COMMONWEALTH of VIRGINIA
Board of Education Agenda

Date of Meeting: November 18, 2010 **Time:** 9 a.m.
Location: Jefferson Conference Room, 22nd Floor, James Monroe Building
101 North 14th Street, Richmond, Virginia

9:00 a.m. FULL BOARD CONVENES `

Moment of Silence

Pledge of Allegiance

Approval of Minutes of the October 28, 2010, Meeting of the Board

Resolutions/Recognitions

- Resolutions of Recognition Presented to Virginia's 2011 Regional Teachers of the Year and State Teacher of the Year

Public Comment

Action/Discussion: Board of Education Regulations

A. First Review of Proposed Amendments to the *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131) to Conform to HB 1199 Passed by the 2010 General Assembly

B. First Review of the Proposed Revisions to the *Guidance Document Governing Certain Provisions of the Regulations Establishing Standards for Accrediting Public Schools in Virginia*

Action/Discussion Items

C. First Review of a Report on Homebound Instructional Services in Response to HB 257 Passed by the 2010 General Assembly

D. First Review of the Criteria for Charter Schools, the Application for Charter Schools, and the Procedures for Receiving and Reviewing Charter School Applications

E. First Review of the Application for College Partnership Laboratory Schools and the Procedures for Receiving, Reviewing, and Ruling on College Partnership Laboratory School Applications

Action/Discussion Items (continued)

F. Final Review of the Proposed Criteria and Processes for Approving and Monitoring Multidivision Online Providers in Virginia (§22.1-212.23.-27)

G. First Review to Reaffirm the 2009 Recommendations to the *Standards of Quality*

H. First Review of Proposed *Guidelines for the Prevention of Sexual Misconduct and Abuse in Virginia Public Schools*

I. Final Review of Proposed Revised Curriculum Framework for 2010 *Science Standards of Learning*

J. Final Review of the Proposed Revised Curriculum Framework for 2010 *English Standards of Learning*

K. First Review of a Proposed Supplement to the Curriculum Framework for the 2009 *Mathematics Standards of Learning*

L. First Review of Proposed Guidelines for Policies on Concussions in Student-Athletes, Senate Bill 652 Passed by the 2010 General Assembly

M. Final Review of the Board of Education's *2010 Annual Report on the Condition and Needs of Public Schools in Virginia*

N. Final Review of a Recommendation of the Advisory Board on Teacher Education and Licensure (ABTEL) to Grant the Professional Education Program at Christopher Newport University Accreditation by the Board of Education Approved Process

O. Final Review of a Recommendation of the Advisory Board on Teacher Education and Licensure (ABTEL) to Approve the Accountability Measurement of Partnerships and Collaborations Based on PreK-12 School Needs Required by the *Regulations Governing the Review and Approval of Education Programs in Virginia*

P. Final Review of a Recommendation of the Advisory Board on Teacher Education and Licensure (ABTEL) to Grant Approval to Add New Education (Endorsement) Programs at James Madison University, Longwood University, Lynchburg College, Radford University, Shenandoah University, University of Richmond, The University of Virginia's College at Wise, Virginia Intermont College, and Virginia State University

Q. Final Review of Proposed English Language Proficiency Performance Target for Annual Measurable Achievement Objective (AMAO) 1 for 2009-2010 in Virginia's Consolidated State Application Accountability Plan Under the *No Child Left Behind Act of 2001* (NCLB)

R. First Review of Recommended Cut Scores for End-of-Course History Standards of Learning Tests Based on the 2008 History Standards

Reports

S. Annual Report of the State Special Education Advisory Committee

T. Report on the Virginia College and Career Readiness Initiative

DISCUSSION OF CURRENT ISSUES - by Board of Education Members and Superintendent of Public Instruction

EXECUTIVE SESSION

ADJOURNMENT

PUBLIC NOTICE

The Board of Education members will meet for dinner at 6:30 p.m. at the Crowne Plaza Hotel on Wednesday, November 17, 2010. Items for the Board agenda may be discussed informally at that dinner. No votes will be taken, and it is open to the public. The Board president reserves the right to change the times listed on this agenda depending upon the time constraints during the meeting.

GUIDELINES FOR PUBLIC COMMENT

1. The Board of Education is pleased to receive public comment at each of its regular monthly meetings. In order to allow the Board sufficient time for its other business, the total time allotted to public comment will generally be limited to thirty (30) minutes. Individuals seeking to speak to the Board will be allotted three (3) minutes each.

2. Those wishing to speak to the Board should contact Dr. Margaret Roberts, Executive Assistant for Board Relations at (804) 225-2924. Normally, speakers will be scheduled in the order that their requests are received until the entire allotted time slot has been used. Where issues involving a variety of views are presented before the Board, the Board reserves the right to allocate the time available so as to ensure that the Board hears from different points of view on any particular issue.

3. Speakers are urged to contact Dr. Roberts in advance of the meeting. Because of time limitations, those persons who have not previously registered to speak prior to the day of the Board meeting cannot be assured that they will have an opportunity to appear before the Board.

4. In order to make the limited time available most effective, speakers are urged to provide multiple written copies of their comments or other material amplifying their views.

Board of Education Agenda Item

Item: A. **Date:** November 18, 2010

Topic: First Review of Proposed Amendments to the *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131) to Conform to HB 1199 by the 2010 General Assembly

Presenter: Ms. Anne D. Wescott, Assistant Superintendent for Policy and Communications

Telephone Numbers: (804) 225-2403 **E-Mail Addresses** **Anne.Wescott@doe.virginia.gov**

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

____ Action requested at this meeting

_X_ Action requested at future meeting: January 13, 2011

Previous Review/Action:

_X_ No previous board review/action

____ Previous review/action

dates _____

actions _____

Background Information: The 2010 General Assembly passed HB 1199, which requires the Board of Education to provide for the waiver of certain graduation requirements to be granted only for good cause and to be considered on a case-by-case basis.

The legislation passed by the 2010 General Assembly amended § 22.1-253.13:4 of the *Code of Virginia* to add the following provision:

> **§ 22.1-253.13:4. Standard 4. Student achievement and graduation requirements.**
>
> ….D. In establishing course and credit requirements for a high school diploma, the Board shall:

…7. Provide for the waiver of certain graduation requirements (i) upon the Board's initiative or (ii) at the request of a local school board. Such waivers shall be granted only for good cause and shall be considered on a case-by-case basis.

Virginia Board of Education *Regulations Establishing Standards for Accrediting Public Schools in Virginia* outline student achievement expectations and graduation requirements for public school students as well as the standards under which all public schools will receive accreditation ratings.

The Administrative Process Act (APA), in § 2.2-4006 of the *Code of Virginia*, provides for exemptions from the rulemaking process for regulatory actions that are necessary to conform to state and federal laws, federal regulations, and state and federal court orders when there is no agency discretion involved.

This is a final action that, upon certification by the Office of the Attorney General, is published in the Virginia Register and posted to the Virginia Regulatory Town Hall (the electronic Web site for all state agency regulations). The regulation becomes effective 30 days following publication in the Virginia Register.

Summary of Major Elements: The waiver provision in the *Regulations Establishing Standards for Accrediting Public Schools in Virginia* would be amended to address the requirements of HB 1199. The amended language would say:

"Waivers of some of the requirements of these regulations may be granted by the Board of Education based on submission of a request from the division superintendent and chairman of the local school board. The request shall include documentation of the need for the waiver. In no event shall waivers be granted to the requirements of Part III (8 VAC 20-131-30 through 8 VAC 20-131-60) of these regulations ***except that the Board of Education may provide for the waiver of certain graduation requirements in 8 VAC 20-131-50 (i) upon the Board's initiative or (ii) at the request of a local school board on a case-by-case basis in accordance with guidelines established by the Board.***"

It is the intent of the Board to develop guidelines that address submission procedures needed in order to implement this legislation. These guidelines would be included in the Board's *Guidance Document Governing Certain Provisions of the Regulations Establishing Standards for Accrediting Public Schools in Virginia*.

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education accept for first review the proposed revisions to the *Regulations Establishing Standards for Accrediting Public Schools in Virginia*.

Impact on Resources: The impact on resources for these regulations is expected to be minimal.

Timetable for Further Review/Action: Final approval will be requested at the January 13, 2011 Board meeting.

Attachment A

Proposed Amendments to the
Regulations Establishing Standards for Accrediting Public Schools in Virginia
(8 VAC 20-131-5 et seq.)

8 VAC 20-131-350. Waivers.

Waivers of some of the requirements of these regulations may be granted by the Board of Education based on submission of a request from the division superintendent and chairman of the local school board. The request shall include documentation of the need for the waiver. In no event shall waivers be granted to the requirements of Part III (8 VAC 20-131-30 through 8 VAC 20-131-60) of these regulations ***except that the Board of Education may provide for the waiver of certain graduation requirements in 8 VAC 20-131-50 (i) upon the Board's initiative or (ii) at the request of a local school board on a case-by-case basis in accordance with guidelines established by the Board.***

Virginia
Regulatory
Town Hall

townhall.virginia.gov

Exempt Action Final Regulation
Agency Background Document

Agency name	Virginia Board of Education
Virginia Administrative Code (VAC) citation	8 VAC 20 – 131
Regulation title	*Regulations Establishing Standards for Accrediting Public Schools in Virginia*
Action title	This regulatory change, which is proposed in response to legislation enacted by the 2010 General Assembly, will permit the Virginia Board of Education to waive certain requirements for graduation.
Final agency action date	Expected January 13, 2011
Document preparation date	November 1, 2010

When a regulatory action is exempt from executive branch review pursuant to § 2.2-4002 or § 2.2-4006 of the Virginia Administrative Process Act (APA), the agency is encouraged to provide information to the public on the Regulatory Town Hall using this form.

Note: While posting this form on the Town Hall is optional, the agency must comply with requirements of the Virginia Register Act, Executive Orders 14 (2010) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Summary

Please provide a brief summary of all regulatory changes, including the rationale behind such changes. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

The proposed amendments are needed to address legislation enacted by the 2010 General Assembly. House Bill 1199 requires the Board of Education to provide for the waiver of certain graduation requirements to be granted only for good cause and on a case-by-case basis. The legislation states that the Board of Education shall: "*…Provide for the waiver of certain graduation requirements (i) upon the Board's initiative or (ii) at the request of a local school board. Such waivers shall be granted only for good cause and shall be considered on a case-by-case basis.*"

The Virginia Board of Education *Regulations Establishing Standards for Accrediting Public Schools in Virginia*, outline student achievement expectations and graduation requirements for public school students as well as the standards under which all public schools will receive accreditation ratings. One section of these regulations (8 VAC 20-131-350) provides for waivers as follows: *"Waivers of some of the requirements of these regulations may be granted by the Board of Education based on submission of a request from the division superintendent and chairman of the local school board. The request shall include documentation of the need for the waiver. In no event shall waivers be granted to the requirements of Part III (8 VAC 20-131-30 et seq.) of these regulations."* The wavier provision in the *Regulations Establishing Standards for Accrediting Public Schools in Virginia* would be amended to address the requirements of House Bill 1199.

This proposed regulatory change would amend 8 VAC 20-131-350 by adding a provision that would permit the Board to develop and implement guidelines under which local school boards could request a waiver of some of the graduation requirements outlined in the regulation for individual students under certain conditions.

Statement of final agency action

Please provide a statement of the final action taken by the agency including (1) the date the action was taken, (2) the name of the agency taking the action, and (3) the title of the regulation.

At the meeting of the Board of Education on November 18, 2010, the Board is expected to accept for first review proposed revisions to the *Regulations Establishing Standards for Accrediting Public Schools in Virginia* 8VAC 20-131-10 et seq. to address House Bill 1199. Final action will be taken by the Board of Education on January 13, 2011, at which time it is anticipated that the Board will direct the Department of Education to proceed with the final stages of the regulatory process.

Family impact

Assess the impact of this regulatory action on the institution of the family and family stability.

The proposed amendment does not negatively impact the institution of the family or the stability of families. The amendment is intended to address a legislative mandate that would provide relief from certain graduation requirements to those students with extenuating circumstances, as determined by the Board of Education.

Board of Education Agenda Item

Item: B. **Date:** November 18, 2010

Topic: First Review of the Proposed Revisions to the *Guidance Document Governing Certain Provisions of the Regulations Establishing Standards for Accrediting Public Schools in Virginia*

Presenter: Ms. Anne D. Wescott, Assistant Superintendent for Policy and Communications

Telephone Number: (804) 225-2403 **E-Mail Address:** Anne.Wescott@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

____ Action requested at this meeting

_X_ Action requested at future meeting: January 13, 2011

Previous Review/Action:

_X_ No previous board review/action
____ Previous review/action
dates _____
actions _____

Background Information: The 2010 General Assembly passed HB 1199, which requires the Board of Education to provide for the waiver of certain graduation requirements to be granted only for good cause and to be considered on a case-by-case basis.

In a separate Board action item, an amendment to the *Regulations Establishing Standards for Accrediting Public Schools in Virginia* is being considered to address implementation of this bill by including the following proposed language in the waiver section (8 VAC 20-131-350) of these regulations:

> **8 VAC 20-131-350. Waivers**
>
> Waivers of some of the requirements of these regulations may be granted by the Board of Education based on submission of a request from the division superintendent and chairman of the local school board. The request shall include documentation of the need

for the waiver. In no event shall waivers be granted to the requirements of Part III (8 VAC 20-131-30 et seq.) of these regulations ***except that the Board of Education may provide for the waiver of certain graduation requirements in 8 VAC 20-131-50 (i) upon the Board's initiative or (ii) at the request of a local school board on a case-by-case basis in accordance with guidelines established by the Board.***

Summary of Major Elements: The guidelines would provide that the Board of Education may waive certain graduation requirements in 8 VAC 20-131-50 by resolution. The resolution shall specify the requirement(s) being waived and, if the waiver is time-limited, when the waiver would expire.

The guidelines for waiver requests from local school boards would include the following:

1. Provisions for local school boards to submit to the Superintendent of Public Instruction, on behalf of the Board, requests for waivers of certain graduation requirements for a student.

2. A requirement that any local school board submitting a waiver must include an explanation of what requirements are requested to be waived and a justification, which shall include a statement of all efforts that the local school board has made to assist the student prior to the submission of the request to the Board.

3. A provision that a waiver request may not be submitted more than 90 days prior to the date of graduation.

4. A provision allowing the Superintendent of Public Instruction to approve a waiver on behalf of the Board. The Superintendent will also report to the Board any waivers granted or denied.

5. Provisions for determining 'good cause', which would include, but not be limited to:

   - A catastrophic, sudden, or debilitating illness or injury suffered by the student late in his high school career; or

   - A sudden, unexpected requirement or event that causes a student's family to relocate to another state where the student is unable to complete graduation requirements in Virginia or the receiving state.

6. In no event shall a waiver be granted if that waiver substantially reduces or diminishes the integrity of the diplomas approved by the Board.

7. Graduation requirements that have been approved for a waiver shall be noted on a student's official academic record.

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education accept the proposed revisions for first review and authorize 30 days of public comment.

Impact on Resources: The impact on resources is not expected to be significant.

Timetable for Further Review/Action: Following public comment, the proposed revisions to the guidance document will be presented to the Board for approval on January 13, 2011.

Attachment A

Proposed Amendments to the
Guidance Document Governing Certain Provisions of the
Regulations Establishing Standards for Accrediting Public Schools in Virginia

STANDARD: 8 VAC 20-131-350. Waivers.

Waivers of some of the requirements of these regulations may be granted by the Board of Education based on submission of a request from the division superintendent and chairman of the local school board. The request shall include documentation of the need for the waiver. In no event shall waivers be granted to the requirements of Part III (8 VAC 20-131-30 et seq.) of these regulations ***except that the Board of Education may provide for the waiver of certain graduation requirements in 8 VAC 20-131-50 (i) upon the Board's initiative or (ii) at the request of a local school board on a case-by-case basis in accordance with guidelines established by the Board.***

Guidance:

The Board of Education may waive certain graduation requirements in 8 VAC 20-131-50 by resolution. The resolution shall specify the requirement(s) being waived and, if the waiver is time-limited, when the waiver would expire.

Local school boards may seek a waiver of certain graduation requirements in 8 VAC 20-131-50 on a case-by-case basis by submitting a request to the Superintendent of Public Instruction, on behalf of the Board, which explains what requirement(s) are requested to be waived and the justification for each requirement(s) requested for waiver.

The justification shall include a statement of the efforts made by the local school board to assist the student to meet the requirement(s) prior to requesting the waiver.

Such waiver requests may not be submitted more than 90 days prior to the date the student is expected to graduate.

The Superintendent may approve the waiver on behalf of the Board and report to the Board waivers that have been granted or denied.

For the purposes of this provision, good cause may include, but not be limited to, a catastrophic, sudden, or debilitating illness or injury suffered by the student late in his high school career or a sudden, unexpected requirement or event that causes the family to relocate to another state where the student is unable to complete graduation requirements either in Virginia or the receiving state.

In no event shall a waiver be granted that would substantially reduce or diminish the integrity of the diplomas approved by the Board of Education.

Requirements that have been approved for a waiver shall be noted on the student's official academic record (transcript).

Board of Education Agenda Item

Item: C. **Date:** November 18, 2010

Topic: First Review of a Report on Homebound Instructional Services in Response to HB 257 Passed by the 2010 General Assembly

Presenter: Ms. Anne D. Wescott, Assistant Superintendent for Policy and Communications

Telephone Numbers: (804) 225-2403 **E-Mail Address:** **Anne.Wescott@doe.virginia.gov**

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

____ Action requested at this meeting

_X_ Action requested at future meeting: January 13, 2011

Previous Review/Action:

_X_ No previous board review/action

____ Previous review/action

dates _____

actions _____

Background Information: The 2010 General Assembly passed HB 257, which requires the Board of Education to review its *Regulations Establishing Standards for Accrediting Public Schools in Virginia* *(SOA)* as they relate to homebound instructional services. The legislation passed by the 2010 General Assembly states the following:

> § 1. That the Board of Education shall review its *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131) as they relate to homebound instructional services to address whether homebound instruction may be made available to students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon evidence submitted by any person licensed to diagnose and treat mental, emotional, or behavioral disorders by a health regulatory board within the Department of Health Professions.

Currently 8 VAC 20-131-180.A of the SOA provides in part:

> Homebound instruction shall be made available to students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon certification of need by a licensed physician or licensed clinical psychologist….

The delivery of homebound instructional services is the responsibility of the school divisions. To assist school divisions with the administration of the homebound instructional program, the Virginia Department of Education (VDOE) has issued *Homebound Instructional Services Guidelines*. These VDOE guidelines cover areas such as:

1. The eligibility for homebound services;
2. The initiation, review, and termination of services;
3. The role of the teacher, physician, and licensed clinical psychologist;
4. Suggested guidelines as to the number of hours of instruction to be provided at the elementary and secondary level;
5. The use of online instruction; and
6. Reimbursement of costs by the Commonwealth.

Summary of Major Elements: In order to assist the Board in its review required by HB 257, the VDOE administered a short survey to solicit information about homebound instructional services offered by school divisions during the 2009-2010 academic year. This survey was provided to school divisions in September, 2010, and it asked general questions about the number of students referred for homebound services, whether complaints were received from parents about the homebound program, including the certification process, and whether school divisions had any suggested changes to the current structure of the homebound program. Ninety-one school divisions responded to this survey.

None of the 91 school divisions responding indicated that there are any deficiencies with the current certification process. Three respondents indicated that the current certification structure is effective.

Many of the comments received from school divisions indicate that additional guidance from the VDOE would be helpful. The conclusions and recommendations section of the report suggests that the Board may want to consider directing the VDOE to review its *Homebound Instructional Services Guidelines* to determine whether revisions to the guidelines are necessary.

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education accept the report for first review and authorize 30 days of public comment on the findings of the review.

Impact on Resources: The impact on resources will be dependent on final action taken by the Board but the impact of any actions is expected to be minimal.

Timetable for Further Review/Action: Final action will be requested at the January 13, 2011, Board meeting.

VIRGINIA DEPARTMENT OF EDUCATION

REPORT

INFORMATION ON HOMEBOUND INSTRUCTIONAL SERVICES

PRESENTED TO THE

VIRGINIA BOARD OF EDUCATION

NOVEMBER 2010

Introduction and Background

The 2010 General Assembly passed House Bill 257, which requires the Board of Education to review its *Regulations Establishing Standards for Accrediting Public Schools in Virginia (SOA)* as they relate to homebound instructional services. The law states the following:

> That the Board of Education shall review its *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131) as they relate to homebound instructional services to address whether homebound instruction may be made available to students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon evidence submitted by any person licensed to diagnose and treat mental, emotional, or behavioral disorders by a health regulatory board within the Department of Health Professions.

Currently 8 VAC 20-131-180.A of the SOA provides in part:

> Homebound instruction shall be made available to students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon certification of need by a licensed physician or licensed clinical psychologist….

The delivery of homebound instructional services is the responsibility of the school divisions. In its *Homebound Instructional Services Guidelines*, the Virginia Department of Education (VDOE) states that "…homebound instruction is designed to provide continuity of educational services between the classroom and home or health care facility, for students whose medical needs, either physical or psychiatric, do not allow school attendance for a short period of time. It is not intended to supplant school services and is by design temporary. The school division is responsible for providing instructional services for all public school students who must be temporarily confined at home or in a health care facility. The school division is also responsible for providing homebound services to a student enrolled in the school division who is confined in another county or city in Virginia and to qualified students confined in another state, if those students meet all the homebound eligibility requirements."

These VDOE guidelines cover areas such as:

1. The eligibility for homebound services;
2. The initiation, review, and termination of services;
3. The role of the teacher, physician, and licensed clinical psychologist;
4. Suggested guidelines as to the number of hours of instruction to be provided at the elementary and secondary level;
5. The use of online instruction; and
6. Reimbursement of costs by the Commonwealth.

The Commonwealth reimburses school divisions for costs incurred from the delivery of homebound services. School divisions receive this reimbursement as a percentage of hourly payments to teachers employed to provide homebound instruction to eligible children. A maximum hourly rate is established annually and the reimbursements received by a school division are adjusted for that division's local composite index of ability-to-pay.

State funding available for homebound services reimbursement is approximately $5.6 million in fiscal year 2011 and $5.9 million in fiscal year 2012. Based on the amount of state funding available in fiscal year 2010 compared to the amount of homebound expenditures reported by school divisions for the 2009-2010 academic year, it appears that school divisions were reimbursed by the Commonwealth for less than 30 percent of their total expenditures.

This report provides information on data collected from school divisions regarding homebound instructional services. These data are provided to assist the Virginia Board of Education in assessing the need for amending its existing regulations to address any changes that may be needed to the current certification process so that other individuals licensed by a health regulatory board may certify the need for a student to have homebound services. Currently, only physicians and licensed clinical psychologists can certify the need for a student to have homebound services.

Review Process

In order to assist the Board in its review of this legislation, the VDOE administered a short survey to solicit information about homebound instructional services offered by school divisions during the 2009-2010 academic year. This survey was provided to school divisions in September, 2010, and it asked general questions about the number of students referred for homebound services, whether complaints were received from parents about the homebound program, including the certification process, and whether school divisions had any suggested changes to the current structure of the homebound program. The appendix to this report contains the superintendent's memo and survey questions distributed to school divisions.

This report presents a summary of the survey responses received from 91 school divisions, representing almost 70 percent of all Virginia school divisions.

General Survey Response Information

Data

School divisions were asked the following questions about the number of students referred for homebound services.

1. **For the 2009-2010 school year, please provide the total number of students approved for homebound due to:**

Category	Total Reported by School Divisions	Percent of Total
Physical Illness	4,135	54%
Mental Illness	984	13%
Discipline Program	1,828	24%
Other	723	9%

2. **For the 2009-2010 school year, how many of these students had an individualized education program (IEP)?**

Total Reported by School Divisions
2,757

3. **For the 2009-2010 school year, how many of these students had a 504 plan?**

Total Reported by School Divisions
207

4. **For the 2009-2010 school year, how many of these students were approved for homebound services by one of the following?**

Category	Total Reported by School Divisions	Percent of Total Number of Students Reported to Have Received Homebound Services
Physician	4,285	56%
Licensed Clinical Psychologist	560	7%

Narrative Information

School divisions were asked the following questions regarding the receipt of complaints and changes that could be made to the homebound program.

1. **Has your school division received complaints from parents who have been unable to secure a homebound certification from either a licensed clinical psychologist or a physician? If so, what was the resolution?**

   Approximately 12 percent of the school divisions responding to the survey indicated that complaints have been received from parents. Eighty-eight percent of the school divisions responding indicated that they have not received any complaints regarding this issue. The following information highlights the responses received:

- Only one school division referenced the certification process addressed in House Bill 257. In its response, this school division indicated support of the current certification structure.
- The other responding school divisions had no complaints directly related to the certification issues raised in House Bill 257.
- Some school divisions reported parental complaints about the certification process. The complaints were usually related to delays in the physician's office, misunderstanding of the requirements, or the physician's determination that homebound bound services were not necessary.
- Three school divisions indicated that some parents had concerns about difficulty in securing the appropriate certification. However, this issue was usually resolved by seeking the assistance of another physician or licensed clinical psychologist. In one school division, the child did not get the certification because homebound was not the appropriate placement. In another school division, the child was able to receive homebound services through his Individualized Education Program (IEP). In the third case, truancy was an issue and the child was required to attend class.

2. Has your school division received any other complaints about the homebound program from parents? (If the answer is yes, please describe the complaints.)

Approximately 40 percent of the school divisions responding to the survey indicated that complaints have been received from parents about the program. Sixty percent of the responding school division indicated that they have not received any complaints. The following information highlights the responses received:

- None of the school divisions referenced the certification process addressed in House Bill 257 in the responses.
- Some of the school divisions reported complaints about the certification process. Some school divisions reported that parents were reluctant to follow the process. School divisions also reported that the extension of services is sometimes difficult. One school division reported that a parent of a private school student wanted to have homebound services provided by the public school division.
- School divisions reported that complaints were received when parents asked for homebound instructional services without valid medical reasons.
- One school division reported complaints due to denial of homebound instruction even when the parent provided a certification from a physician or licensed psychologist.
- Some of the school divisions reported complaints about the quality of instruction, the amount of instruction, the difficulty in getting instruction started, scheduling difficulties, problems with the teacher, and the inability to cover the laboratory requirements for related science courses and some advanced level classes.

3. Does your school division have any changes you would like to make to the homebound program to facilitate academic enhancement?

Approximately 20 percent of the school divisions responding to the survey commented on the need to make changes to the program. The following information highlights the responses received:

- Only two school divisions referenced the certification process addressed in House Bill 257 in their response and both school divisions support the current certification structure.
- One school division expressed interest in having a maximum number of hours of homebound instruction provided per grade level of instruction. Another school division expressed interest in increasing the number of instructional hours provided for high school students.
- Some school divisions reported concerns about the lack of teachers available to teach homebound instruction. One school division asked that any licensed teacher be allowed to teach any student. Another school division suggested the use of a regional pool of teachers who could provide homebound instruction.
- One school division expressed concern about teacher safety.
- Several school divisions mentioned the use of virtual education as a means to meet the needs of students requiring homebound instruction. However, one school division mentioned the challenge in using virtual instruction because many of the students' homes are not equipped with "wifi" or with "hotspots."
- One school division mentioned that many students are on home-based instruction for disciplinary reasons. This school division reported that if it received financial reimbursement for these students, it could hire additional staff.
- Another school division asked for reimbursement for students placed on homebound instruction by the IEP team.

Other General Comments

School divisions that submitted information to the VDOE commented on other issues surrounding the homebound program. The following information highlights the responses received:

- No school division reported that they would support certification for homebound instruction by any person licensed to diagnose and treat mental, emotional, or behavioral disorders by a health regulatory board within the Department of Health Professions.
- One school division reported that a child receiving homebound services was not allowed to participate in extracurricular activities.
- One school division asked for a better definition of mental health issues as students with these issues are a significant percentage of those students receiving homebound services.

- Several school divisions mentioned the need for a greater emphasis on services plans and transition plans for students receiving homebound services.
- One school division reported frustration because personnel were unable to speak to the physician about a homebound referral.
- One school division reported that parents could not understand the need for a nine week review of the homebound services provided.

Conclusions and Recommendations

No school divisions responding to the survey indicated that there are any deficiencies with the current certification process, which is the issue under examination under HB 257. Three respondents indicated that the current certification structure is effective.

During 2009, VDOE received a request from the Virginia Association of Clinical Counselors to expand the professionals that may refer a student for homebound instruction to include licensed professional counselors, licensed clinical social workers, and licensed marriage and family therapists. In response to this request, VDOE indicated that it maintains a medical orientation to homebound instruction and also indicated that it had received no requests from school divisions to expand referral authority beyond what is currently in Board regulations.

Many of the comments received from school divisions indicate that additional guidance from the VDOE would be helpful. It is not clear from the data reported how many divisions may be denying services for homebound instruction after receiving certification or how many school divisions are choosing to provide homebound services without certification under varying circumstances. For these reasons, the Board may want to consider directing the VDOE to review its *Homebound Instructional Services Guidelines* to determine whether revisions to the guidelines are necessary.

APPENDIX

SUPERINTENDENT'S MEMORANDUM

DATE: September 24, 2010 **MEMO. NO. 234**

TO: Division Superintendents

FROM: Patricia I. Wright
Superintendent of Public Instruction

SUBJECT: Survey related to House Bill 257 – Homebound Instructional Services

The 2010 General Assembly passed HB 257, which requires the Board of Education to review its *Regulations Establishing Standards for Accrediting Public Schools in Virginia (SOA)* as they relate to homebound instructional services. The law states the following:

> That the Board of Education shall review its *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131) as they relate to homebound instructional services to address whether homebound instruction may be made available to students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon evidence submitted by any person licensed to diagnose and treat mental, emotional, or behavioral disorders by a health regulatory board within the Department of Health Professions.

Currently 8 VAC 20-131-180.A of the SOA provides in part:

> Homebound instruction shall be made available to students who are confined at home or in a health care facility for periods that would prevent normal school attendance based upon certification of need by a licensed physician or licensed clinical psychologist….

In order to assist the Board in its deliberations on this issue, the Department has developed a short survey to solicit information about homebound instruction offered by school divisions. Please complete the survey, which can be found at http://www.surveymonkey.com/s/5YJYT2V, by October 22, 2010. You may contact the Office of Policy at 804-225-2092 or by e-mail at policydata@doe.virginia.gov if you have any questions regarding this matter.

Thank you for your assistance in providing the Board with information on homebound instructional services.

PIW/MMV/jcj

Virginia Department of Education
School Division Survey Instrument
Homebound Instructional Services

1. **Name of School Division**

2. **School Division Contact Information: (Please include name, title, telephone number, and e-mail address.)**

3. **For the 2009-2010 school year, please provide the total number of students approved for homebound due to:**

    a. **Physical Illness**
    b. **Mental Illness**
    c. **Discipline Program**
    d. **Other**

4. **For the 2009-2010 school year, how many of these students had an individualized education program (IEP)?**

5. **For the 2009-2010 school year, how many of these students had a 504 plan?**

6. **For the 2009-2010 school year, how many of these students were approved for homebound services by one of the following?**

    a. **Physician**
    b. **Licensed Clinical Psychologist**

7. **Has your school division received complaints from parents who have been unable to secure a homebound certification from either a licensed clinical psychologist or a physician? If so, what was the resolution?**

8. **Has your school division received any other complaints about the homebound program from parents? (If the answer is yes, please describe the complaints.)**

9. **Does your school division have any changes you would like to make to the homebound program to facilitate academic enhancement?**

Board of Education Agenda Item

Item: D. **Date:** November 18, 2010

Topic: First Review of the Criteria for Charter Schools, the Application for Charter Schools, and the Procedures for Receiving and Reviewing Charter School Applications

Presenter: Ms. Anne D. Wescott, Assistant Superintendent for Policy and Communications

Telephone Numbers: (804) 225-2403 **E-Mail Addresses** Anne.Wescott@doe.virginia.gov

Origin:

___ Topic presented for information only (no board action required)

X Board review required by
- X State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

___ Action requested at this meeting

X Action requested at future meeting: January 13, 2011

Previous Review/Action:

X No previous board review/action

___ Previous review/action
dates _____
actions _____

Background Information: HB 1390 (Lingamfelter) and SB 737 (Newman), passed by the 2010 General Assembly and signed by the Governor, amended the provisions in the *Code of Virginia* related to charter schools. The legislation requires a public charter school applicant to submit its proposed charter application to the Board of Education for review, comment, and a determination as to whether the application meets approval criteria developed by the Board, prior to submission to the local school board.

The legislation also provides for an opportunity for a public charter school applicant to petition for reconsideration of a decision by a local school board to deny an application. Prior to such petition for reconsideration, an applicant may seek technical assistance from the Superintendent of Public Instruction.

Section 22.1-212.5 of the *Code of Virginia* defines a public charter school as "a public, nonreligious, or non-home-based alternative school located within a public school division. A public charter school may

be created as a new public school or through the conversion of all or part of an existing public school; however, no public charter school shall be established through the conversion of a private school or a nonpublic home-based educational program. A charter school for at-risk pupils may be established as a residential school."

Section 22.1-212.9 of the *Code of Virginia* requires all applications for public charter schools to be submitted to the Virginia Board of Education for review prior to submission of the application to the local school board. The Board is required to establish procedures of receiving and reviewing applications, and making a determination as to whether the application meets approval criteria developed by the Board. The *Code* further provides that the Board's review would examine such applications for feasibility, curriculum, financial soundness, and other objective criteria as the Board may establish, consistent with existing state law.

§ 22.1-212.9. Review of public charter school applications.

A. Public charter school applications shall be received and reviewed by the Board of Education and local school boards or, in the case of a regional public charter school, by all of the relevant school boards, as provided in subsection C.

The Board of Education and each local school board shall establish procedures for receiving, reviewing, and, in the case of local school boards, ruling upon applications. The Board of Education and local school boards shall post their procedures on their websites and make a copy of the procedures available to all interested parties upon request. If any such board finds the public charter school application is incomplete, the board shall request the necessary information from the charter applicant.

B. To provide appropriate opportunity for input from parents, teachers, citizens, and other interested parties and to obtain information to assist local school boards in their decisions to grant or deny a public charter school application, local school boards shall establish a procedure for public notice and to receive comment on public charter school applications. A local school board shall give at least 14 days' notice of its intent to receive public comment on an application.

C. Prior to submission of an application to a local school board for review, the public charter school applicant shall submit its proposed charter application to the Board of Education for its review, comment, and a determination as to whether the application meets the approval criteria developed by the Board. The Board's review shall examine such applications for feasibility, curriculum, financial soundness, and other objective criteria as the Board may establish, consistent with existing state law. The Board's review and comment shall be for the purpose of ensuring that the application conforms to such criteria, and the Board shall make a determination as to whether the application meets the approval criteria developed by the Board. Nothing in this section shall prevent a local school division from working with a charter school applicant before the application is submitted to the Board of Education for review and recommendation.

Section 22.1-212.8 of the *Code of Virginia* specifies what the public charter school application must include:

§ 22.1-212.8. Charter application.

…B. The public charter school application shall be a proposed agreement and shall include:

1. The mission statement of the public charter school that must be consistent with the principles of the Standards of Quality.

2. The goals and educational objectives to be achieved by the public charter school, which educational objectives must meet or exceed the Standards of Learning.

3. Evidence that an adequate number of parents, teachers, pupils, or any combination thereof, support the formation of a public charter school.

4. A statement of the need for a public charter school in a school division or relevant school divisions in the case of a regional public charter school, or in a geographic area within a school division or relevant school divisions, as the case may be.

5. A description of the public charter school's educational program, pupil performance standards, and curriculum, which must meet or exceed any applicable Standards of Quality; any assessments to be used to measure pupil progress towards achievement of the school's pupil performance standards, in addition to the Standards of Learning assessments prescribed by § 22.1-253.13:3; the timeline for achievement of such standards; and the procedures for taking corrective action in the event that pupil performance at the public charter school falls below such standards.

6. A description of the lottery process to be used to determine enrollment. A lottery process shall also be developed for the establishment of a waiting list for such students for whom space is unavailable and, if appropriate, a tailored admission policy that meets the specific mission or focus of the public charter school and is consistent with all federal and state laws and regulations and constitutional provisions prohibiting discrimination that are applicable to public schools and with any court-ordered desegregation plan in effect for the school division or, in the case of a regional public charter school, in effect for any of the relevant school divisions.

7. Evidence that the plan for the public charter school is economically sound for both the public charter school and the school division or relevant school divisions, as the case may be; a proposed budget for the term of the charter; and a description of the manner in which an annual audit of the financial and administrative operations of the public charter school, including any services provided by the school division or relevant school divisions, as the case may be, is to be conducted.

8. A plan for the displacement of pupils, teachers, and other employees who will not attend or be employed in the public charter school, in instances of the conversion of an existing public school to a public charter school, and for the placement of public charter school pupils, teachers, and employees upon termination or revocation of the charter.

9. A description of the management and operation of the public charter school, including the nature and extent of parental, professional educator, and community involvement in the management and operation of the public charter school.

10. An explanation of the relationship that will exist between the proposed public charter school and its employees, including evidence that the terms and conditions of employment have been addressed with affected employees.

11. An agreement between the parties regarding their respective legal liability and applicable insurance coverage.

12. A description of how the public charter school plans to meet the transportation needs of its pupils.

13. Assurances that the public charter school (i) is nonreligious in its programs, admission policies, employment practices, and all other operations and (ii) does not charge tuition.

14. In the case of a residential charter school for at-risk students, a description of (i) the residential program, facilities, and staffing; (ii) any parental education and after-care initiatives; (iii) the funding sources for the residential and other services provided; and (iv) any counseling or other social services to be provided and their coordination with any current state or local initiatives.

15. [Expired.]

16. Disclosure of any ownership or financial interest in the public charter school, by the charter applicant and the governing body, administrators, and other personnel of the proposed public charter school, and a requirement that the successful applicant and the governing body, administrators, and other personnel of the public charter school shall have a continuing duty to disclose such interests during the term of any charter.

C. [Expired.]

D. The charter applicant shall include in the proposed agreement the results of any Board of Education review of the public charter school application that may have been conducted as provided in subsection C of § 22.1-212.9.

The Board of Education's Charter School Committee met on June 23, July 21, September 22, and November 17.

At the June 23 meeting, the committee held a forum with national experts on charter schools:

- Mr. Randy Dowell, KIPP Foundation
- Mr. James W. Dyke, Jr and Mr. Curtiss Stancil, Edison Learning
- Mr. Todd Ziebarth, National Alliance for Public Charter Schools
- Mr. Andrew Broy, Illinois Charter School Network
- Mr. Don Soifer, Lexington Institute

At the July 21 meeting, staff presented background information to the committee.

At the September 22 meeting, the committee held a forum with Virginia stakeholders:

- Mr. Pat Lacy and Mr. Stuart Gibson, Virginia School Boards Association
- Dr. Phil Worrell, Virginia Association of School Superintendents
- Dr. Kitty Boitnott, Virginia Education Association
- Ms. Susan Bridges, Virginia Association of Elementary School Principals
- Dr. Randy Barrack, Virginia Association of Secondary School Principals
- Mrs. Anne Carson, Virginia PTA
- Mrs. Marcia Obenshain, Virginia Counselors Association

The principals from the four Virginia charter schools have been invited to give presentations at the November 17 meeting, which will be followed by a joint meeting with the College Partnership Laboratory School Committee to review the draft procedures and the application package.

Summary of Major Elements: The criteria for public charter schools are found in Attachment A. The procedures receiving, reviewing, and ruling upon an application are found in Attachment B. They include:

- Directions for submitting the application;
- Technical assistance provided upon request;
- Receipt of the application and determination of whether the application is complete;
- Review of the application by the Charter School Committee; and
- Review by the Board of Education.

The application package, found in Attachment C, includes the following:

- Applicant fact sheet;

- Narrative information

    - ✓ Executive summary;
    - ✓ Mission and vision;
    - ✓ Goals and educational objectives;
    - ✓ Evidence of support;
    - ✓ Statement of need;
    - ✓ Educational program;
    - ✓ Enrollment policies;
    - ✓ Economic soundness;
    - ✓ Displacement;
    - ✓ Management and operation;
    - ✓ Employment terms and conditions;
    - ✓ Liability and insurance;
    - ✓ Transportation;
    - ✓ Assurances required by the *Code*;
    - ✓ Residential charter school;

- ✓ Disclosures;
- ✓ Additional assurances and requirements; and

- Certification.

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education accept the item for first review and authorize 30 days of public comment on the proposed criteria, procedures, and application package.

Impact on Resources: The impact on resources is not expected to be significant.

Timetable for Further Review/Action: Following a 30-day public comment period, this item is expected to be presented to the Board for final review and approval on January 13, 2011.

Attachment A

Criteria for Public Charter Schools

- The mission statement of the public charter school must be consistent with the principles of the Standards of Quality.

- The goals and educational objectives to be achieved by the public charter school must meet or exceed the Standards of Learning.

- There must be evidence that an adequate number of parents, teachers, pupils, or any combination thereof, supports the formation of a public charter school.

- There must be evidence of the need for the charter school in the school division (or relevant school divisions in the case of a regional public charter school), or in a geographic area within a school division (or relevant school divisions, as the case may be) as documented in the statement of need.

- There must be a description of the public charter school's:

  - ✓ Educational program, pupil performance standards, and curriculum, which must meet or exceed any applicable Standards of Quality;
  - ✓ Any assessments to be used to measure pupil progress towards achievement of the school's pupil performance standards, in addition to the Standards of Learning assessments prescribed by §22.1-253.13:3; and
  - ✓ The timeline for achievement of such standards; and the procedures for taking corrective action in the event that pupil performance at the public charter school falls below such standards.

- There must be a description of the lottery process to be used to determine enrollment. A lottery process must also be developed for the establishment of a waiting list for such students for whom space is unavailable and, if appropriate, a tailored admission policy that meets the specific mission or focus of the public charter school and is consistent with all federal and state laws and regulations and constitutional provisions prohibiting discrimination that are applicable to public schools and with any court-ordered desegregation plan in effect for the school division or, in the case of a regional public charter school, in effect for any of the relevant school divisions. (Reference: § 22.1-212.6 of the *Code of Virginia.*)

- There must be evidence that the plan for the public charter school is economically sound for both the public charter school and the school division (or relevant school divisions, as the case may be), including:

  - ✓ A proposed budget for the term of the charter;
  - ✓ A description of the manner in which an annual audit of the financial and administrative operations of the public charter school; and

- ✓ Information about any services to be provided by the school division (or relevant school divisions, as the case may be).

- There must be a plan for:

  - ✓ The displacement of pupils, teachers, and other employees who will not attend or be employed in the public charter school if the charter school is converted from an existing public school to a public charter school, and
  - ✓ The placement of public charter school pupils, teachers, and employees upon termination or revocation of the charter. (Reference: § 22.1-212.12, *Code of Virginia.*)

- There must be a description of the management and operation of the public charter school, including the nature and extent of parental, professional educator, and community involvement in the management and operation of the public charter school. (Reference: § 22.1-212.7, *Code of Virginia*.)

- There must be an explanation of the relationship that will exist between the proposed public charter school and its employees, including evidence that the terms and conditions of employment have been addressed with affected employees. (References: §§ 22.1-212.13, § 22.1-296.1 and § 22.1-296.2, *Code of Virginia*.)

- There must be an agreement between the parties regarding their respective legal liability and applicable insurance coverage. (References: § 22.1-212.16, *Code of Virginia*.)

- There must be a description of how the public charter school plans to meet the transportation needs of its pupils.

- There must be assurances that the public charter school is nonreligious in its programs, admission policies, employment practices, and all other operations.

- There must be an assurance that the public charter school does not charge tuition.

- In the case of a residential charter school for at-risk students, there must be a description of (i) the residential program, facilities, and staffing; (ii) any parental education and after-care initiatives; (iii) the funding sources for the residential and other services provided; and (iv) any counseling or other social services to be provided and their coordination with any current state or local initiatives.

- There must be disclosure of any ownership or financial interest in the public charter school by the charter applicant and the governing body, administrators, and other personnel of the proposed public charter school, and a requirement that the successful applicant and the governing body, administrators, and other personnel of the public charter school shall have a continuing duty to disclose such interests during the term of any charter.

Attachment B

Virginia Public Charter Schools
Submission Procedures and Board of Education Review

Submission of the Application

Applications for public charter schools should be submitted to the Board of Education within a time frame that is adequate to ensure that the public charter school application will be submitted to the respective local school board in a manner that takes into consideration application policies of the local school board. Unless otherwise addressed by such local school board policies, an applicant should consider allowing for at least 18 months from the time the application is submitted to the local school board to the proposed opening date for the public charter school.

Applicants must adhere to the form prescribed by the Board, which addresses the application elements stated in § 22.1-212.8, *Code of Virginia.* Applications may be submitted electronically or by hard copy to the Executive Assistant for the Board of Education.

Technical Assistance

There is nothing that prohibits a prospective applicant from contacting a school division for assistance in advance of submitting an application to the Board. The Board encourages an applicant to do so as working with a school division prior to submission helps ensure a smooth transition for any public charter school that may be approved by a local school board and then established within a school division.

If an applicant submits its application to a local school board and the application is not approved, or if the charter of a current school is revoked or not renewed by a local school board, then the applicant or charter school operator may petition the local school board for reconsideration. Prior to such petition, the applicant or charter school operator may seek technical assistance from the Virginia Department of Education (VDOE). VDOE staff will work with each applicant or charter school operator on a case-by-case basis in order to address individual needs.

Receipt of the Application

When the Board receives an application, VDOE staff, on behalf of the Board, will send an acknowledgement to the applicant. VDOE will determine, on behalf of the Board that an application is complete when all of the required application elements have been submitted in the required format.

If the application is deemed incomplete, the VDOE will notify the applicant within 15 business days of receipt of the application and request that the outstanding information be submitted within 30 business days of such notification to the applicant that additional information is needed.

If an applicant fails to respond to the initial request for additional information, the VDOE will contact the applicant and will make a second request for any outstanding information. In this communication, VDOE will indicate that the application will not be considered for review by the Board's Charter Schools Committee until all information is received. The applicant may withdraw his application at any time during the initial process and resubmit it at a later time.

If the application is deemed complete by VDOE, it will be sent to the Board's Charter Schools Committee members. The committee may appoint an advisory work group to review the application and provide the committee with technical expertise.

Review by the Charter Schools Committee

The applicant must attend a meeting with the Board committee. VDOE staff, on behalf of the Board, may also invite representatives of the applicable local school board to attend the meeting.

All meetings of the Board's Charter Schools Committee are publicly noticed at: http://www.doe.virginia.gov/boe/committees_standing/index.shtml#lab and all meetings are open to the public.

At the meeting with the Charter Schools Committee, the applicant will be asked to discuss the contents of the application and address the committee members' questions. The committee may request public comment or schedule public hearings on the application to provide appropriate opportunity for input from parents, teachers, and other interested parties and to obtain information to assist the Board in its evaluation of a public charter school application.

Action by the Board of Education

Following the meeting of the applicant with the Board's Charter Schools Committee, VDOE will assist the committee in preparing a report to the full Board with the recommendation of the committee as to whether the application meets the Board's approval criteria. A copy of the report will be provided to the applicant within ten business days of the committee meeting.

The report will be presented to the full Board at the next regularly scheduled Board meeting. The applicant will be requested to attend this meeting to answer questions or make comments on the application.

At this meeting, the Board will take one of the following actions:

1. The Board will render a decision that the application meets the Board's approval criteria.

   Following action by the Board, the applicant will be formally notified by the VDOE of the Board's action within five business days. Concurrent with its notification to the applicant, the applicable local school board will also receive a formal notification of the Board's action.

2. The Board will render a decision that the application does not meet the Board's approval criteria.

   The Board will provide the applicant with an opportunity to address any deficiencies in the application. The applicant may also withdraw his application at any time and resubmit it at a later date.

   Following action by the Board, the applicant will be formally notified by the VDOE of the Board's action within five business days. Concurrent with its notification to the applicant, the applicable local school board will also receive a formal notification of the Board's action.

Attachment C

Virginia Public Charter School
Application Package

For the purpose of full disclosure and to benefit the local school board, the application package submitted to the Board must be included as part of the application made to the local school board.

Applicant Fact Sheet

The applicant fact sheet provides basic information concerning the nature of the proposed public charter school, contact information for the applicant, and the applicant's prior experience. The fact sheet contains the following information:

- Applicable local school board;
- Applicant contact information, including name, title/affiliation, address, telephone number, e-mail address;
- Name of the proposed school;
- If the applicant has identified a facility suitable for a school, information about the location and ownership of the facility;
- Proposed opening date of the school;
- Proposed date that an application for charter approval will be made to the applicable local school board;
- Grades to be served by the school;
- A description of any specialized focus (such as, but not limited to: science, technology, engineering, mathematics [STEM]; at-risk students; special education; career and technical education; and gifted education), if applicable;
- A description of any prior experience with establishing charter schools and/or similar schools, including the name of the applicable state, the name of the school, years of operation, contact information, and (if the school is no longer operating) the reasons for closure; and
- A description of the prior or relevant experience of the members of the management committee.

Narrative Information

I. **Executive Summary**: This summary should address the need for the public charter school and its goals and objectives.

II. **Mission and Vision**: The statement must be consistent with the principles of the Standards of Quality. The following components should be addressed:

1. A description of the public charter school's mission and show how it is consistent with the principles of the Standards of Quality (Reference: § 22.1-253.13:1, paragraph A, *Code of Virginia*);

2. A description of any specific area of academic concentration; and

3. Information about the public charter school's anticipated student population, consistent with § 22.1-212.6 of the *Code of Virginia*.

III. **Goals and Educational Objectives***:* The goals and objectives to be achieved by the public charter school, which educational objectives must meet or exceed the Standards of Learning. The following components should be addressed:

1. A description of the performance-based goals and related measurable educational objectives to be achieved by the public charter school (Reference: § 22.1-253.13:1.B, paragraph A, *Code of Virginia*);

2. For each grade or course in the public charter school, please provide a detailed description of how the Standards of Learning and the corresponding Standards of Learning Curriculum Framework will be used as the foundation for curricula to be implemented. Include within the description how the goals and objectives of the curricula will meet or exceed the Standards of Learning, address student performance standards, relate to state and federal assessment standards, and include measurable student outcomes;

3. A description of the public charter school assessment plan to obtain student performance data, which includes how these data will be used to monitor and improve achievement and how program effectiveness will be measured over a specified period of time. The applicant also needs to provide benchmark data for how student achievement will be measured. The applicant must address how these data will be established and documented in the first year of operation and how the data will be measured over the successive four-year period before the charter of such school is renewed by the local school board. The benchmark data should address targets for student improvement to be met in each year; and

4. A description of any assessment other than the Standards of Learning assessments that may be used to measure progress during the academic year.

IV. **Evidence of Support:** The applicant should provide evidence that an adequate number of parents, teachers, pupils, or any combination thereof, supports the formation of a public charter school. The following components should be addressed:

1. Information and materials indicating how parents, the community, and other stakeholders were involved in supporting the application for the public charter school;

2. Tangible evidence of support for the public charter school from parents, teachers, students, and residents, or any combination thereof, including information regarding the number of persons and organizations involved in the process; and

3. A description of how parental involvement will be used to support the educational needs of the students, the school's mission and philosophy, and its educational focus.

V. **Statement of Need**: The applicant should provide a statement of the need for a public charter school in a school division or relevant school divisions in the case of a regional public charter school, or in a geographic area within a school division or relevant school divisions, as the case may be. The following components should be addressed:

1. A statement of the need for a public charter school that addresses the anticipated school population to be served and the reasons for locating the school within a particular school division;

2. An explanation as to why the public charter school is being formed - for example, if the school is being formed at the requests of parents or community organizations, and how the need was determined; and

3. An explanation as to why a public charter school is the appropriate vehicle to address the need as outlined in the mission statement.

VI. **Educational Program**: The applicant should provide a description of the public charter school's educational program, pupil performance standards, and curriculum, which must meet or exceed any applicable Standards of Quality; any assessments to be used to measure pupil progress towards achievement of the school's pupil performance standards, in addition to the Standards of Learning assessments prescribed by §22.1-253.13:3; the timeline for achievement of such standards; and the procedures for taking corrective action in the event that pupil performance at the public charter school falls below such standards. The following components should be addressed:

1. A description of the public charter school's educational program;

2. A description of the pupil performance standards, and curriculum, which must meet or exceed any applicable Standards of Quality, §§ 22.1-253.13:1 through 22.1-253.13:9, *Code of Virginia*;

3. Any assessments to be used to measure pupil progress towards achievement of the school's pupil performance standards, in addition to the Standards of Learning assessments prescribed by § 22.1-253.13:3, *Code of Virginia*;

4. The timeline for achievement of pupil performance standards, in accordance with the Standards of Learning;

5. An explanation of the general procedures for corrective actions needed in the event that pupil performance at the public charter school falls below the standards outlined in the Board of Education's *Regulations Establishing Standards for Accrediting Public Schools in Virginia*, 8 VAC 20-131-310;

6. Information regarding the minimum and maximum enrollment per grade as well as class size and structure for each grade served by the public charter school;

7. Information regarding the proposed calendar and daily schedule, including any plans to open prior to Labor Day and, if so, how and when a waiver to open early will be submitted by the local school board to the Board of Education, under § 22.1-79.1, *Code of Virginia;*

8. A description of plans for identifying and serving students who are:

   - Students with disabilities;
   - English Language Learners (ELL)
   - Academically at-risk; or
   - Gifted and talented.

   Such plans must comply with state and federal laws and regulations.

9. A description of the learning environment and instructional strategies to be used at the public charter school, including scientifically research-based instructional strategies to ensure that student engagement and achievement are occurring;

10. If the public charter school plans to utilize virtual learning in its educational program, a description of how virtual learning will be used and estimates of how many students may participate;

11. A general description of any alternative accreditation plan, in accordance with the Board of Education's *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131-280), that the public charter school would request the local school board to submit to the Board of Education for approval; and

12. In reference to serving students with disabilities, a general description of any alternative accreditation plan, in accordance with the Board of Education's *Regulations Governing Special Education Programs For Children With Disabilities in Virginia* (8 VAC 20-80-40) that the public charter school would request the local school board to submit to the Board of Education for approval.

VII. **Enrollment Policies**: A description of the lottery process to be used to determine enrollment, should the number of applications for admission exceed available enrollment slots.

A lottery process shall also be developed for the establishment of a waiting list for such students for whom space is unavailable and, if appropriate, a tailored admission policy that meets the specific mission or focus of the public charter school and is consistent with all federal and state laws and regulations and constitutional provisions prohibiting discrimination that are applicable to public schools and with any court-ordered desegregation plan in effect for the school division or,

in the case of a regional public charter school, in effect for any of the relevant school divisions. (Reference: § 22.1-212.6 of the *Code of Virginia*, which states: "Enrollment shall be open to any child who is deemed to reside within the relevant school division or, in the case of a regional public charter school, within any of the relevant school divisions, as set forth in § 22.1-3, through a lottery process on a space-available basis. A waiting list shall be established if adequate space is not available to accommodate all students whose parents have requested to be entered in the lottery process. Such waiting list shall also be prioritized through a lottery process and parents shall be informed of their student's position on the list.")

The following components should be addressed:

1. A description of the lottery process to be used to determine public charter school enrollment on a space-available basis, including the establishment of a waiting list for students for whom space is not available;

2. If appropriate, a description of a tailored admission policy that meets the specific mission or focus of the public charter school;

   This policy shall be consistent with all federal and state laws and regulations and constitutional provisions prohibiting discrimination that are applicable to public schools and with any court-ordered desegregation plan in effect for the school division or, in the case of a regional public charter school, in effect for any of the relevant school divisions.

3. A timeline for when the lottery process will begin for the first academic year of enrollment and when parents will be notified of the outcome of the lottery process;

4. Any enrollment-related policies and procedures that address special situations, such as the enrollment of siblings and children of faculty and founders and the enrollment of nonresident students, if applicable. Consistent with a public charter school's mission and purpose that may address special populations of students, the applicant must indicate how it will ensure that community outreach has been undertaken so that special populations are aware of the formation of the public charter school and that enrollment is open to all students residing in the school division where the public charter school is located or in school divisions participating in a regional charter school; and

5. A description of how the transfer of students to and from the public charter school will be accomplished and how the enrollment of students after the school year begins will be accommodated.

VIII. **Economic Soundness**: Evidence that the plan for the public charter school is economically sound for both the public charter school and the school division or relevant school divisions, as the case may be; a proposed budget for the term of the charter; and a description of the manner in which an annual audit of the financial and administrative operations of the public charter school, including any services provided by the school division or relevant school divisions, as the case may be, is to be conducted. The following components must be addressed:

1. A description of the public charter school's financial plan, including financial controls and audit requirements in accordance with generally accepted accounting principles;

2. Start-up and five-year budgets with clearly stated assumptions and information regarding projected revenues and expenditures;

3. Start-up and five-year cash flow projections with clearly stated assumptions and indications of short- and long-term sources of revenue;

4. Description of anticipated fundraising contributions, if applicable; and

5. A description of the funding agreement that the public charter school intends to have with the local education agency, including information regarding anticipated local, state, and federal per-pupil-amounts to be received and any information pertaining to the maintenance of facilities.

IX. **Displacement**: A plan for the displacement of pupils, teachers, and other employees who will not attend or be employed in the public charter school, in instances of the conversion of an existing public school to a public charter school, and for the placement of public charter school pupils, teachers, and employees upon termination or revocation of the charter. (Reference: § 22.1-212.12, *Code of Virginia*.) The following components should be addressed:

1. Identification of a member of the school's leadership who will serve as a single point of contact for all that may need to take place in order for the school to close including, but not limited to, the transfer of students to another school, the management of student records, and the settlement of financial obligations;

2. A notification process for parents or guardians of students attending the school and teachers and administrators of the closure date;

3. A notification process to parents or guardians of students attending the public charter school of alternative public school placements within a set time period from the date that the closure is announced;

4. Provisions for ensuring that student records are provided to the parents or guardians or another school identified by the parent or guardian within a set time period. If the student transfers to another school division, provisions must be made for the transfer of the student's record to the school division to which the student transfers upon the request of that school division. (Reference: § 22.1-289 of the *Code of Virginia*.);

5. Notification to the local school board of a list of all students in the school and the names of the schools to which these students will transfer;

6. A placement plan for school employees that details the level of assistance to be provided within a set period of time from the date of closure. For teachers and administrators, the level of assistance should address finding employment within the school division where the public charter school is located or other public school divisions; and

7. A close-out plan related to financial obligations and audits, the termination of contracts and leases, and the sale and disposition of assets within a set period of time from the date of

closure. The plan shall include the disposition of the schools' records and financial accounts upon closure.

X. **Management and Operation**: A description of the management and operation of the public charter school, including the nature and extent of parental, professional educator, and community involvement in the management and operation of the public charter school. (Reference: § 22.1-212.7, *Code of Virginia*.) The following components should be addressed:

1. A description of the functions, roles, and duties of the management committee and its proposed composition and bylaws. The description must detail the specific role of the management committee in the operation and oversight of the public charter school;

2. An explanation of how support services will be provided. These services include, but are not limited to:

   - Food services;
   - School health services;
   - Custodial services;
   - Extracurricular activities; and
   - Security services;

3. An explanation of any partnerships or contractual relationships central to the school's operations or mission, including information regarding the relationship of all contractors to the governing board of the public charter school, and information regarding how contractors and the employees of the contractors having direct contact with students will comply with the provisions of § 22.1-296.1, *Code of Virginia*. (Contractual relationships include procuring the services of an education management organization, food services, school health services, custodial services, and security services.);

4. A detailed start-up plan, identifying tasks, timelines, and responsible individuals;

5. A proposed organization chart; and

6. Plans for recruiting school leadership and staff.

XI. **Employment Terms and Conditions:** An explanation of the relationship that will exist between the proposed public charter school and its employees, including evidence that the terms and conditions of employment have been addressed with affected employees. (References: §§ 22.1-212.13, § 22.1-296.1 and § 22.1-296.2, *Code of Virginia*.) The following components should be addressed:

1. A plan that addresses the qualifications of teachers and administrators at the public charter school, including compliance with state law and regulation regarding Board of Education licensing endorsements;

2. A plan to provide high quality professional development programs (Reference: § 22.1-253.13:5, *Code of Virginia*);

3. Provisions for the evaluation of staff at regular intervals and in accordance with state law and regulation;

4. Provisions for a human resource policy for the public charter school that is consistent with state and federal law;

5. Notification to all school employees of the terms and conditions of employment; and

6. A staffing chart for the school's first year and a staffing plan for the term of the contract.

XII. **Liability and Insurance:** An agreement between the parties regarding their respective legal liability and applicable insurance coverage. (Reference: § 22.1-212.16, *Code of Virginia*.) The following components should be addressed:

1. The types of insurance for the charter school, its property, its employees, the charter school management committee, and the board and the levels of coverage sought. Types of insurance include, but are not limited to:

   - General liability;
   - Health; and
   - Property;

2. A justification for each type of coverage sought; and

3. A description of any plans of the public charter school to provide indemnity for the local school division.

XIII. **Transportation:** A description of how the public charter school plans to meet the transportation needs of its pupils. The following components should be addressed:

1. A description of how the transportation of students will be addressed. This plan should address whether transportation will be provided by:

   - The local school division;
   - The public charter school;
   - The parent(s); or
   - A combination of these options;

2. If transportation services will be provided to students by the public charter school, indicate whether the school will contract for transportation with the local education agency or with another entity or have its own means of providing transportation, and describe those means. Please indicate whether transportation will be provided to all students attending the school;

3. A description of transportation services for students with disabilities. (Section 22.1-221, *Code of Virginia*, states that each "disabled child enrolled in and attending a special education program provided by the school division pursuant to any of the provisions of § 22.1-216 or § 22.1-218 shall be entitled to transportation to and from such school or class at no cost if such transportation is necessary to enable such child to obtain the benefit of educational programs

and opportunities." Also, the Board's *Regulations Governing Special Education Programs for Children with Disabilities in Virginia* state the following: "Each child with a disability, aged two to 21, inclusive, placed in an education program, including private special education day or residential placements, by the local school division shall be entitled to transportation to and from such program at no cost if such transportation is necessary to enable such child to benefit from educational programs and opportunities. Children with disabilities and children without disabilities shall share the same transportation unless a child's IEP requires specialized transportation."); and

4. An assurance that transportation will be provided consistent with state law and regulation. (Reference: §§ 22.1-176, 22.1-182, 22.1-186, 22.1-191, 22.1-221, 22.1-216, 22.1-218, *Code of Virginia* and the Board of Education's *Regulation Governing Pupil Transportation*.)

XIV. **Assurances Required by the *Code of Virginia*:** By signing and submitting this application, the applicant expressly assures the Board that:

1. No tuition will be charged to students;

2. The school is nonreligious in its admission policies, employment practices, and all other operations;

3. The public charter school policies and procedures are in compliance with the federal *Family Educational Rights and Privacy Act* (FERPA) and the records retention schedules for public schools, and evidence that such policies and schedules will be acceptable to the local education agency; and

4. The proposed public charter school programs, services, and activities will operate in accordance with all applicable federal and state laws and regulations, including the Virginia Freedom of Information Act.

XV. **Residential Charter School:** In the case of a residential charter school for at-risk students, a description of (i) the residential program, facilities, and staffing; (ii) any parental education and after-care initiatives; (iii) the funding sources for the residential and other services provided; and (iv) any counseling or other social services to be provided and their coordination with any current state or local initiatives. The following components should be addressed:

1. A description of the residential program to include: a) the educational program; b) a facilities description to include grounds and dormitories; c) a program for parental education and involvement; d) a description of after-care initiatives; e) funding sources to support the costs of maintaining the residential facility; f) counseling and other social services to be provided; and g) a description of enrichment activities available to students; and

2. A description of how the facility will be maintained including, but not limited to: a) janitorial and regular maintenance services and b) security services to ensure the safety of students and staff.

XVI. **Disclosures:** Disclosure of any ownership or financial interest in the public charter school, by the charter applicant and the governing body, administrators, and other personnel of the proposed

public charter school, and a requirement that the successful applicant and the governing body, administrators, and other personnel of the public charter school shall have a continuing duty to disclose such interests during the term of any charter. The following components should be addressed:

1. A description of how the applicant and members of the management committee will disclose any ownership or financial interest.
2. Information regarding the frequency by which such disclosures will be made. (Reference: § 2.2-3114, *Code of Virginia*.)
3. A description of ownership or financial interest of the applicant and/or members of the management committee in the proposed charter school. This includes any relationships that parties may have with vendors performing services at the school.
4. An assurance that the applicant has knowledge of the Virginia Conflict of Interest Act and the Virginia Public Procurement Act.

XVII. **Additional Assurances and Requirements:** Additional components of the application that are not contained in the *Code of Virginia*. The following components should be addressed:

1. The applicant must provide an assurance that, if an application is approved by a local school board, the applicant will take all actions necessary to enter into a contract with the local school board no later than nine months prior to the opening date of the public charter school;

2. The application must provide information regarding the proposed term of its contract with a local school board. Section 22.1-212.12, *Code of Virginia*, states: "A charter may be approved or renewed for a period not to exceed five school years." The applicant must also provide information regarding its proposed agreement with the local school board regarding notice should a charter be revoked or fail to be renewed;

3. The applicant must provide an assurance that, if an application is approved by a local school board, the school leadership of the public charter school will be retained on contract no later than six months prior to the opening date of the school;

4. The applicant must include a listing of all waivers to state regulations needed for the public charter school at the time of its opening. This does not preclude a public charter school from working with the local school board to request additional waivers once the school is operational. Along with this listing, the applicant must also provide an assurance that, if an application is approved by a local school board, all requests for waivers from the Board of Education will be made by the local school board, on behalf of the applicant, no later than six months prior to the opening date of the school;

5. The applicant must provide facilities information including, but not limited to:

   - The provision of suitable instructional space;
   - Provisions for library services;
   - Provisions for the safe administration and storage of student records and student medications;
   - Information regarding compliance with building and fire codes and compliance with the federal *Americans with Disabilities Act* (ADA);

- General information on emergency evacuation plans;
- Information regarding site location and preparation;
- The structure of operation and maintenance services; and
- Financial arrangements for facilities, including any lease arrangements with school divisions or other entities and whether debt will be incurred;

6. In reference to serving students with disabilities, the applicant must provide a description of how services will be rendered to this population of students attending the public charter school, including the extent of the involvement of the local school board in providing for such services. The public charter school must assure that it will comply with all provisions of the Board of Education's *Regulations Governing Special Education Programs For Children With Disabilities in Virginia*; and

7. The applicant must provide a model Student Code of Conduct policy that addresses student behavior, discipline and participation in school activities. The plan should identify the role of teachers and administrators in discipline and mentoring and must demonstrate compliance with the code of conduct policy of the applicable local school board.

Certification

The applicant must certify that to the best of his/her knowledge, the information in this application is correct, that the applicant has completed all elements of the application, and that the applicant understands the assurances given in this application and will comply with them.

Board of Education Agenda Item

Item: E. **Date:** November 18, 2010

Topic: First Review of the Application for College Partnership Laboratory Schools and the Procedures for Receiving, Reviewing, and Ruling on College Partnership Laboratory School Applications

Presenter: Ms. Anne D. Wescott, Assistant Superintendent for Policy and Communications

Telephone Numbers: (804) 225-2403 **E-Mail Addresses** Anne.Wescott@doe.virginia.gov

Origin:

___ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

___ Action requested at this meeting

_X_ Action requested at future meeting: January 13, 2011

Previous Review/Action:

_X_ No previous board review/action

____ Previous review/action
dates _____
actions _____

Background Information: HB 1389 (Peace) and SB 736 (Newman), passed by the 2010 General Assembly and signed by the Governor, added sections to the *Code of Virginia* providing for the establishment of college partnership laboratory schools.

Section 23-299 of the *Code of Virginia* defines a college partnership laboratory school as "a public, nonsectarian, nonreligious school established by a public institution of higher education that operates a teacher education program approved by the Virginia Board of Education (Board)." College partnership laboratory schools are public schools established by contract between the governing board of a college partnership laboratory school and the Board of Education. The members of the governing board are selected by the institution of higher education establishing the college partnership laboratory school.

As provided in § 23-299 of the *Code*, a college partnership laboratory school may be established to:

- Stimulate the development of innovative programs for preschool through grade twelve students;

- Provide opportunities for innovative instruction and assessment;
- Provide teachers with a vehicle for establishing schools with alternative innovative instruction and school scheduling, management, and structure;
- Encourage the use of performance-based educational programs;
- Establish high standards for both teachers and administrators;
- Encourage greater collaboration between education providers from preschool to the postsecondary level; and
- Develop models for replication in other public schools.

Section 23-299.4 of the Code specifies the essential elements of the proposed school plan. It says:

§ 23-299.4. College partnership laboratory school application.

A. Any public institution of higher education operating within the Commonwealth and having a teacher education program approved by the Board of Education may submit an application for formation of a college partnership laboratory school.

B. Each college partnership laboratory school application shall provide or describe thoroughly all of the following essential elements of the proposed school plan:

1. An executive summary;

2. The mission and vision of the proposed college partnership laboratory school, including identification of the targeted student population;

3. The proposed location of the school;

4. The grades to be served each year for the full term of the contract;

5. Minimum, planned, and maximum enrollment per grade per year for the term of the contract;

6. Background information on the proposed founding governing board members and, if identified, the proposed school leadership and management team;

7. The school's proposed calendar and sample daily schedule;

8. A description of the academic program aligned with state standards;

9. A description of the school's educational program, including the type of learning environment (such as classroom-based or independent study), class size and structure, curriculum overview, and teaching methods;

10. The school's plan for using internal and external assessments to measure and report student progress in accordance with the Standards of Learning;

11. The school's plans for identifying and successfully serving students with disabilities, students who are English language learners, students who are academically behind, and

gifted students, including but not limited to compliance with applicable laws and regulations;

12. A description of co-curricular and extracurricular programs and how they will be funded and delivered;

13. Plans and timelines for student recruitment and enrollment, including lottery procedures if sufficient space is unavailable;

14. The school's student disciplinary policies, including those for special education students;

15. An organization chart that clearly presents the school's organizational structure, including lines of authority and reporting between the governing board, staff, any related bodies (such as advisory bodies or parent and teacher councils), Board of Education, and any external organizations that will play a role in managing the school;

16. A clear description of the roles and responsibilities for the governing board, the school's leadership and management team, and any other entities shown in the organization chart;

17. A staffing chart for the school's first year and a staffing plan for the term of the contract;

18. Plans for recruiting and developing school leadership and staff;

19. The school's leadership and teacher employment policies, including performance evaluation plans;

20. A plan for the placement of college partnership laboratory school pupils, teachers, and employees upon termination or revocation of the contract;

21. Explanation of any partnerships or contractual relationships central to the school's operations or mission;

22. The school's plans for providing transportation, food service, and all other significant operational or ancillary services;

23. Opportunities and expectations for parent involvement;

24. A detailed school start-up plan, identifying tasks, timelines, and responsible individuals;

25. Description of the school's financial plan and policies, including financial controls and audit requirements;

26. A description of the insurance coverage the school will obtain;

27. Start-up and five-year budgets with clearly stated assumptions;

28. Start-up and first-year cash-flow projections with clearly stated assumptions;

29. Evidence of anticipated fundraising contributions, if claimed in the application;

30. A sound facilities plan, including backup or contingency plans if appropriate; and

31. Assurances that the college partnership laboratory school (i) is nonreligious in its programs, admission policies, employment practices, and all other operations and (ii) does not charge tuition.

The purposes of the college partnership laboratory school application are to present the proposed school's academic and operational vision and plans, demonstrate the applicant's capacities to execute the proposed vision and plans, and provide the Board of Education a clear basis for assessing the applicant's plans and capacities….

Section 23-299.5 of the *Code* requires the Board to establish procedures for receiving, reviewing, and ruling on applications. It says:

§ 23-299.5. Review of college partnership laboratory school applications.

A. The Board of Education shall establish procedures for receiving, reviewing, and ruling upon applications and shall make a copy of any such procedures available to all interested parties upon request. If the Board finds the application is incomplete, the Board shall request the necessary information from the applicant. The Board of Education's review procedures shall establish a review committee that may include experts with the operation of similar schools located in other states.

B. To provide appropriate opportunity for input from parents, teachers, and other interested parties and to obtain information to assist the Board of Education in its evaluation of a college partnership laboratory school application, the Board of Education may establish a procedure for public notice, comment, or hearings on such applications.

The Board of Education's College Partnership Laboratory School Committee met on June 23, July 21, September 2, September 22, and November 17.

At the June 23 meeting, staff presented background information to the committee, and the committee reviewed the work plan.

At the July 21 and the September 2 meetings, the committee held a forum with national experts on college laboratory schools:

- Dr. John Jacobson, Dean, Teachers College, Ball State University
- Dr. Jay McGee, Principal and Chair of the Burris Laboratory School Ball State University, and Board of Directors, National Association of Laboratory Schools
- Mr. Glen Thomas, Principal and Director, A.D. Henderson University (Elementary and Middle) school, Florida Atlantic University, and Board of Directors, National Association of Laboratory Schools

- Dr. Beverly Warren, Interim Provost and Vice President for Academic Affairs, Virginia Commonwealth University

At the September 22 meeting, the committee held forums with provosts and deans of Virginia institutions of higher education. The provosts were:

- Dr. Bill Gannon, Radford University, representing the Vice President for Academic Affairs
- Dr. Jerry Benson, Provost and Senior Vice President, James Madison University
- Dr. Weldon Hill, Provost and Vice President for Academic Affairs, Virginia State University

The deans were:

- Dr. Susan Magliaro, Associate Dean for Professional Education and Director, School of Education, Virginia Tech
- Dr. Phil Wishon, Dean of the School of Education, James Madison University
- Dr. Patricia Shoemaker, Dean of the College of Education and Human Development, Radford University
- Dr. Rebecca Kneedler, Associate Dean for Academic Partnerships and International Initiatives, University of Virginia

The November 17 meeting is scheduled to be a joint meeting with the Charter School Committee to review the draft procedures and the application package.

Summary of Major Elements: The procedures receiving, reviewing, and ruling upon an application are found in Attachment A. They include:

- Directions for submitting the application;
- Technical assistance provided upon request;
- Receipt of the application and determination of whether the application is complete;
- Review of the application by the College Partnership Laboratory School Committee;
- Review by the Board of Education;
- Execution of the contract after an application is approved;
- Renewal of an application; and
- Revocation.

The application package, found in Attachment B, includes the following:

- Applicant fact sheet;

- Narrative information
  - ✓ Executive summary;
  - ✓ Mission and vision;
  - ✓ Educational program;
  - ✓ Governance;
  - ✓ Management structure;
  - ✓ Financial and operational information;
  - ✓ Placement plan;

- ✓ Other requirements;
- ✓ Assurances; and

- Certification.

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education accept the item for first review and authorize 30 days of public comment on the proposed procedures and application package.

Impact on Resources: The impact on resources is not expected to be significant.

Timetable for Further Review/Action: Following a 30-day public comment period, this item is expected to be presented to the Board for final review and approval on January 13, 2011.

Attachment A

Procedures for Receiving, Reviewing, and Ruling on Virginia College Partnership Laboratory School Applications

Submission of the Application

Applicants must adhere to the form prescribed by the Board of Education. The format provided addresses the application elements included in § 23-299.4, *Code of Virginia*. Applications for college partnership laboratory schools should be submitted to the Board at least 12 months prior to the proposed opening day of the school.

Applications may be submitted electronically or by hard copy to the Executive Assistant for the Board of Education.

Technical Assistance

Prior to submitting an application, the applicant may seek technical assistance from the Virginia Department of Education (VDOE). VDOE staff will work with each applicant on a case-by-case basis in order to address individual needs.

Receipt of the Application

When the Board of Education receives an application, VDOE staff, on behalf of the Board, will send an acknowledgement to the applicant. VDOE will determine, on behalf of the Board, that an application is complete when all of the required application elements have been submitted in the required format.

If the application is deemed incomplete, the VDOE will notify the applicant within 15 business days of receipt of the application and request that the outstanding information be submitted within 30 business days of such notification to the applicant that additional information is needed.

If an applicant fails to respond to the initial request for additional information, the VDOE will contact the applicant and make a second request for any outstanding information. In this communication, VDOE will indicate that the application will not be considered for review by the Board's College Partnership Laboratory School Committee until all information is received. The applicant may withdraw his application at anytime during the initial process and resubmit it at a later time.

If the application is deemed complete by VDOE, it will be sent to the Board's College Partnership Laboratory School Committee members. The committee may appoint an advisory work group to review the application and provide the committee with technical expertise. The work group could include individuals with experience in the operation of similar schools located in other states.

Review by the College Partnership Laboratory School Committee

The applicant and applicable representatives of the institution of higher education affiliated with the applicant must attend a meeting with the Board committee.

All meetings of the Board's College Partnership Laboratory School Committee are publicly noticed at: http://www.doe.virginia.gov/boe/committees_standing/index.shtml#lab and all meetings are open to the public.

At the meeting with the College Partnership Laboratory Committee, these representatives will be asked to discuss the contents of the application and address the committee members' questions. The committee may request public comment or schedule public hearings on the application to provide appropriate opportunity for input from parents, teachers, and other interested parties and to obtain information to assist the Board in its evaluation of a college partnership laboratory school application.

Action by the Board of Education

Following the meeting of the applicant with the Board's College Partnership Laboratory Committee, VDOE will assist the committee in preparing a report to the full Board with the recommendation of the committee as to whether the application should be approved. A copy of the committee's report will be provided to the applicant within ten business days of the committee meeting. The report will be presented to the full Board at the next regularly scheduled Board meeting. The applicant will be requested to attend this meeting to answer questions or make comments on the application.

At this meeting, the Board will take one of the following actions:

1. The Board will render a decision that the application meets the Board's approval criteria.

   Following action by the Board, the applicant will be formally notified by the VDOE of the Board's action within five business days. Concurrent with its notification to the applicant, the applicable public institution of higher education will also receive a formal notification of the Board's action.

2. The Board will render a decision that the application does not meet the Board's approval criteria.

   The Board will provide the applicant with an opportunity to address any deficiencies in the application. The applicant may also withdraw his application at any time and resubmit it at a later date.

   Following action by the Board, the applicant will be formally notified by the VDOE of the Board's action within five business days. Concurrent with its notification to the applicant, the applicable public institution of higher education will also receive a formal notification of the Board's action.

Contract Execution

Section 23-299.4, *Code of Virginia,* states that "Within 90 days of approval of a college partnership laboratory school application, the Board of Education and the governing board of the approved school

shall execute a contract that clearly sets forth the academic and operational performance expectations and measures by which the college partnership laboratory school will be judged and the administrative relationship between the Board of Education and the college partnership laboratory school, including each party's rights and duties…."

As soon as the Board takes action to approve a college partnership laboratory school application, VDOE staff, on behalf of the Board, will begin working with the applicant on the terms of the contract so that it can be executed within the 90 day statutory timeline.

Renewals

Section 23-299.7, *Code of Virginia*, states that "A college partnership laboratory school may be approved or renewed for a period not to exceed five school years. The renewal application shall include the following:

1. A report on the progress made in achieving goals, objectives, programs, and performance standards for the students, and other conditions and terms specified by the Board upon granting initial approval.

2. A concise and clearly written financial statement which discloses the costs of administration, instruction, and other spending categories for the school. This information must be submitted on forms prescribed by the Board and must provide the Board with sufficient information that will enable the Board and the public to compare costs with those of other schools or comparable organizations."

Revocations

The Board may revoke a contract if the college partnership laboratory school does any of the following or otherwise fails to comply with the *Code* requirements:

1. Commits a material and substantial violation of any of the terms, conditions, standards, or procedures required by the *Code* or the contract;

2. Fails to meet or make sufficient progress toward the performance expectation set forth in the contract;

3. Fails to meet generally accepted standards of fiscal management; or

4. Substantially violates any material provision of law or regulation from which the college partnership laboratory school was not exempted.

If the Board revokes or does not renew a college partnership laboratory school contract, the Board will state the reasons for the action in a Board resolution. The Board's decision to approve or disapprove a college partnership laboratory application or to revoke or fail to renew an agreement is final and is not subject to appeal.

The applicant may, however, submit an application again at a later date.

Attachment B

Virginia College Partnership Laboratory School Application Package

Applicant Fact Sheet

The applicant fact sheet provides basic information concerning the nature of the proposed college partnership laboratory school, contact information for the applicant, and the applicant's prior experience. The fact sheet contains the following information:

- Public institution of higher education partner;
- Applicant's contact information, including name, title, affiliation, address, telephone number, and e-mail address;
- Name of the proposed school;
- If the institution of higher education has identified a facility suitable for a school, information about the location and ownership of the facility;
- Proposed opening date of the school;
- Grades to be served by the school;
- A description of any specialized focus (such as, but not limited to: science, technology, engineering, mathematics [STEM]; at-risk students; special education; career and technical education; and gifted education), if applicable;
- A description of any proposed partnerships between the school and a school division, if applicable;
- A description of any prior experience with establishing college partnership laboratory schools and/or similar schools, including the name of the applicable state, the name of the school, years of operation, contact information, and (if the school is no longer operating) the reasons for closure; and
- A description of the prior or relevant experience of the members of the governing board.

Narrative Information

I. **Executive Summary**: This summary should address the need for the college partnership laboratory school and its goals and objectives.

II. **Mission and Vision**: The mission and vision of the proposed college partnership laboratory school, including identification of the targeted student population, must be included. The following components should be addressed:

1. A description of the college partnership laboratory school's mission and how it is consistent with the Standards of Quality, the Standards of Learning, and the Board of Education's *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (Reference: § 23-299.2, *Code of Virginia*);

2. A description of any specific area of academic concentration; and

3. Information about the college partnership laboratory school's anticipated student population.

III. **Educational Program**: The goals and objectives to be achieved by the college partnership laboratory school must meet or exceed the Standards of Learning. The following components should be addressed:

1. A description of the college partnership laboratory school's academic program and how it is aligned with state standards;

2. A description of the learning environment and instructional strategies to be used at the college partnership laboratory school, including scientifically research-based instructional strategies to ensure that student engagement and achievement are occurring;

3. If the college partnership laboratory school plans to utilize virtual learning in its educational program a description of how virtual learning will be used and estimates of how many students will participate;

4. A plan for using internal and external assessments to measure and report student progress in accordance with the Standards of Learning;

5. A description of plans for identifying, evaluating, and serving students who are: students with disabilities; English Language Learners (ELL); academically at-risk; and gifted and talented. Such plans must comply with state and federal laws and regulations;

6. An explanation of the procedures for corrective actions needed in the event that pupil performance at the college partnership laboratory school falls below the standards outlined in the Board of Education's *Regulations Establishing Standards for Accrediting Public Schools in Virginia*, 8 VAC 20-131-310;

7. Information regarding the minimum and maximum enrollment per grade for the full term of the contract as well as class size and structure for each grade. (Reference: Standards of Quality in § 22.1-253.13:2, *Code of Virginia*);

8. An overview of the curriculum, and teaching methods to be used at the college partnership laboratory school;

9. The proposed calendar and sample daily schedule;

10. A description of the performance-based goals and related measurable educational objectives to be achieved by the school. (Reference: § 22.1-253.13:1, *Code of Virginia*);

11. For each grade or course in the college partnership laboratory school, a detailed description of how the Standards of Learning and the corresponding Standards of Learning Curriculum Framework will be used as the foundation for curricula to be implemented. Include how the goals and objectives of the curriculum will meet or exceed the Standards of Learning, address student performance standards, relate to state and federal assessment standards, and include measurable student outcomes;

12. A description of the school's assessment plan, which would include how student performance data will be used to monitor and improve achievement and how program effectiveness will be measured. The applicant must also provide benchmark data for how student achievement will be measured over a specified period of time. The applicant must address how these data will be established and documented in the first year of operation and how the data will be measured over the successive four-year period before the contract of such school is renewed by the Board of Education. The benchmark data should address targets for student improvement to be met in each year;

13. A description of any assessment other than the Standards of Learning that may be used to measure progress during the academic year;

14. A detailed description of any alternative accreditation plan, in accordance with the Board of Education's *Regulations Establishing Standards for Accrediting Public Schools in Virginia* (8 VAC 20-131-280), that the college partnership laboratory school will request from the Board of Education for approval; and

15. A general description of any incentives/partnerships that the college partnership laboratory school intends to have with school divisions to enhance both the educational program of the college partnership laboratory school and the partnering school division(s).

IV. **Governance**: The following components should be addressed:

1. Background information on the proposed founding governing board members, and, if identified, the proposed school leadership and management team. (Reference § 22.1-299.2 B, *Code of Virginia*);

2. A chart that clearly presents the school's organizational structure, including lines of authority and reporting between the governing board, staff, any related bodies (such as advisory bodies or parent and teacher councils), the Board of Education, and any external organizations that will play a role in managing the school;

3. A clear description of the roles and responsibilities for the governing board, the school's leadership and management team, and any other entities shown in the organization chart. This includes a description of the functions, roles, and duties of the governing board and its proposed composition and bylaws. The description must detail the specific role of the governing board in the operation and oversight of the college partnership laboratory school; and

4. A description of the governing board's relationship with the affiliated public institution of higher education, any local school boards, parents, and community organizations.

V. **Management Structure**: The following components should be addressed:

1. Staffing chart for the school's first year and a staffing plan for the term of the contract;

2. Plans for recruiting and developing school leadership and staff;

3. A description of the academic/professional experience/qualifications of proposed faculty who will teach at the school;

4. An assurance that the applicant will meet the conditions in § 23-299.8, *Code of Virginia*, which state that teachers "working in a college partnership laboratory school shall hold a license issued by the Board of Education or, in the case of an instructor in the higher education institution's Board-approved teacher education program, be eligible to hold a Virginia teaching license. Teachers working in a college partnership laboratory school shall be subject to the requirements of §§ 22.1-296.1 and 22.1-296.2 applicable to teachers employed by a local school board;"

5. The school's leadership and teacher employment policies, including performance evaluation plans. Such performance evaluation plans must be consistent with the policies of the institution of higher education;

6. A plan that addresses the qualifications of the teachers and administrators at the college partnership laboratory school, including compliance with state law and regulation regarding Board of Education licenses and endorsements. (Reference § 22.1-299.2 B, *Code of Virginia*, for information regarding the employment of professional, licensed personnel);

7. A plan to provide high quality professional development programs (Reference: § 22.1-253.13:5, *Code of Virginia*);

8. Provisions for the evaluation of staff at regular intervals;

9. Provisions for a human resource policy for the school that is consistent with state and federal law;

10. Notification to all school employees of the terms and conditions of employment;

11. An explanation of any partnerships or contractual relationships central to the college partnership laboratory school's operations or mission, including information regarding any

partnerships with school divisions to provide educational or ancillary services. (Contractual relationships include procuring the services of an education management organization, food services, transportation, school health services, custodial services, and security services. Reference: § 23-299.2.C, *Code of Virginia.*);

12. Information and materials indicating how parents, the community, and other stakeholders were involved in developing the application for the college partnership laboratory school;

13. A description of how parental involvement will be used to support the educational needs of the students, the school's mission and philosophy, and its educational focus;

14. Plans and timelines for student recruitment and an open enrollment process for any child who is a resident of the Commonwealth, including lottery procedures if sufficient space is unavailable. (Please include a description of the lottery process to be used to determine school enrollment on a space-available basis and a time line for when the lottery process will begin for the first academic year of enrollment and when parents will be notified of the outcome of the lottery process. Reference: § 23-299.2, *Code of Virginia*);

15. Any enrollment-related policies and procedures that address special situations, such as the enrollment of siblings and children of faculty and founders and the enrollment of nonresident students, if applicable;

    Consistent with a college partnership laboratory school's mission and purpose that may address special populations of students, the applicant must indicate how to ensure that community outreach has been undertaken so that special populations are aware of the formation of the college partnership laboratory school and that enrollment is open to all students residing in the Commonwealth. Pursuant to § 23-299.2, *Code of Virginia*, enrollment in a college partnership laboratory school "shall be open to any child who is deemed to reside within the Commonwealth through a lottery process on a space-available basis. A waiting list shall be established if adequate space is not available to accommodate all students whose parents have requested to be entered in the lottery process. Such waiting list shall also be prioritized through a lottery process and parents shall be informed of their student's position on the list.

16. A model Student Code of Conduct policy that addresses student behavior, discipline and participation in school activities. The plan should identify the role of teachers and administrators in discipline and mentoring. The plan must also identify disciplinary policies related to students with disabilities;

17. A detailed school start-up plan, identifying tasks, timelines, and responsible individuals;

18. A description of co-curricular and extracurricular programs and how these programs will be funded and delivered; and

19. A general description of any operational incentives/partnerships that the college partnership laboratory school intends to have with school divisions to enhance both the educational program of the college partnership laboratory school and the partnering school division(s).

VI. **Financial and Operations Information**: The following components should be addressed:

1. A description of the college partnership laboratory school's financial plan, including financial controls and audit requirements in accordance with generally accepted accounting principles;

2. Start-up and five-year budgets with clearly stated assumptions and information regarding projected revenues and expenditures;

3. Start-up and five-year cash flow projections with clearly stated assumptions and indications of short- and long-term sources of revenue;

4. Description of anticipated fundraising contributions, if applicable;

5. The types of insurance and the levels of coverage sought. Types of insurance include, but are not limited to, general liability, health, and property;

6. A justification for each type of insurance coverage sought and evidence that the applicant has consulted with the affiliated public institution of higher education to ensure that the level of coverage is satisfactory;

7. A sound facilities plan, including backup or contingency plans. Facilities information includes, but is not limited to:

   - The provision of suitable instructional space;
   - Provisions for library services;
   - Provisions for the safe administration and storage of student records and medications;
   - Information regarding compliance with building and fire codes and compliance with the federal Americans with Disabilities Act (ADA);
   - General information on emergency evacuation plans;
   - Information regarding site location and preparation;
   - The structure of operation and maintenance services; and
   - Financial arrangements for facilities, including any lease arrangements with school divisions or other entities and whether debt will be incurred.

8. A description of whether transportation services will be provided. If transportation is to be provided, indicate whether the school will contract for transportation with the local education agency or another entity, and specify whether transportation will be provided to all students attending the school;

9. A description of transportation services for students with disabilities. (§ 22.1-221, *Code of Virginia*, states: that each "disabled child enrolled in and attending a special education program provided by the school division pursuant to any of the provisions of § 22.1-216 or § 22.1-218 shall be entitled to transportation to and from such school or class at no cost if such transportation is necessary to enable such child to obtain the benefit of educational programs and opportunities"); and

10. A description of food service operations and all other operational or ancillary services to be provided.

VII. **Placement Plan**: The following components should be addressed:

1. Identification of a member of the school's leadership who will serve as a single point of contact for all activities that may need to take place in order for the school to close including, but not limited to, the transfer of students to another school, the management of student records, and the settlement of financial obligations;

2. A notification process for parents/guardians of students attending the school and teachers and administrators of the closure date;

3. A notification process to parents/guardians of students attending the college partnership laboratory school of alternative public school placements within a set time period from the date that the closure is announced;

4. Provisions for ensuring that student records are provided to the parent or guardian or another school identified by the parent or guardian within a set time period. If the student transfers to another school division, provisions must be made for the transfer of the student's record to the school division to which the student transfers upon the request of that school division. (Reference: § 22.1-289 of the *Code of Virginia*);

5. A placement plan for school employees that details the level of assistance to be provided within a set period of time from the date of closure; and

6. A close-out plan related to financial obligations and audits, the termination of contracts and leases, and the sale and disposition of assets within a set period of time from the date of closure. The plan shall include the disposition of the schools' records and financial accounts upon closure.

VIII. Other Requirements: The following components must be addressed:

1. A listing of all waivers to state regulations needed for the college partnership laboratory school at the time of its opening. This does not preclude a college partnership laboratory school from requesting additional waivers once the school is operational;

2. A description of any collaborative partnerships that may be made with public school divisions to enhance opportunities for all Virginia students, from preschool to postsecondary. (Reference: § 23-299.2 F, *Code of Virginia*); and

3. A description of all agreements that the applicant may need in the contract with the Board of Education related to the release of the college partnership laboratory school from state regulations, consistent with the requirements in § 23-299.2 and § 23-299.3, *Code of Virginia.*

IX. **Assurances**: By signing and submitting this application, the applicant expressly assures the Board that:

1. No tuition will be charged to students;

2. The college partnership laboratory school is nonreligious in its admission policies, employment practices, and all other operations;

3. The proposed college partnership laboratory school shall operate in accordance with all applicable federal and state laws and regulations and constitutional provisions prohibiting discrimination on the basis of disability, race, creed, color, gender, national origin, religion, ancestry, or need for special education services. (Reference: § 23-299.2, *Code of Virginia*);

4. The college partnership laboratory school's policies and procedures will be in compliance with the federal *Family Educational Rights and Privacy Act* (FERPA) and records retention schedules consistent with guidance issued by the Library of Virginia;

5. The college partnership laboratory school programs, services, and activities will operate in accordance with all applicable federal and state laws and regulations, including the Virginia Freedom of Information Act;

6. The applicant will take all actions necessary to ensure that its governing board will enter into a contract with the Board of Education no later than nine months prior to the opening date of the college partnership laboratory school;

7. If approved to open a college partnership laboratory school, the leadership of the school will be retained on contract no later than six months prior the opening date of the school;

8. The applicant will meet the condition in § 23-299.8, *Code of Virginia*, which states that teachers "working in a college partnership laboratory school shall hold a license issued by the Board of Education or, in the case of an instructor in the higher education institution's Board-approved teacher education program, be eligible to hold a Virginia teaching license. Teachers working in a college partnership laboratory school shall be subject to the requirements of §§ 22.1-296.1 and 22.1-296.2 applicable to teachers employed by a local school board."

9. The applicant and members of the governing board will disclose any conflicts of interest, which would include a personal interest in any transactions involving the college partnership laboratory school and information regarding the frequency by which such disclosures will be made. (Reference: § 2.2-3114, *Code of Virginia*). This includes any relationships that parties may have with vendors performing services at the school. As part of this assurance, the applicant must assure knowledge of the Virginia Conflict of Interest Act and the Virginia Public Procurement Act;

Certification

The applicant must certify that to the best of his/her knowledge, the information in this application is correct, that the applicant has completed all elements of the application, and that the applicant understands the assurances given in this application and will comply with them.

Board of Education Agenda Item

Item: F. **Date:** November 18, 2010

Topic: Final Review of the Proposed Criteria and Processes for Approving and Monitoring Multidivision Online Providers in Virginia (§ 22.1-212.23.-27)

Presenter: Mr. Lan Neugent, Assistant Superintendent for Technology, Career & Adult Education

Telephone Numbers: (804) 225-2757 **E-Mail Addresses** lan.neugent@doe.virginia.gov

Origin:

___ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

_X_ Action requested at this meeting

____ Action requested at future meeting:

Previous Review/Action:

____ No previous board review/action

_X_ Previous review/action: First Review of Establishment of Virtual School Programs in Virginia
date October 28, 2010
actions Received document for first review

Background Information: As specified in *§ 22.1-212.24.A & B*, the Superintendent of Public Instruction will develop, and the Board of Education will approve, the criteria and application process for approving multidivision online providers; a process for monitoring approved multidivision online providers; a process for revocation of the approval of a previously approved multidivision online provider; and an appeals process for a multidivision online provider whose approval was revoked or whose application was denied. The purpose of the legislation is to ensure that quality online instruction is available to school divisions who are interested in offering students alternative methods of instruction. The legislation is intended to expand educational options for public school students.

Summary of Major Elements: The attachments include the proposed criteria and processes to satisfy the virtual school programs legislation introduced by Governor Robert F. McDonnell and passed by the Virginia General Assembly in 2010. Attachment A details the proposed criteria for approval of multidivision online providers as specified in *§22.1-212.24.A&B*. Attachment B details the procedures for the submission and review of the multidivision online provider application. They include a description of

the application and appeal process, procedures for monitoring approved multidivision online providers including reporting, and the revocation process, should that prove necessary.

The components of the application, found in Attachment C, include the following:

- Directions for completing the application
- Part I. Applicant Affidavit
- Part II. Program Profile
- Part III. Program Requirements
- Part IV. Program Description
- Application Review Rubric

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education approve the proposed criteria and processes for approval, monitoring, revocation, and appeal of multidivision online providers.

Impact on Resources: The Department of Education will administer the Virtual School Program with existing resources.

Timetable for Further Review/Action: N/A

Attachment A

Criteria for Approval of Multidivision Online Providers

The Criteria for Approval of Multidivision Online Providers address the following sections of the *Code of Virginia*.

> *As specified in § 22.1-212.24.A & B, the Superintendent of Public Instruction will develop, and the Board of Education will approve, the criteria for approving multidivision online providers, including those specified in these sections. Per § 22.1-212.26.A & B, teachers and administrators for multidivision online providers must meet specified requirements.*

CATEGORY	CRITERIA
ORGANIZATION REQUIREMENTS	
Accreditation	The multidivision online provider's program is accredited by one of the following accrediting agencies: • AdvancEd (formerly Commission on International and Trans-Regional Accreditation [CITA], North Central Association Commission on Accreditation and School Improvement [NCA CASI], and Southern Association of Colleges and Schools Council on Accreditation and School Improvement [SACS CASI]) • Middle States Association of Colleges and Schools Commission on Elementary Schools and Commission on Secondary Schools • New England Association of Schools and Colleges (NEASC) • Northwest Accreditation Commission (NWAC) (formerly Northwest Association of Accredited Schools) • Western Association of Schools and Colleges (WASC) • Virginia Council for Private Education (VCPE) School divisions operating as multidivision online providers may be deemed as meeting accreditation requirements if a majority of its schools are fully accredited by the Virginia Board of Education.
Organizational Stability	The multidivision online provider has an effective and stable organizational and management structure. The multidivision online provider is financially solvent. The legal status of the online program is clear with no ambiguities in ownership, control, or responsibility.
STAFFING	
Teachers	All teachers hired by the multidivision online provider who provide instruction to students meet the requirements set forth in section *§ 22.1-296.1 and 22.1-296.2* of the *Code of Virginia* and will be highly qualified, licensed by the Virginia Board of Education, and endorsed in their course content area. The established agreements between Virginia and other states for reciprocal teacher licensure are also in effect for virtual schools. The multidivision online provider must provide at least one FTE teacher at a

	reasonable ratio to students based on grade and subject being taught but not exceeding 150 students per FTE teacher.
Administrators	All administrators hired by the multidivision online provider meet the requirements set forth in section *§ 22.1-212.26.B* of the *Code of Virginia*. The *Code of Virginia* states: "The administrator of a virtual school program must hold an advanced degree from a regionally accredited institution of higher education with educational and work experience in administering education programs."
DATA	
Data Reporting	Multidivision online providers provide data to each division in which students are enrolled for the purposes of monitoring student participation and progress to ensure that students meet division participation requirements and make progress toward successful completion of the course. Data and data management meet state and federal reporting requirements.
Data Reporting	Multidivision online providers provide data to the Virginia Department of Education for the purposes of reporting information to the Governor and the General Assembly regarding multidivision online learning during the previous school year.
ACCOUNTABILITY	
Pupil Performance	The pupil performance standards for online courses or virtual school programs meet or exceed any applicable Virginia Board of Education Standards of Accreditation. Any educational objectives and assessments used to measure pupil progress toward achieving pupil performance standards are in accordance with the Board's Standards of Accreditation and all applicable state and federal laws.
Content	The content of each online course is accurate, rigorous, and meets or exceeds the content of courses taught in traditional school environments. The multidivision online provider must provide evidence that at least two subject matter experts have reviewed and validated the accuracy of online content. Standards meet or exceed the Virginia Standards of Learning and the Standards of Accreditation.
CURRICULUM AND INSTRUCTION	
Research-based	Curriculum and instruction reflect both scientifically-based research and best practices for online courses.
Differentiation	Differentiation in content, delivery of content, and assessments meets the needs of a variety of learners.
Special Needs	Students with special needs, including students with disabilities, students with limited English proficiency, students with financial limitations, students from traditionally underrepresented groups, and others, are not excluded from participating in courses provided by the multidivision online provider. The provider must comply with all state and federal regulations specific to students with disabilities and work with the division to ensure student individualized education programs (IEPs) are implemented.
TECHNOLOGY	
Reliability	The system used to support course delivery and management is effective and reliable.
Support	Technical support is consistently available on a timely basis for students, parents, and school divisions.

Attachment B

Procedures for the Submission and Review of the Multidivision Online Provider Application

I. Application Process for Multidivision Online Providers

The application, appeals, monitoring, and revocation processes address the following section of the *Code of Virginia.*

> *As specified in § 22.1-212.24.A, the Superintendent of Public Instruction will develop, and the Board of Education will approve, the processes for approving and monitoring multidivision online providers, as well as a process for the revocation of a previously approved multidivision online provider and an appeal process for a multidivision online provider whose approval was revoked or for whom application was denied.*

Local school boards in Virginia may enter into contracts with private organizations, educational institutions, or nonprofit virtual school organizations to establish multidivision online provider agreements once the Superintendent of Public Instruction has established the private, nonprofit, or school division virtual school organization as an approved multidivision online provider. The instruction in a virtual school is done primarily by a teacher who is in a different physical setting from the student, though local mentors may support this instruction.

A multidivision online provider is

- a private or nonprofit organization that enters into a contract with a local school board to provide online courses or programs through that school board to students who reside in Virginia both within and outside the geographical boundaries of that school division
- a private or nonprofit organization that enters into contracts with multiple local school boards to provide online courses or programs to students in grades K through 12 through those school boards
- a local school board that provides online courses or programs to students who reside in Virginia but outside the geographical boundaries of that school division

A multidivision online provider is not

- a local school board's online learning program in which fewer than 10 percent of the students enrolled reside outside the geographical boundaries of that school division
- multiple local school boards that establish joint online courses or programs in which fewer than 10 percent of the students enrolled reside outside the geographical boundaries of those school divisions
- local school boards that provide online learning courses or programs for their students through an arrangement with a public or private institution of higher education
- local school boards providing online courses or programs through a private or nonprofit organization that has been approved as a multidivision online provider

Electronic applications for approval will be made available on the Virginia Department of Education (VDOE) Web site on February 1, 2011. Applications will be accepted for a period of 30 calendar days

beginning February 1. The application will be accessible at http://www.doe.virginia.gov/instruction/virtual_learning/index.shtml.

Applications will be reviewed by teams selected by VDOE and whose members have expertise in curriculum, instruction, online learning, counseling support, assessment and accountability, finance, staff quality, data collection and use, and technology and technical support. The applications will be reviewed based on the Criteria for Approving Multidivision Online Providers. These teams will prepare a report with recommendations for the Superintendent of Public Instruction within 30 business days of the close of the application period.

The Superintendent of Public Instruction will make a decision regarding approval of multidivision online providers and official notification of approval or notification of denial will be mailed to the applicant within 45 business days of the close of the application period. The letter will be sent by the U.S. Postal Service and will include detailed reasons for denial if applicable.

II. Appeals Process for Multidivision Online Providers

If the Superintendent of Public Instruction denies approval of an application, the applicant may submit a revised application within 30 business days of notification; the applicant is not required to submit a revised application. The Superintendent of Public Instruction will review any changes and either approve or deny the resubmitted application within 45 business days from the receipt of a resubmitted application.

An applicant whose application has been denied by the Superintendent of Public Instruction, either upon the original submission of the application or upon submission of a revised application, may appeal the decision of the Superintendent of Public Instruction to the Virginia Board of Education.

The appeal must be submitted to the Virginia Board of Education within 30 business days of the mailing of the decision being appealed. The appeal must be in writing. The appeal shall contain: (1) a copy of the decision being appealed; (2) the applicant's statement of the errors alleged in the decision of the Superintendent of Public Instruction; and (3) together with those portions of the application that bear on the issues on appeal.

The appeal to the Board is on the record, and the Board will not receive additional information, except for good cause shown. "Good cause" means: (1) there is significant, relevant information not previously available and not presented to the Superintendent of Public Instruction; (2) there have been significant changes in factors or circumstances relating to the application subsequent to the application being presented to the Superintendent; or (3) there is a substantial material mistake of fact or law in the application, and which could not have been avoided by diligence on the part of the applicant.

Upon receipt of the appeal, the Board will convene to hear the matter; the meeting may be either a regularly scheduled meeting of the Board, or upon a meeting called specially for the purpose. The Board delegates to the president the authority to issue such rulings and instructions as will ensure that the appeal is heard in a timely, efficient, and effective manner. The Board will render its decision in writing.

Denied applicants may also submit a new application in subsequent application periods.

III. Monitoring Process for Multidivision Online Providers

An oversight committee of the Virginia Department of Education will conduct selected reviews of approved providers and their approved courses each year. The intent of the monitoring process is to provide oversight through periodic review of previously approved programs and to intervene when programs no longer meet the Criteria for Approving Multidivision Online Providers, including possible revocation of approved programs. Information from the reviews will be used in preparing a required annual report to the Governor and the General Assembly of Virginia.

The applicant must submit a Provider Monitoring Report each year that includes information required by the Virginia Department of Education; however, the Department of Education may request that a Provider Monitoring Report be completed and submitted at any time. Multidivision online providers must complete a full review after three years. Updates and changes to approved multidivision online provider programs will be submitted using the Provider Monitoring Report. The oversight committee will evaluate the information about program changes as well as information collected from stakeholder surveys and statistical data related to course completion and student growth and achievement. The oversight committee will make a recommendation within 30 business days. Based on the recommendation of the oversight committee, a decision regarding the continued approval of multidivision online providers will be made by the Superintendent of Public Instruction within 15 business days of receipt of the monitoring report. The applicants will be notified of their status via a letter sent by the U.S. Postal Service within 45 business days of the end of the monitoring report period.

A multidivision online provider that no longer meets the Criteria for Approving Multidivision Online Providers is placed on provisional status (they may continue to serve Virginia students currently enrolled in the multidivision online program but cannot enroll new students or enter into new multidivision online provider contracts) and must address the concerns of the oversight committee and the Superintendent of Public Instruction within 40 business days of receipt of notification. If the provider does not address the concerns to the satisfaction of the Superintendent of Public Instruction, the approval status of the provider may be revoked at the end of the academic year or provisional status may be extended; however, provisional status will not be extended past the full review date.

IV. Revocation Process for Multidivision Online Providers

The approval of a multidivision online provider will remain in effect until the approval is revoked for cause, pursuant to section *§ 22.1-212.24* of the *Code of Virginia*. The decision regarding revocation of a previously approved multidivision online provider will be made by the Superintendent of Public Instruction based on the oversight committee's report and recommendation during the monitoring process.

Revocation notices will be made by certified mail within five business days after the decision has been made.

If the Superintendent of Public Instruction has revoked a provider's approval, the applicant may appeal, in writing, to the Virginia Board of Education within 30 business days of the date the revocation letter is mailed. The Board of Education will review the appeal within 60 business days of the date the appeal is received—or at the next public meeting if none takes place within 60 days of receiving the appeal. The final decision of the Board of Education will be sent by letter to the individual submitting the appeal. This decision of the Board of Education is intended to be a final "case decision" within the meaning of the Virginia Administrative Process Act (APA) *§ 2.2-4000 et seq.* of the *Code of Virginia*, and subject to further review in accordance with the APA and Part 2A of the Supreme Court of Virginia. The APA details the authority of state agencies to make decisions based on regulations and explains the standard procedures to be used.

If a provider's approval is revoked by the Superintendent of Public Instruction and upheld by the Board of Education, the applicant may submit a new application during the next application period.

Attachment C

Components of
Application to Become an Approved Multidivision Online Provider

(Note: The application will be an online form to be completed by applicants.)

The Application addresses the following sections of the *Code of Virginia*.

> *As specified in § 22.1-212.24.A & B, the Superintendent of Public Instruction will develop, and the Board of Education will approve, the criteria and application process for approving multidivision online providers, including those specified in these sections. Per § 22.1-212.26.A & B, teachers and administrators for multidivision online providers must meet specified requirements.*

An application must be completed by each provider that is seeking approval to become a multidivision online provider through local school boards in Virginia. The initial online application period will be available for 30 calendar days.

Applications must include all the information requested by the Virginia Department of Education and in the form and by the date requested. Incomplete applications will not be considered. The Virginia Department of Education will provide the applicant with a written decision regarding the approval or denial of the application within 45 business days of the close of the application period.

A copy of the Application Affidavit must be signed, scanned, and attached to the application as a PDF.

APPLICATION FOR APPROVAL AS A MULTIDIVISION ONLINE PROVIDER

(Note: The application will be an online form to be completed by applicants, though this page will be printed, signed, and submitted as a PDF document.)

Part I. Applicant Affidavit

Applicant: _____

Primary Contact Person: _____

Address:_____City/State/Zip:_____

Telephone:_____Fax:_____

E-Mail Address: _____Web Site:_____

Printed Name:_____Signature: _____

Title:_____Date Signed:_____

Certification:

The applicant acknowledges that federal and state laws and regulations prohibit certain forms of discrimination. The applicant further acknowledges that, by entering into a contract with a local school division for the provision of services, the applicant may become subject to such laws or regulations, either directly through the application of such laws or regulations to itself, or in the provision of services under the contract with the local school division.

I, _____, certify that the information contained in, and attached to, this application is true and correct to the best of my knowledge and that the multidivision online provider program conforms to the provisions of the *Code of Virginia § 22.1-212.23* through *22.1-212.27*. If changes occur in the operation or ownership of the program, I further certify that I will notify the Virginia Department of Education prior to or immediately following such changes. I understand that providing false, misleading, or incomplete information or failing to notify the Department of changes as they occur may result in the removal of the entity from the list of approved multidivision online providers as provided for in the above-referenced *Code*.

_____

Signature of Authorized Official Date

_____

Title

APPLICATION FOR APPROVAL AS A MULTIDIVISION ONLINE PROVIDER

(Note: The application will be an online form to be completed by applicants.)

Part II. Program Profile

The Application: Program Profile addresses the following section in the *Code of Virginia.*

> *As specified in § 22.1-212.25, the Virginia Department of Education will develop and maintain a Web site that provides objective information for students, parents, and educators regarding online courses and virtual programs offered through local school boards by approved multidivision online providers. Some of this information must be provided by multidivision online providers as a condition of maintaining Board approval.*

Please respond to each of the following, limiting the number of characters when noted:

1. Type of program (e.g., full-time, supplemental, fully-online, blended [online instruction by a teacher in a different physical location from the student but with local mentors], computer-based instruction, or other)
2. URL for provider's Web site and contact information for division personnel, parents, and students, as well as a link to a course directory page where individual course syllabi may be accessed (list of approved courses and link to Web page for "Virginia Approved Courses")
3. Grade levels served
4. Target population (e.g., full-time, credit recovery, expanded options, advanced placement, etc.)
5. Capacity of the program in terms of the number of full-time equivalent students that can be served each year
6. Enrollment schedule and course calendar, including course withdrawal dates, cohort information, and grading periods
7. The learning management system used, including Shareable Content Object Reference Model (SCORM) compliance (300 characters)
8. Third-party providers used and their interactions with stakeholders, including how this interaction is monitored (300 characters)
9. Instructional model used in courses (600 characters)
10. Technology infrastructure model used to deliver and support courses (300 characters)
11. In general, online teacher qualifications, including academic credentials, licensure, certifications, experience, and the teacher review process (600 characters)
12. Average teacher load by subject area or grade-level range
13. In general, type and frequency of synchronous and asynchronous methods of student-teacher interaction, including the monitoring process (300 characters)
14. Average teacher availability (hours of support) for students and parents, including communication methods (300 characters)
15. Technical support availability for students, parents, and school personnel and methods for providing timely support (300 characters)
16. How student progress is monitored and reported, including verification of authenticity of student work (300 characters)
17. Course completion rates and graduation rates, where applicable (300 characters)

18. Information on student test scores, including Virginia's Standards of Learning assessment outcomes; English language proficiency; the SAT, ACT, and Advanced Placement test outcomes; and outcomes on other standardized assessments as applicable (600 characters)
19. Specific special education supports and services for students with disabilities who have an individualized education program (IEP) or a 504 Plan (600 characters)
20. Information on support services, including career explanation and counseling, academic advising and placement, assistance for students with limited English proficiency, mental health and social services, gifted education, high school/college dual-enrollment credits, etc. (600 characters)
21. Information on Internet safety policies, procedures, and monitoring (600 characters)
22. Information on disaster recovery plans and strategies for addressing short- and long-term service interruptions (300 characters)
23. Program experience in providing online or virtual instruction programs (300 characters)

APPLICATION FOR APPROVAL AS A MULTIDIVISION ONLINE PROVIDER

(Note: The application will be an online form to be completed by applicants.)

Part III. Program Requirements

The Application: Program Requirements address the following sections of the *Code of Virginia*.

> *As specified in § 22.1-212.24.A & B, the Superintendent of Public Instruction will develop, and the Board of Education will approve, the criteria and application process for approving multidivision online providers, including those specified in these sections. Per § 22.1-212.26.A & B, teachers and administrators for multidivision online providers must meet specified requirements.*

Please indicate whether your virtual instruction program meets these requirements by checking the appropriate box. Applications must provide documentation to support responses for each question. An application without the requested documentation will not be considered for approval.

This application is a

- ☐ new submission
- ☐ resubmission (previously denied)
- ☐ resubmission (third year monitoring submission)
- ☐ resubmission (expanding or revising scope of services)

Accreditation

The multidivision online provider's program is accredited by one of the following accrediting agencies: *(Please check one of the agencies listed below and attach accreditation certificate with dates of validity.)*

- ☐ AdvancEd (formerly Commission on International and Trans-Regional Accreditation [CITA], North Central Association Commission on Accreditation and School Improvement [NCA CASI], and Southern Association of Colleges and Schools Council on Accreditation and School Improvement [SACS CASI])
- ☐ Middle States Association of Colleges and Schools Commission on Elementary Schools and Commission on Secondary Schools
- ☐ New England Association of Schools and Colleges (NEASC)
- ☐ Northwest Accreditation Commission (NWAC) (formerly Northwest Association of Accredited Schools)
- ☐ Western Association of Schools and Colleges (WASC)
- ☐ Virginia Council for Private Education (VCPE)

Note: School divisions operating as multidivision online providers may be deemed as meeting accreditation requirements if a majority of its schools are fully accredited by the Virginia Board of Education.

Organizational Stability

The multidivision online provider has an effective and stable organizational management structure. The multidivision online provider is financially solvent. The legal status of the online program is clear with no ambiguities in ownership, control, or responsibility.

Please provide written documentation to support provider compliance:

- *Independent audit findings or other financial information that document financial stability from the previous three years, if available*

Staffing

I. All teachers hired by the multidivision online provider who provide instruction to students meet the requirements set forth in section *§ 22.1-296.1* and *22.1-296.2* of the *Code of Virginia* and will be highly qualified, licensed by the Virginia Board of Education, and endorsed in their course content area.

Please include evidence to support provider compliance:

- *Evidence that the multidivision online provider will hire only highly qualified teachers licensed by the Virginia Board of Education and endorsed in the content area they will teach*
- *An electronic listing of all teachers; teacher license number; and dates of background, fingerprint, and convictions check, to be updated immediately as new teachers are hired. No course will be approved to be offered until a teacher has been hired.*
- *Willingness and ability to provide other staff records to the Virginia Department of Education with the information necessary to verify compliance for maintaining approval*

II. All administrators hired by the multidivision online provider meet the requirements set forth in section *§ 22.1-212.26.B* of the *Code of Virginia*. The *Code of Virginia* states: "The administrator of a virtual school program must hold an advanced degree from a regionally accredited institution of higher education with educational and work experience in administering education programs."

Please include evidence to support provider compliance:

- *Qualifications required by the provider for administrators*

III. Provide at least one FTE teacher at a reasonable ratio to students based on grade and subject being taught, but not exceeding 150 students per FTE teacher.

Please include evidence to support provider compliance:

- *A statement regarding student/teacher ratios that will not be exceeded, listed by course, and a rationale supporting the established ratio.*

Data

I. Multidivision online providers must provide data to each division in which students are enrolled for the purposes of monitoring student participation and progress to ensure that students meet

division participation requirements and make progress toward successful completion of the course. Data and data management meet state and federal reporting requirements.

Please include evidence to support provider compliance including the following:

- *Written policies and procedures for recording, monitoring, and reporting student participation and progress*
- *Written grading and reporting policies*
- *Ability to deliver data to meet state and federal requirements*
- *Ability to transmit data electronically to each division*

II. Multidivision online providers must provide data to the Virginia Department of Education for the purposes of reporting information to the Governor and the General Assembly regarding multidivision online learning during the previous school year.

Please include evidence that the following data are collected and, where applicable, can be reported in a format consistent with the requirements of the Virginia Department of Education's data collection:

- *Parental satisfaction*
- *Activities and outcomes of course and provider approval reviews. This may include how course satisfaction and approval of the provider's services by the contracting division are conducted and how the results will be shared with the Virginia Department of Education*

Accountability

I. The pupil performance standards for online courses or virtual school programs meet or exceed any applicable Virginia Board of Education Standards of Accreditation. Any educational objectives and assessments used to measure pupil progress toward achieving pupil performance standards are in accordance with the Board's Standards of Accreditation and all applicable state and federal laws.

Please provide written documentation to support provider compliance:

- *Evidence that the multidivision online provider has the ability to work with divisions to meet the applicable Virginia Board of Education Standards of Accreditation, and all applicable state and federal laws*

II. The content of each online course is accurate, rigorous, and meets or exceeds the content of courses taught in traditional school environments. Standards meet or exceed the Virginia Standards of Learning and the Standards of Accreditation.

Please provide written documentation to support provider compliance:

- *The complete list of courses to be offered in Virginia, including a URL for the course directory which includes an online syllabus for each course*
- *Correlation using the online template provided by VDOE for all courses being offered to Virginia students, indicating what Virginia Standards of Learning are met by each course and describing where each course might exceed Virginia's Standards of Learning*
- *Certification that at least two subject matter experts have reviewed and validated the accuracy of content*

- *Written policies and procedures related to supporting state achievement testing*

Curriculum and Instruction

I. Curriculum and instruction reflect both scientifically-based research and best practices for online courses.

Please provide written documentation to support provider compliance:
- *Descriptions of basis for curriculum used and/or developed*
- *Descriptions of basis for instructional methodologies used*

II. Differentiation in content, delivery of content, and assessments meets the needs of a variety of learners.

Please provide written documentation to support provider compliance:
- *Description of means used to differentiate course content*
- *Description of how delivery of content is differentiated for different learners*
- *Description of various assessments used throughout the course*

III. Students with special needs, including students with disabilities, students with limited English proficiency, students with financial limitations, students from traditionally underrepresented groups, and others, are not excluded from participating in courses provided by the multidivision online provider. The provider must comply with all state and federal regulations specific to students with disabilities and work with the division to ensure student individualized education programs (IEPs) are implemented.

Please provide written documentation to support provider compliance:
- *Evidence that no students are excluded based on special needs*
- *Evidence that materials used in courses are in accessible digital formats for use by assistive technology devices or programs and that content is SCORM compliant*
- *Evidence that the multidivision online provider has the ability to work with LEA to meet the applicable state and federal regulations specific to students with disabilities and to implement specific student IEPs*

Technology

I. The system used to support course delivery and management is effective and reliable.

Please provide written documentation to support provider compliance:
- *Description of the chosen course delivery and management system*
- *Statistical information on system availability, downtime, and back-up procedures*

II. Technical support is consistently available on a timely basis for students, parents, and school divisions.

Please provide written documentation to support provider compliance:

- *Description of technical support mechanisms in place*

Upon request, the applicant will provide course access to the Virginia Department of Education during the review phase of the application process.

Course Correlation to Virginia Standards of Learning

A 90 percent alignment to the Virginia Standards of Learning is required for approval.

[THIS WILL BE AN ONLINE FORM]

Name of Provider:
Name of Course:
URL for Course Syllabus:
Last Revision Date:

(Specify grade and subject area SOL)	
Standard:	**How does the course content address this standard? (Please refer to syllabus posted on your Web site.)**
1.1 The student will	
a) demonstrate …	
b) analyze …	
c) draw conclusions …	

How might this course exceed the Virginia Standards of Learning?

APPLICATION FOR APPROVAL AS A MULTIDIVISION ONLINE PROVIDER

(Note: The application will be an online form to be completed by applicants.)

Part IV. Program Description

The Application: Program Description addresses the following sections of the *Code of Virginia*.

> *As specified in § 22.1-212.24.A & B, the Superintendent of Public Instruction will develop, and the Board of Education will approve, the criteria and application process for approving multidivision online providers, including those specified in these sections. Per § 22.1-212.26.A & B, teachers and administrators for multidivision online providers must meet specified requirements.*

The following information will assist the Virginia Department of Education evaluation team using an application review rubric to determine the quality of the provided services. These responses will be used while reviewing the program. Please provide a narrative response not to exceed the specified character limits. Include prior experience, if applicable (for the initial application only, such experience may reflect that from comparable states if not currently a provider in Virginia). For organizations which have not provided online courses before, and for the initial application only, descriptions of policies, procedures and descriptions of the program's technical capabilities to meet the requirements will be considered.

Organizational Strengths (5,000 characters)

Provide information about the leadership, organizational, and management structure of the multidivision online provider, including:

- Mission statement
- Functions, organization, responsibilities, and membership of the governance organization
- Stability of management structures
- Tenor of relationships between all levels in the organization

Teacher and Administrator Quality (5,000 characters)

Provide information on teacher quality within the virtual program, indicating the proficiency of teachers—including descriptions of measures—in the following areas:

- Content area knowledge
- Multimedia applications and tools
- Developmentally appropriate software
- Assessment
- Internet safety policies

This should also include professional development requirements and teacher evaluation procedures.

Descriptive information should include the following data. No course will be approved to be offered until a teacher has been hired.

- Total number of teachers
- Number and percentage of teachers with advanced degrees

- Average and range of years of teaching experience
- Average and range of years of online teaching experience
- Number and percentage of highly qualified teachers
- Percentage of National Board Certified teachers
- Teacher/staff turnover rates

Provide information about administrator quality within the virtual school program, including information about:

- Requirements for previous experience with administering educational programs
- Number of teachers supervised
- Ongoing professional development requirements

Data Management (5,000 characters)

Provide information about the use of data for management and instruction and how data is protected:

- How data integrity is managed
- Data security policy and implementation plan, as well as verification that data management and reporting practices are in compliance with federal and state privacy laws, including the Family Educational Rights and Privacy Act (FERPA) and Virginia's Government Data Dissemination and Practices Act, known as the Privacy Act

Include information on the following:

- Protection from security threats such as viruses and hackers
- Reporting and data transmission policies and measures to ensure compliance with state and federal privacy laws

Provider Accountability (5,000 characters)

Provide information documenting student assessment and program accountability (for the initial application only, this may include examples from comparable states if currently not a provider in Virginia)—including the ability to provide electronic data to the Virginia Department of Education, school divisions, and other stakeholders—and how the following are tracked:

- Student participation rates in the Virginia Standards of Learning tests, early literacy assessments, or other types of standardized tests, including the names and types of assessments, grade levels, and participation rates
- Student, school, and program performance results, including nationally recognized standardized test results; Standards of Learning assessments; results from end-of-course exams; college entrance and readiness exams, including the SAT, ACT, and Advanced Placement tests, where applicable; rates of promotion to the next grade; high school graduation rates; postsecondary enrollment rates and the need for remediation/developmental coursework upon enrollment in postsecondary education programs; professional licenses and credentials earned; successful completion rates; student mobility rates; and dropout rates
- Summary data on noncompleters or dropouts related to the timing of and primary reasons for withdrawal

Curriculum and Instruction (10,000 characters)

Provide information documenting your curriculum's design and effectiveness. Include the following:

- Source or origin of your course content
- Strengths of teaching pedagogy followed and supported
- Basis for and frequency of revisions
- Progress monitoring used to frequently assess students' growth toward meeting specific learning objectives with a description of how students who are not meeting objectives receive additional assistance
- How course requirements and expectations are communicated to parents, students, and other stakeholders
- What type of orientation and other supporting services for students are provided
- Equity-related policies and practices for providing access to students with disabilities, students with limited English proficiency, traditionally underrepresented students, and students with financial and other constraints (see the Americans with Disabilities Act: http://www.ada.gov/ and the Individuals with Disabilities Education Act: http://idea.ed.gov/)
- Steps taken to ensure content is SCORM compliant and in accessible digital formats
- Protection from online bullies and potential predators
- Resources to promote Internet safety and positive digital citizenship

Technology Infrastructure, System Performance, and Technical Support (5,000 characters)

Describe the technology infrastructure that supports the delivery of online courses, including the following:

- Technical requirements for end users
- Alternative means of delivery for content if the system is down

Describe the overall system performance of the learning management system, including off-site back-up frequency for student data and other critical information.

Describe the technical support for students, parents, and staff, including the following:

- Training provided for mentors and/or parents, if course is blended
- Types of technical assistance provided
- Hours/days technical support is available and how support can be accessed
- Staffing levels for technical support
- Average response time
- Typical procedures for students when encountering problems

Other Indicators of Program Success (2,500 characters)

Describe any additional support for the program, such as the following:

- A summary of stakeholder satisfaction survey results with links or an address to obtain copies of the complete survey results
- Awards, recognitions, testimonials, etc.

Application Review Rubric

CATEGORY	CRITERIA	MEETS	DOES NOT MEET
ORGANIZATION REQUIREMENTS			
Accreditation	The multidivision online provider's program is accredited by one of the following accrediting agencies: • AdvancEd (formerly Commission on International and Trans-Regional Accreditation [CITA], North Central Association Commission on Accreditation and School Improvement [NCA CASI], and Southern Association of Colleges and Schools Council on Accreditation and School Improvement [SACS CASI]) • Middle States Association of Colleges and Schools Commission on Elementary Schools and Commission on Secondary Schools • New England Association of Schools and Colleges (NEASC) • Northwest Accreditation Commission (NWAC) (formerly Northwest Association of Accredited Schools) • Western Association of Schools and Colleges (WASC) • Virginia Council for Private Education (VCPE) • School divisions operating as multidivision online providers may be deemed as meeting accreditation requirements if a majority of its schools are fully accredited by the Virginia Board of Education.		
Organizational Stability	The multidivision online provider has an effective and stable organizational and management structure. The multidivision online provider is financially solvent. The legal status of the online program is clear with no ambiguities in ownership, control, or responsibility.		
Reviewer's Comments:			
STAFFING			
Teachers	All teachers hired by the multidivision online provider who provide instruction to students meet the requirements set forth in section *§ 22.1-296.1 and 22.1-296.2* of the *Code of Virginia* and will be highly qualified, licensed by the Virginia Board of Education, and endorsed in their course content area. If teachers have not yet been hired, policies and		

CATEGORY	CRITERIA	MEETS	DOES NOT MEET
	procedures in place ensure they will be hired to meet the above requirements. The multidivision online provider must provide at least one FTE teacher at a reasonable ratio to students based on grade and subject being taught but not exceeding 150 students per FTE teacher.		
Administrators	All administrators hired by the multidivision online provider meet the requirements set forth in section *§ 22.1-212.26.B* of the *Code of Virginia*. The *Code of Virginia* states: "The administrator of a virtual school program must hold an advanced degree from a regionally accredited institution of higher education with educational and work experience in administering education programs." If administrators have not yet been hired, policies and procedures in place ensure they will be hired to meet the above requirements.		
Reviewer's Comments:			
DATA			
Data Reporting	Multidivision online providers are able to provide data to each division in which students are enrolled for the purposes of monitoring student participation and progress to ensure that students meet division attendance requirements and make progress toward successful completion of the course. Data and data management meet state and federal reporting requirements.		
Data Reporting	Multidivision online providers are able to provide data to the Virginia Department of Education for the purposes of reporting information to the Governor and the General Assembly regarding multidivision online learning during the previous school year.		
Reviewer's Comments:			
ACCOUNTABILITY			
Pupil Performance	The pupil performance standards for online courses or virtual school programs meet or exceed any applicable Virginia Board of Education Standards of Accreditation. Any educational objectives and assessments used to measure pupil progress toward achieving pupil performance standards are in accordance with the Board's Standards of Accreditation and all applicable state and federal laws.		

CATEGORY	CRITERIA	MEETS	DOES NOT MEET
Content	The content of each online course is accurate, rigorous, and meets or exceeds the content of courses taught in traditional school environments. The multidivision online provider must provide evidence that at least two subject matter experts have reviewed and validated the accuracy of online content. Standards meet or exceed the Virginia Standards of Learning and the Standards of Accreditation.		
Reviewer's Comments:			
CURRICULUM AND INSTRUCTION			
Special Needs	Students with special needs, including students with disabilities, students with limited English proficiency, students with financial limitations, students from traditionally underrepresented groups, and others, are not excluded from participating in courses provided by the multidivision online provider. The provider must comply with all state and federal regulations specific to students with disabilities and work with the division to ensure student individualized education programs (IEPs) are implemented.		
Research-based	Curriculum and instruction reflect both scientifically-based research and best practices for online courses.		
Differentiation	Differentiation in content, delivery of content, and assessments meets the needs of a variety of learners.		
Reviewer's Comments:			
TECHNOLOGY			
Reliability	The system used to support course delivery and management is effective and reliable.		
Support	Technical support is consistently available on a timely basis for students, parents, and school divisions.		
Reviewer's Comments:			

Board of Education Agenda Item

Item: G. **Date:** November 18, 2010

Topic: First Review to Reaffirm the 2009 Recommendations to the Standards of Quality

Presenter: Ms. Anne D. Wescott, Assistant Superintendent for Policy and Communications

Telephone Number: (804) 225-2403 **E-Mail Address:** Anne.Wescott@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

X Board review required by
- X State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

____ Action requested at this meeting

X Action requested at future meeting: January 13, 2011

Previous Review/Action:

X No previous board review/action

____ Previous review/action
date _____
action _____

Background Information: Article VIII, § 2 of the *Constitution of Virginia* requires the Board of Education to determine and prescribe Standards of Quality for the public schools in Virginia. The *Constitution* says:

> **Article VIII, § 2. Standards of quality; State and local support of public schools.**
>
> Standards of quality for the several school divisions shall be determined and prescribed from time to time by the Board of Education, subject to revision only by the General Assembly. The General Assembly shall determine the manner in which funds are to be provided for the cost of maintaining an educational program meeting the prescribed standards of quality, and shall provide for the apportionment of the cost of such program between the Commonwealth and the local units of government comprising such school divisions. Each unit of local government shall provide its portion of such cost by local taxes or from other available funds.

The *Code of Virginia* requires the Board of Education to review the Standards of Quality every two years. Section 22.1-18.01 of the *Code* says, in part:

> **§ 22.1-18.01. Biennial review of the standards of quality required; budget estimates.**
>
> A. To ensure the integrity of the standards of quality, the Board of Education shall, in even-numbered years, exercise its constitutional authority to determine and prescribe the standards, subject to revision only by the General Assembly, by reviewing the standards and either (i) proposing amendments to the standards or (ii) making a determination that no changes are necessary.…

Summary of Major Elements: During 2009, the Board conducted a review of the Standards of Quality and proposed policy directions, options for revisions to the Standards of Quality, and issues for further study, as follows:

Policy Directions

- Enhance the Standards of Quality so that the Commonwealth's basic foundation program for K-12 public education reflects a comprehensive educational program of the highest quality.
- Provide clarity and greater transparency in SOQ funding with the goal of maintaining the Commonwealth's commitment to public education funding at the state and local levels and encouraging a continued emphasis on school-based instructional services.
- Provide greater flexibility to school divisions in using noninstructional personnel funding for instructional support services.
- Support the appropriateness of establishing ratio standards for individual categories of "support service" positions as is the current practice used for instructional personnel.
- Advocate against permanent structural changes to the Standards of Quality that result in decreased funding for K-12 public education.
- Begin building a more comprehensive basic foundation program by including in the SOQ gifted, special education, and career and technical staffing ratios and certain incentive programs that have become core components of K-12 educational programs statewide and currently funded in the Appropriation Act.
- Set priorities for the Board's unfunded SOQ recommendations from previous years so that these instructional staffing standards can be fully implemented in future years.
- Begin to address the Board's school leadership priorities of requiring a principal in every school and increasing the number of assistant principals in schools with the greatest need.
- Mitigate the perverse incentive of reducing a school division's special education funding when it mainstreams students with disabilities into general education classrooms or uses Response to Intervention (RtI) and/or other instructional supports to reduce the number of students identified as needing special education services.

- Provide additional policy guidance and direction to school divisions offering alternative or nontraditional educational programs, such as the Individual Student Alternative Education Plan (ISAEP).

SOQ Language Revisions to Address Policy Directions

- Codify the Board of Education's recommendations that were included in the 2009 Appropriation Act providing flexibility in the use of existing funds for hiring reading specialists, mathematics specialists, data coordinators, and instruction of English language learners.
- Codify the provisions of the Early Intervention Reading Initiative and the Algebra Readiness program by including them in the Standards of Quality and requiring all school divisions to provide these interventions with funding currently appropriated for these incentive programs.
- Codify the Appropriation Act provision that the Standards of Quality includes a minimum of 58 licensed, full-time instructional positions per 1,000 students, including instructional positions for special education, gifted education, and career and technical education.
- Codify the staffing standards for special education (currently in regulations), gifted education (currently in the Appropriation Act), and career and technical education (currently in regulations).
- Provide school divisions the flexibility to deploy assistant principals to the schools with the greatest needs, so long as they employ a sufficient number of assistant principals divisionwide to meet the total number required in the current SOQ staffing requirement.
- Define the categories of personnel who make up "support services," and specify how those positions are funded, and require transparency in the use of funds by mandating divisions publicly report the state and local amounts budgeted and expended for each category.
- Permit school divisions to use funds for support services to provide additional instructional services and include instructional services as a separate category to be reported publicly.

Issues for Further Study

As resources become available, conduct a comprehensive study of the following complex funding issues and report the findings to the Governor and General Assembly for consideration as part of the Standards of Quality:

- The feasibility of converting the prevailing costs for each major category of the "support services" positions into ratios (for example, based on positions per 1,000 students), and including ratios for some or all of the categories in the Appropriation Act.
- The feasibility of establishing alternative staffing approaches to provide school divisions with additional instructional resources to address identified needs. This could include ratios based on positions per 1,000 students for assistant principals, school counselors, and library-media specialists that would reduce funding "cliffs." It could also include assigning weights for students who may be at-risk and require additional support, including special education services, services to English language learners, and services to disadvantaged students.

- The feasibility of creating a special education incentive fund or other funding methodologies to mitigate the perverse incentive of reducing a school division's special education funding when it mainstreams students with disabilities into general education classrooms or uses Response to Intervention (RtI) and/or other instructional supports to reduce the number of students identified as needing special education services.
- The feasibility of updating technology staffing ratios, taking into consideration the increased role of technology in instruction, assessment, and operations since staffing standards were first established in the SOQ.
- The feasibility of updating career and technical education staffing ratios, taking into consideration the (i.) implementation of new curricular pathways that require high-tech equipment and specialized instruction and (ii.) anticipated increased enrollments in CTE courses given the newly created standard technical and advanced technical diplomas.

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education accept this item for first review and authorize 30 days of public comment on the Standards of Quality.

Impact on Resources: It is not expected that this proposal will have a significant impact on state and local resources.

Timetable for Further Review/Action: Final approval will be requested at the January 13, 2011, Board meeting.

Board of Education Agenda Item

Item: H. **Date:** November 18, 2010

Topic: First Review of Proposed *Guidelines for the Prevention of Sexual Misconduct and Abuse in Virginia Public Schools*

Presenter: Mr. Charles B. Pyle, Director of Communications

Telephone Number: (804) 371-2420 **E-Mail Address:** **Charles.Pyle@doe.virginia.gov**

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by

- ___ State or federal law or regulation
- ____ Board of Education regulation
- _X_ Other: Guidance to local school boards related to § 22.1-253.13:7, *Code of Virginia*

___ Action requested at this meeting

_X_ Action requested at future meeting: January 13, 2011

Previous Review/Action:

_X_ No previous board review/action

____ Previous review/action
date _____
action _____

Background Information:
Virginia was among the first states to require criminal background checks for all public school teachers and other school board employees. Since 1989, all initial or first-time applicants offered or accepting employment have had to submit to fingerprinting and provide personal descriptive information to be forwarded along with the applicant's fingerprints through the Central Criminal Records Exchange to the Federal Bureau of Investigation for a criminal background check. This requirement was extended in 1998 to include applicants for positions with accredited private and parochial schools.

Since 1997, applicants offered or accepting employment requiring direct contact with students have been required to provide written consent and the necessary personal information for the hiring school board to obtain a search of the registry maintained by the Virginia Department of

Social Services of founded complaints of child abuse and neglect.

In 2006, the General Assembly expanded background check certifications to include employees of contractors employed by public schools who have direct contact with students.

Section 5414 of the Elementary and Secondary Education Act of 1965, as amended by the No Child Left Behind Act of 2001, required a national study of sexual abuse in schools. The study, *Educator Misconduct: A Synthesis of Existing Literature*, was conducted by Charol Shakeshaft of Hofstra University (now the chairman of the Department of Educational Leadership at Virginia Commonwealth University) and published in 2004 by the U.S Department of Education (USED).

Foremost among Shakeshaft's recommendations for the prevention of sexual misconduct is the development of specific district-level policies prohibiting sexual misconduct and inappropriate relationships between educators and students — including consensual relationships. Shakeshaft stated that local policies should describe prohibited behaviors to eliminate ambiguity about what types of actions are unacceptable.

The 2004 USED report also recommended mandatory training for educators and administrators about the prevention and detection of misconduct. Shakeshaft noted that sexual abuse prevention training for educators and other school employees — whether pre-professional or in-service — rarely includes training on the prevention and recognition of educator sexual misconduct. Rather, programs focus on recognizing and responding to abuse and neglect occurring outside the school.

Of the 169 actions taken by the Board of Education against licenses since 2000, 120 were in response to misconduct involving minors. In many of these cases, school divisions filed petitions only after receiving an inquiry from VDOE about a case in which a license holder had been convicted but no licensure action had been initiated by the division.

The 2008 General Assembly — with the support of the Board of Education — approved HB 1439 and SB 241, which amended Standard 7 of the Standards of Quality by adding language requiring school boards to develop policies and procedures to address complaints of sexual abuse of students by school board employees.

HB 1439 and SB 241 require local school boards to notify the Board of Education within 10 days if a licensed employee is dismissed or resigns due to a criminal conviction or founded child abuse or neglect charge.
In addition, HB 1439 and SB 241 require:

- Court clerks to notify the Superintendent of Public Instruction when a person licensed by the Board of Education is convicted of a felony drug crime or a felony sex crime involving a child victim; and
- Local social services departments to notify the state superintendent of license holders who have exhausted appeals after being identified as the subject of a founded case of abuse.

The 2008 General Assembly also erected additional barriers to employment and access to school buildings by offenders:

- HB 1242 prohibits the employment of anyone whose job would require direct contact with students if the applicant is the subject of a founded case of physical or sexual abuse of a child. Additionally, the bill requires the dismissal of a teacher who, while employed by a local school board, becomes the subject of a founded case of physical or sexual abuse of a child and has exhausted all available appeals.
- HB 567 prohibits any adult convicted of a sexually violent offense from entering and being present upon any property he knows or has reason to know is a public or private elementary or secondary school or child day care property during school hours and during school-related and school-sponsored activities. Previously, the prohibition only applied during school hours.

Summary of Major Elements

Mandatory background checks can keep offenders out of the system and reporting requirements increase the likelihood that convictions and founded cases of abuse are followed by timely licensure actions. But these measures focus on entry and exit points and do not provide a means for evaluating the conduct of current employees and volunteers.

Division-level policies are critical in the *prevention* of misconduct. Well-designed local policies — with specific consequences for willful violations — also can play a role in preventing individuals who have been dismissed — but not prosecuted — for misconduct from moving to a new school division and engaging in further misconduct with students.

Adherence to specific rules governing communication, physical contact, and socializing with students also can protect teachers and other school board employees from false accusations and rumors.

Under the state constitution and state law, local school boards are responsible for the development of policies governing the conduct of their employees. The model policies and best practices described in *Guidelines for the Prevention of Sexual Misconduct and Abuse in Virginia Public Schools* are designed to assist school boards in crafting effective local policies to prevent abuse and meet their responsibilities under HB 1439 and SB 241 to develop policies and procedures to address complaints of sexual abuse of a student by a teacher or other school board employee.

The guidance and best practices contained in *Guidelines for the Prevention of Sexual Misconduct and Abuse in Virginia Public Schools* address factors contributing to actual cases of misconduct in the commonwealth's public schools and include elements and practices common to successful youth protection programs. These elements are:

- A statement of purpose and philosophy addressing the shared responsibility of school divisions, school employees, volunteers, students, parents and others for the prevention and reporting of sexual misconduct and abuse;
- Clear and reasonable policies governing communication between students and school board employees — including electronic communication — that promote transparency, accessibility and professionalism;
- Clear and reasonable policies governing physical contact between students and school board employees and volunteers in settings and circumstances common to public schools;

- Clear and reasonable policies governing permissible and unacceptable social interactions and relationships between students and school board employees and volunteers;
- Training of school personnel and volunteers and the dissemination of sexual misconduct and abuse prevention policies to school board employees, volunteers, students, and parents;
- Clear procedures for the reporting of suspected sexual misconduct and abuse; and
- Consequences for school personnel and volunteers who violate sexual misconduct and abuse prevention policies.

School boards that adopt and implement local policies aligned with the guidance document will meet their obligation under HB 1439 and SB 241 and create learning environments with clear rules that emphasize awareness, transparency, and prevention.

In developing *Guidelines for the Prevention of Sexual Misconduct and Abuse in Virginia Public Schools*, the Division of Policy and Communications studied policies adopted by school boards and legislatures in several states, youth protection policies adopted by private and parochial school systems, policies adopted by national youth-service organizations, and reports and studies on the issue of sexual misconduct in school settings.

- Boy Scouts of America, *Guide to Safe Scouting, Chapter 1: Youth Protection and Adult Leadership*, 2007
- Carr, Nora, *How to avoid committing social media gaffes: 11 strategies for keeping your staff out of hot water in today's new media world.* E-school News. Accessed October 5, 2010: http://www.eschoolnews.com/2010/10/05/how-to-avoid-committing-social-media-gaffes/
- Catholic Diocese of Arlington, *Policy on the Protection of Children/Young People and Prevention of Sexual Misconduct and/or Child Abuse*, 2003
- Catholic Diocese of Richmond, *Diocesan Safe Environment Regulations*, 2005
- Chicago Public Schools, *Chicago Public Schools Policy Manual, Section 604.1: Acceptable Use of the CPS Network and Computer Resources*, 2009
- Church Mutual Insurance Company, *Safety Tips on a Sensitive Subject: Child Sexual Abuse*, 2009
- Church Mutual Insurance Company, *Sample Child and Youth Abuse Prevention Program for Religious Organizations*, 2009
- Church Pension Group (Episcopal), *Model Policies for the Protection of Children and Youth from Abuse*, 2004
- Commonwealth Girl Scout Council of Virginia, *Volunteer Essentials 2010, Chapter 4: Safety-Wise*, 2010
- Community High School District 128 (Vernon Hills, Illinois), *Expectations for Communicating Electronically with Students*, 2010
- Georgia Professional Standards Commission, *Code of Ethics for Educators*, 2009
- Idaho Professional Standards Commission, *Code of Ethics for Idaho Professional Educators*, 2009
- Lee County Public Schools (Florida), *Guidelines for Employees Who Participate in Social Media Websites*, 2010
- Louisiana Revised Statutes 17:81(Q) and 3996 (B)(21), as amended by HB 570 (2009): *AN ACT … to require the governing authority of a public elementary or secondary school to formulate, develop, adopt, and implement policies, procedures, and practices applicable to school employees relative to electronic communications by an employee at a school to a student enrolled at that school; to provide policy guidelines and requirements; to provide limitations and exceptions; to provide that the occurrence of certain electronic communications be reported by*

the school employee; to provide for immunity from civil liability; to provide an effective date; and to provide for related matters. 2009
- Manatee County School District (Florida), *Computer Systems Acceptable Use Policy*, 2010
- North Carolina Board of Education, *Code of Ethics for North Carolina Educators*, 1998
- Ontario College of Teachers, *Professional Advisory: Professional Misconduct Related to Sexual Abuse and Sexual Misconduct*, 2002
- Oregon Revised Statutes 339.370, 339.372, and 339.377, as amended by HB 2062 (2009): *AN ACT Relating to misconduct by school employees; creating new provisions; amending ORS 339.370, 339.372, 339.375 and 339.377; and prescribing an effective date.* 2009
- Shakeshaft, Charol, *Educator Sexual Misconduct: A Synthesis of Existing Literature*, United States Department of Education, 2004
- Texas State Board for Educator Certification, *Code of Ethics and Standard Practices for Texas Educators*, 1998
- Utah Administrative Code, Rule R277-515, *Utah Educator Standards*, Utah State Board of Education, 2010
- Utah State Office of Education, A Review of Professional Conduct in Utah's Public Schools, 2010

Superintendent's Recommendation:
The Superintendent of Public Instruction recommends that the Board of Education accept for first review the proposed *Guidelines for the Prevention of Sexual Misconduct and Abuse in the Public Schools* and authorize a 30-day period of public comment.

Impact on Resources: The impact on resources is expected to be minimal.

Timetable for Further Review/Action: Following a 30-day public comment period, final approval will be requested at the January 13, 2011, Board meeting.

Proposed Guidelines for the Prevention of Sexual Misconduct & Abuse in Virginia Public Schools

Virginia Board of Education
November 18, 2010

Introduction

The 2008 General Assembly adopted legislation (HB 1439 and SB 241) amending Standard 7 of the Standards of Quality to require school boards to adopt policies addressing sexual abuse of students by teachers and other school board employees:

> § 22.1-253.13:7. Standard 7. School board policies.
>
> A. Each local school board shall develop policies and procedures to address complaints of sexual abuse of a student by a teacher or other school board employee.

The Virginia Board of Education developed *Guidelines for the Prevention of Sexual Misconduct and Abuse in Virginia Public Schools* to help school divisions meet their obligation under the law and create and implement policies and procedures that establish clear and reasonable boundaries for interactions between students and teachers, other school board employees, and adult volunteers.

The model policies and best practices in the document draw from policies and legislation approved by school boards and legislatures in other states and policies and best practices implemented by private and parochial schools and national youth-service organizations.

Elements of Sexual-Abuse Prevention Policy

School board policies on the prevention of sexual abuse of students by division employees and volunteers should contain these basic elements:

1. Statement of purpose and philosophy addressing the shared responsibility of the school board, school divisions employees, volunteers, students, parents and others for the prevention and reporting of sexual misconduct and abuse;
2. Clear and reasonable rules governing communication — including electronic communication — between students and school board employees;
3. Clear and reasonable rules governing physical contact between students and school board employees and volunteers;
4. Clear and reasonable rules governing social interactions and relationships between students and school board employees and volunteers;
5. Requirement for training of school personnel and volunteers and the dissemination of sexual misconduct and abuse prevention policies to school board employees, volunteers, students, and parents;
6. Procedures for the reporting of suspected sexual misconduct and abuse;
7. Consequences for school personnel and volunteers who violate sexual misconduct and abuse prevention policies; and
8. Applicability to teachers and other employees of virtual school programs and other vendors providing instructional services to students.

Statement of purpose and philosophy

Responsibility for protecting students from sexual misconduct and abuse is shared by the division superintendent, the school board, teachers and other school board employees, school volunteers, state agencies, law enforcement, and parents. By following school board policy on the prevention of sexual misconduct and abuse, teachers, principals, and other educators and employees provide a safe and healthy environment for teaching and learning.

Statements describing the purpose and philosophy of a school board policy on the prevention of sexual misconduct and abuse should define the protection of students as a division priority and express the obligation of all employees to observe boundaries governing interaction and communication with

students. The school board demonstrates its commitment to protecting students from sexual misconduct and abuse through:

1. Strict compliance with all state laws and regulations related to the screening of prospective employees for the conviction of barrier crimes and founded cases of child abuse and neglect;
2. The development, effective implementation — including training — and enforcement of clear and reasonable policies governing the interaction of students and school board employees and volunteers;
3. The establishment of channels for reporting by students and parents of suspected misconduct and abuse, and the prompt notification of law enforcement when criminal activity is alleged or suspected;
4. Disclosure of formal reprimands and dismissals for violating school board policies on sexual misconduct and abuse prevention to school divisions seeking references; and
5. Strict compliance with all state laws and regulations related to reporting to the Virginia Department of Education of resignations and dismissals of licensed employees related to convictions of barrier crimes and founded cases of abuse.

In its statement of purpose and philosophy, the school board should also express how adherence to division policies governing student-employee interactions can protect employees from false accusations and accusations based on misunderstandings.

Communication between school division employees and students

School board policies should recognize the importance of communication in learning and instruction while placing reasonable restrictions on content and settings. Teachers and other employees can protect themselves from misunderstandings and false accusations by adhering to the division's rules on communicating with students.

Model policy for in-person communications with students

- Conversations with students should focus on matters related to instruction and school activities. School board employees and volunteers should not initiate discussions about their private lives or the intimate details of the private lives of unrelated students.
- Conversation by school board employees and volunteers with students that could be interpreted as flirtatious, romantic or sexual is prohibited.
- The sharing of sexually explicit or obscene jokes and verbal "kidding" of a sexual nature between school board employees, volunteers and students is prohibited.
- Private, one-on-one conversations with students should take place within the potential view, but out of the earshot of other adults — such as in a classroom with the hallway door open. This policy also applies to conversations between volunteers and unrelated students.
- School board employees may not conduct an ongoing series of one-on-one meetings with a student without the knowledge of the principal and without written permission of a parent or guardian.
- The school board's policy on in-person communications with students also applies to teachers and other employees of virtual school programs and other vendors providing instructional services to students.

Digital technology provides multiple means for teachers and other school division employees to communicate with students. The division policy should establish acceptable channels for electronic communications with students while prohibiting interactions unrelated to instruction or not specifically authorized by school board policy. In short, electronic communications with students should be transparent, accessible to supervisors, and professional in content and tone.

Model policy for electronic communications with students

- Teachers and other school board employees must restrict electronic communications with students to accounts, systems and platforms provided by the school division.
- Teachers and other employees may not use personal wireless communications devices to "text" students and are prohibited from interacting with students through online social-networking sites. Teachers and other school board employees must decline or disregard invitations from students to interact through texting and social-networking sites.
- Teachers and other school board employees may not knowingly engage in online gaming with students.
- School board policy on electronic communications with students also applies to teachers and other employees of virtual school programs and other vendors providing instructional services to students.

Best Practice: Developments in personal digital communications and social networking are reviewed annually by division technology staff and school board policies are revised as needed.

Best Practice: Information about school board policies on in-person and electronic communication between employees and students is included in student and parent handbooks and posted on the school division Web site.

Physical contact

Physical contact between school board employees and students should be public, nonsexual, and appropriate to the circumstances. School employees and volunteers should avoid adult-minor physical contact when alone with an unrelated student.

Model policy for physical contact with students

- Physical contact between an adult and student that is expected and appropriate in preschool and in the early elementary grades — such as a spontaneous hug between a teacher and a child at the end of the day — is not appropriate with older children.
- Physical contact meant to encourage or reassure students, such as a hand on the shoulder or a pat on the back, should be brief and unambiguous in meaning.
- School board policy on physical contact with students also applies to teachers and other employees of virtual school programs and other vendors providing instructional services to students.

Best Practice: Information about the school board's policy on physical contact between employees and students is included in student and parent handbooks and posted on the school division Web site.

Social Interaction with Students

It is natural for friendships to develop between students and teachers and other school employees. Rules governing social interactions with students allow for healthy relationships between students and educators while eliminating opportunities for misunderstandings and misconduct.

Model policy for on-site and off-site social interaction with students

- School employees and volunteers should avoid situations in which they are alone with an unrelated student and not observable by other adults or students.
- All off-site, school-related activities involving school board employees and students must be approved by an authorized administrator and be supervised by a least two unrelated adults.
- Adult chaperones for off-site, school-related activities must be at least 21 years of age.

- Written parental permission must be secured for all off-site, school-related activities.
- The giving of expensive gifts or gifts of a personal nature, such as jewelry and clothing, to unrelated students by teachers, volunteers and other school board employees is prohibited. School board employees and volunteers may not accept such gifts from individual students.
- School board employees shall not grant special privileges, rewards, or opportunities to a specific child beyond those customarily provided as incentives to promote and recognize achievement.
- School board employees are prohibited from hosting or participating in private social gatherings and parties with students during which alcohol and/or other drugs are consumed.
- School board employees and adult volunteers shall not share pornographic or sexually explicit materials with students.
- Romantic or sexual relationships between school employees or volunteers and students are prohibited, regardless of the age of the student or the proximity in age of the employee or volunteer and student.
- School board policy on social interaction with students also applies to teachers and other employees of virtual school programs and other vendors providing instructional services to students.

Best Practice: Information about the school board's policy on social interaction between employees and students is included in student and parent handbooks and posted on the school division Web site.

Training and dissemination of school board policy

It is the responsibility of the school board to provide training on the prevention of sexual misconduct and abuse to all employees and volunteers. Training may be provided by a qualified vendor or other organization, provided that the content is substantially aligned with school board policy. Training may be provided as a workshop or online with a means of confirming participation and completion.

All school board employees and school volunteers should be provided with a copy of the school board's policy for the prevention of sexual misconduct and abuse at the beginning of the school year. A link to the policy also should be posted on the homepage of the school division Web site.

Contracts with virtual school programs and other vendors providing instructional services to students should include a requirement that employees follow school board policy on the prevention of sexual misconduct and abuse.

Best Practice: Principals appoint — in consultation with faculty and parents — school committees with responsibility for increasing awareness of state laws and school board polices. Divisions provide training to school committees in order for committees to oversee training of building-level employees and volunteers.

Reporting suspected misconduct and/or abuse

The school board's policy on the prevention of sexual misconduct should include clear channels for reporting suspect misconduct for employees and volunteers and for students and parents.

The *Code of Virginia* (§ 63.2-1509) requires school board employees to report all cases of suspected abuse to local or state social services agencies or the principal or his or her designee. The *Code* (§ 22.1-291.3) also requires school boards (and administrators of private and parochial schools) to post a notice reminding teachers and other employees of their responsibility to report suspected abuse. This notice must include the Virginia Department of Social Services' toll-free child-abuse-and-neglect hotline.

All school board employees and volunteers should be aware of location of the notice required by § 22.1-291.3 and understand their legal obligation to report abuse or neglect.

The school board policies on the prevention of sexual misconduct should include these statutory reporting requirements and obligate employees and volunteers who observe, or are told of, misconduct — as defined by the local policy — to notify the principal or his or her designee promptly.

School board policies also should reference the statutory requirement (§ 22.1-313) that school divisions to notify the superintendent of public instruction within 10 business days when employees are dismissed or resign because of a conviction of a barrier offense or a founded case of child abuse.

Model policy for reporting suspected abuse and misconduct

- The principal of each school shall ensure that all building-level employees and adult volunteers are aware of their legal obligation to report suspected abuse to local or state social service agencies or the principal or his or her designee and that the notice required by § 22.1-291.3 is posted in a manner that complies with the law.
- The principal of each school shall ensure that all building-level employees and adult volunteers are aware of their obligation under the school board's policy on the prevention of sexual misconduct to report misconduct to the principal or his or her designee.
- School board employees and adult volunteers who observe or otherwise become aware of sexual misconduct by another employee or adult volunteer must notify the principal or his or her designee promptly.
- The superintendent shall also designate an administrator within the division central office to receive reports of sexual misconduct.
- When a licensed employee is dismissed or resigns because of a conviction of a barrier offense or founded case of child abuse, the superintendent shall notify the superintendent of public instruction within 10 business days and provide the school board with documentation of the notification.

Best Practice: Instructions for reporting misconduct are included in student and parent handbooks and posted on the school division Web site.

Consequences for violations of school board policy

In determining consequences for violations of school board sexual abuse prevention policies, administrators must evaluate the willfulness of the conduct and nature of the conduct or communication. School board employees and volunteers have an obligation to report violations of the division's policies for preventing sexual misconduct to the principal or his or her designee.

Model policy for violations of school board policy on sexual misconduct and abuse

- Violations involving sexual relations with a student, regardless of the age of the student or the proximity in age of the student and employee or volunteer; sexual abuse of a student; or communication with a student of a sexual or romantic nature; shall result in dismissal, prompt notification of law enforcement and social services if required by state law, and in the case of an employee or volunteer licensed by the Board of Education, the initiation of a complaint against the license.
- The response to violations involving willful conduct, or conduct or communication of a sexual or romantic nature not involving actual sexual relations or abuse, may include a formal reprimand, suspension, dismissal or other personnel action deemed necessary to prevent sexual abuse and protect the health, welfare, discipline or morale of students, and if warranted in the

case of an employee or volunteer licensed by the Board of Education, the initiation of a complaint against the license.

- The response to violations determined to have been inadvertent, and/or not involving conduct or communication of an abusive, sexual or romantic nature, may include counseling and training, and in cases involving multiple violations, a formal reprimand or other action deemed warranted to prevent future violations of school board policy.

References

In developing *Guidelines for the Prevention of Sexual Misconduct and Abuse in Virginia Public Schools*, the Division of Policy and Communications studied policies adopted by school boards and legislatures in several states, youth protection policies adopted by private and parochial school systems, policies adopted by national youth-service organizations, and reports and studies on the issue of sexual misconduct in school settings.

- Boy Scouts of America, *Guide to Safe Scouting, Chapter 1: Youth Protection and Adult Leadership*, 2007
- Carr, Nora, *How to avoid committing social media gaffes: 11 strategies for keeping your staff out of hot water in today's new media world.* E-school News. Accessed October 5, 2010: http://www.eschoolnews.com/2010/10/05/how-to-avoid-committing-social-media-gaffes/
- Catholic Diocese of Arlington, *Policy on the Protection of Children/Young People and Prevention of Sexual Misconduct and/or Child Abuse*, 2003
- Catholic Diocese of Richmond, *Diocesan Safe Environment Regulations*, 2005
- Chicago Public Schools, *Chicago Public Schools Policy Manual, Section 604.1: Acceptable Use of the CPS Network and Computer Resources*, 2009
- Church Mutual Insurance Company, *Safety Tips on a Sensitive Subject: Child Sexual Abuse*, 2009
- Church Mutual Insurance Company, *Sample Child and Youth Abuse Prevention Program for Religious Organizations*, 2009
- Church Pension Group (Episcopal), *Model Policies for the Protection of Children and Youth from Abuse*, 2004
- Commonwealth Girl Scout Council of Virginia, *Volunteer Essentials 2010, Chapter 4: Safety-Wise*, 2010
- Community High School District 128 (Vernon Hills, Illinois), *Expectations for Communicating Electronically with Students*, 2010
- Georgia Professional Standards Commission, *Code of Ethics for Educators*, 2009
- Idaho Professional Standards Commission, *Code of Ethics for Idaho Professional Educators*, 2009
- Lee County Public Schools (Florida), *Guidelines for Employees Who Participate in Social Media Websites*, 2010
- Louisiana Revised Statutes 17:81(Q) and 3996 (B)(21), as amended by HB 570 (2009): *AN ACT … to require the governing authority of a public elementary or secondary school to formulate, develop, adopt, and implement policies, procedures, and practices applicable to school employees relative to electronic communications by an employee at a school to a student enrolled at that school; to provide policy guidelines and requirements; to provide limitations and exceptions; to provide that the occurrence of certain electronic communications be reported by the school employee; to provide for immunity from civil liability; to provide an effective date; and to provide for related matters.* 2009
- Manatee County School District (Florida), *Computer Systems Acceptable Use Policy*, 2010
- North Carolina Board of Education, *Code of Ethics for North Carolina Educators*, 1998
- Ontario College of Teachers, *Professional Advisory: Professional Misconduct Related to Sexual Abuse and Sexual Misconduct*, 2002

- Oregon Revised Statutes 339.370, 339.372, and 339.377, as amended by HB 2062 (2009): *AN ACT Relating to misconduct by school employees; creating new provisions; amending ORS 339.370, 339.372, 339.375 and 339.377; and prescribing an effective date.* 2009
- Shakeshaft, Charol, *Educator Sexual Misconduct: A Synthesis of Existing Literature*, United States Department of Education, 2004
- Texas State Board for Educator Certification, *Code of Ethics and Standard Practices for Texas Educators*, 1998
- Utah Administrative Code, Rule R277-515, *Utah Educator Standards*, Utah State Board of Education, 2010
- Utah State Office of Education, A Review of Professional Conduct in Utah's Public Schools, 2010

Board of Education Agenda Item

Item: I. **Date:** November 18, 2010

Topic: Final Review of Proposed Revised Curriculum Framework for 2010 *Science Standards of Learning*

Presenter: Ms. Paula J. Klonowski, Science Coordinator

Telephone Number: (804) 371-0249 **E-Mail Address:** paula.klonowski@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

_X_ Action requested at this meeting ___Action requested at future meeting:

Previous Review/Action:

____ No previous board review/action

_X_ Previous review/action
date September 23, 2010
action Board of Education accepted the Proposed Revised Curriculum Framework for 2010 *Science Standards of Learning* for first review and public comment.

Background Information:
New academic content *Science Standards of Learning* were developed in 1995 and revised in 2003. The Standards of Quality require the Board of Education to review the Standards of Learning on a regular schedule. On January 14, 2010, the Board approved the 2010 *Science Standards of Learning*. In accordance with the plan, the Department of Education then took the following steps to produce a draft of the proposed revised Curriculum Framework for the 2010 *Science Standards of Learning* for the Board's first review:

- Selected a review committee that consisted of individuals solicited from school divisions as well as other stakeholder groups to participate in the process;
- Met with the review committee during June 2010; and
- Developed a draft of the proposed revised Curriculum Framework for the 2010 *Science Standards of Learning*.

On September 23, 2010, the Virginia Board of Education accepted for first review the proposed revised Curriculum Framework for the 2010 *Science Standards of Learning*. A public comment period was held from September 24, 2010, through October 25, 2010. A summarized review of public comment is contained in Attachment A.

Summary of Major Elements:
The proposed revised Curriculum Framework for the 2010 *Science Standards of Learning* in Attachment B contains minimal changes made as a result of public comment. These changes are indicated by double strikethrough and underline and include:

- revisions of language for clarification and/or specification of content; and
- addition of essential understandings information for instruction, assessment, and/or vertical alignment.

Superintendent's Recommendation:
The Superintendent of Public Instruction recommends that the Board of Education accept for final review the proposed revised Curriculum Framework for the 2010 *Science Standards of Learning* and permit the Department of Education to make technical edits as needed.

Impact on Resources:
This responsibility can be absorbed by the agency's existing resources at this time.

Timetable for Further Review/Action:
Following the Board of Education's acceptance of the 2010 *Science Standards of Learning* Curriculum Framework, the Department of Education will post the document on the Department's Curriculum Framework Web site.

Attachment A

Summary of Comments on the Proposed Revised Curriculum Framework for 2010 *Science Standards of Learning*

Summary of Online Comments

A total of 212 comments were received during the public comment period from September 23, 2010, through October 25, 2010. This represents 13 individuals, two school divisions, one school, one professional organization, and two business/industry councils.

The following table indicates the number of comments received.

Grade Band, Level, and Course	Number of Comments
K-12 General	2
Kindergarten	12
Grade 1	13
Grade 2	9
Grade 3	20
Grade 4	38
Grade 5	29
Grade 6	9
Life Science	5
Physical Science	13
Earth Science	38
Biology	6
Chemistry	9
Physics	9
Total	**212**

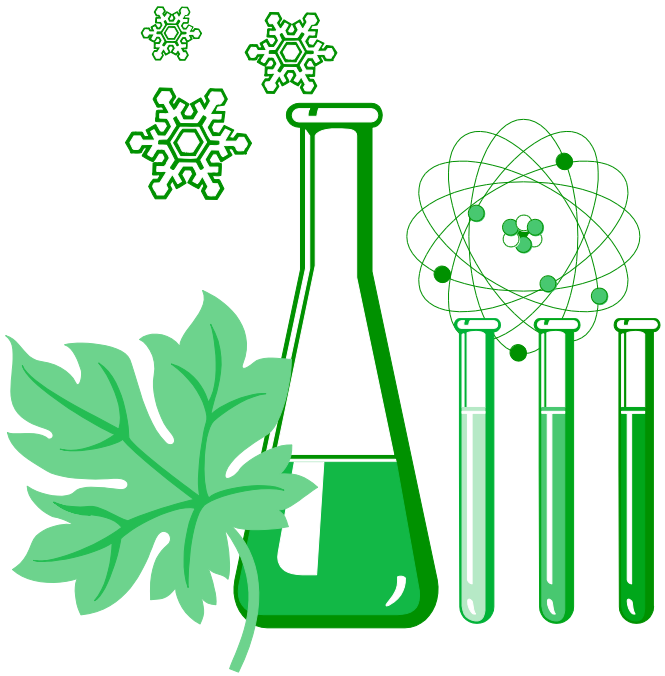
Many of the comments were positive regarding the revisions to the first draft of the Curriculum Framework. Comments included:

- praise for the inclusion of detail associated with the nature of science;
- appreciation for the inclusion of the use of models, simulations, and current applications;
- requests that correct terminology be used when referring to energy;
- appreciation that terminology is now consistent from kindergarten through grade 12;
- appreciation that additional content detail has been included for grades kindergarten through five;
- request that the information about the magnetic compass be modified in kindergarten and grade two;
- concern that information about the particle nature of light had not been included in grade five;
- praise for the inclusion of the chart with details about the characteristics of gases, liquids, and solids in grade five;
- praise for the inclusion of the study of nanotechnology and suggestion that it also be included in physical science;

- request that the importance of the pH scale be put back in the biology Curriculum Framework;
- concern that work with friction no longer is included in physics; and
- praise from the technology industry community that the changes in the Curriculum Framework will help prepare the future work force.

Changes that were made to the proposed revised Curriculum Framework based on the public comments received focused on the following areas.

- Updates were made to add clarity to detail.
- Attention was given to consistency of terminology used and accuracy of terminology definitions so that the integrity of the science content progressions K-12 was maintained.
- Additions were made to content detail to assure that adequate background information was included and that content detail addressed all revisions that had been made to the 2010 *Science Standards of Learning*.
- Additions or deletions were made when needed to ensure content accuracy and to remove any duplication of details.



Science Standards of Learning Curriculum Framework

Kindergarten

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs or activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Kindergarten
Science Strand

Scientific Investigation, Reasoning, and Logic

This strand represents a set of systematic inquiry skills that defines what a student ~~should~~ will be able to do when conducting activities and investigations and represents the student understanding of the nature of science. The various skill categories are described in the "Investigate and Understand" section of the Introduction to the *Science Standards of Learning*, and the skills in science standard K.1 represent more specifically what a student should achieve during the course of instruction in kindergarten. Across the grade levels, the skills in the first standards form a nearly continuous sequence of investigative skills and an understanding of the nature of science. ~~(Please note Appendix, "Science Skills, Scope, & Sequence.")~~ It is important that the classroom teacher understand how the skills in standards K.1 and K.2 are a key part of this sequence (i.e., 1.1, 2.1, 3.1, 4.1, 5.1, and 6.1). ~~It is also important to note that 25 percent of items on the third and fifth grade SOL assessments measure the skills defined in the "Scientific Investigation, Reasoning, and Logic" strand.~~

K.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) basic characteristics or properties of objects are identified by direct observation; b) observations are made from multiple positions to achieve different perspectives; c) a set of objects is sequenced according to size; d) a set of objects is separated into two groups based on a single physical characteristic; e) nonstandard units are used to measure the length, mass, and volume of common objects; f) observations and predictions are made for an unseen member in a sequence of objects; g) a question is developed and predictions are made from one or more observations; h) observations are recorded; i) picture graphs are constructed; j) unusual or unexpected results in an activity are recognized; and k) objects are described both pictorially and verbally.

~~Understanding the Standard~~ Overview

~~The skills defined in~~ Standard K.1 ~~are~~ is intended to develop ~~the~~ investigative and inquiry ~~components~~ skills and an understanding of the nature of science ~~of all of the other kindergarten standards (i.e., K.2–K.10)~~. Standard K.1 describes the range of inquiry skills and the level of proficiency in using those skills ~~that~~ students should achieve, and the components of the nature of science that should be developed and reinforced in the context of science concepts developed in kindergarten. **Standard K.1 does not require a discrete unit be taught on scientific investigation and the nature of science because the ~~inquiry~~ skills that make up the standard should be incorporated in all the other kindergarten science standards.** It is also intended that by participating in activities and experiences that develop these skills, students will achieve a preliminary understanding of scientific inquiry and the nature of science and more fully grasp the content-related concepts.

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) basic characteristics or properties of objects are identified by direct observation;
b) observations are made from multiple positions to achieve different perspectives;
c) a set of objects is sequenced according to size;
d) a set of objects is separated into two groups based on a single physical characteristic;
e) nonstandard units are used to measure the length, mass, and volume of common objects;
f) observations and predictions are made for an unseen member in a sequence of objects;
g) a question is developed and predictions are made from one or more observations;
h) observations are recorded;
i) picture graphs are constructed;
j) unusual or unexpected results in an activity are recognized; and
k) objects are described both pictorially and verbally.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts: a) the natural world is understandable; b) science is based on evidence, both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected. e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. In kindergarten, an emphasis should be placed on concepts a, b, and e. • Science assumes that the natural world is understandable. Scientific inquiry can provide explanations about nature. This expands students' ~~knowledge~~ thinking from just a knowledge of facts to understanding ~~why~~ how ~~the~~ facts are relevant to everyday life. • Science demands evidence. Scientists develop their ideas based on	In order to meet this standard, it is expected that students ~~should be able to~~ will • observe objects and describe their basic properties. These properties include color, shape (circle, triangle, square, and rectangle), size (big, little, large, small), texture (rough, smooth, hard, soft), and weight (heavy, light). • observe an object or objects from multiple positions to achieve different perspectives. In order to accomplish this, the student should look at the object from top, bottom, front, and back, and describe what he/she sees. • arrange a set of objects in sequence according to size. • separate a set of objects into two groups based on a single physical ~~attribute~~ characteristic, including ~~size,~~ color, shape, size, texture, and weight. • measure common objects with nonstandard units. Examples of nonstandard units include hands, pennies, and paper clips for ~~measuring~~ determining length; holding and comparing two different objects for ~~measuring~~ determining mass; and liquids put in drinking

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) basic characteristics or properties of objects are identified by direct observation;
b) observations are made from multiple positions to achieve different perspectives;
c) a set of objects is sequenced according to size;
d) a set of objects is separated into two groups based on a single physical characteristic;
e) nonstandard units are used to measure the length, mass, and volume of common objects;
f) observations and predictions are made for an unseen member in a sequence of objects;
g) a question is developed and predictions are made from one or more observations;
h) observations are recorded;
i) picture graphs are constructed;
j) unusual or unexpected results in an activity are recognized; and
k) objects are described both pictorially and verbally.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
evidence and they change their ideas when new evidence becomes available or the old evidence is viewed in a different way. • Science is a complex social endeavor. It is a complex social process for producing knowledge about the natural world. Scientific knowledge represents the current consensus as to what is the best explanation for phenomena in the natural world. This consensus does not arise automatically, since scientists with different backgrounds from all over the world may interpret the same data differently. To build a consensus, scientists communicate their findings to other scientists and attempt to replicate one another's findings. In order to model the work of professional scientists, it is essential for kindergarten students to engage in frequent discussions with peers about their understanding of their investigations. • Observation is an important ~~way~~ skill that enables us to learn about the world. Observations are expressed as descriptive statements about natural phenomena that are accessible to the senses either directly or with the use of technology. Through observation one can learn to compare, contrast, and note similarities and differences. • An object can appear very different depending on how it is oriented. To describe an object fully and accurately, it should be observed from	cups ~~and compared~~ for ~~measuring~~ determining volume. • predict an unseen member in a sequence of objects to complete a pattern. • develop a question from one or more observations about the natural world. • make a prediction based on observations. • record observations using pictures. • construct picture graphs using 10 or fewer units. • identify unusual or unexpected results in an activity. • describe objects both pictorially and verbally.

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) basic characteristics or properties of objects are identified by direct observation;
b) observations are made from multiple positions to achieve different perspectives;
c) a set of objects is sequenced according to size;
d) a set of objects is separated into two groups based on a single physical characteristic;
e) nonstandard units are used to measure the length, mass, and volume of common objects;
f) observations and predictions are made for an unseen member in a sequence of objects;
g) a question is developed and predictions are made from one or more observations;
h) observations are recorded;
i) picture graphs are constructed;
j) unusual or unexpected results in an activity are recognized; and
k) objects are described both pictorially and verbally.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
several different positions. • Putting objects in a sequence allows one to understand how things are related. A sequence can ~~show how things can change a little at a time~~ illustrate incremental changes over time. • A nonstandard unit of measure, such as the length of a paper clip, can be used to describe and communicate the dimensions of an object. For the nonstandard unit to be most useful, it should be consistent and easily applied. • Sequenced objects or events can show patterns over time. Occasionally, items are missing in a sequence, but observations of patterns in the sequence can offer clues to predict the item(s) that are missing. • Observations about familiar objects or events often lead to the development of predictions and important questions that can spark further investigation. • Observations that are made can be recorded in a variety of ways. Picture graphs are useful ways to display and report information. • It is important to observe the results of an investigation carefully. Results that are unexpected or unusual may be of interest for further study.	

K.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) basic characteristics or properties of objects are identified by direct observation; b) observations are made from multiple positions to achieve different perspectives; c) a set of objects is sequenced according to size; d) a set of objects is separated into two groups based on a single physical characteristic; e) nonstandard units are used to measure the length, mass, and volume of common objects; f) observations and predictions are made for an unseen member in a sequence of objects; g) a question is developed and predictions are made from one or more observations; h) observations are recorded; i) picture graphs are constructed; j) unusual or unexpected results in an activity are recognized; and k) objects are described both pictorially and verbally.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Observations can be communicated through pictures and discussions.	

K.2	The student will investigate and understand that humans have senses that allow them to seek, find, take in, and react or respond to information in order to learn about their surroundings. Key concepts include a) the five senses and corresponding sensing organs; and b) sensory descriptors used to describe common objects and phenomena.

~~Understanding the Standard~~ Overview

~~The second standard at the kindergarten level~~ Standard K.2 is very closely related to K.1 in developing the inquiry skill of observation ~~developed in K.1~~. This standard focuses on the senses — sight, smell, hearing, touch, and taste. Standard K.2 focuses on student understanding that each sensing organ (eyes, ears, nose, tongue, and skin) is associated with a sense. It is important to emphasize that ~~one~~ a student should never taste, touch, or sniff something when the identity is unknown or has any potential danger.

K.2	The student will investigate and understand that humans have senses that allow them to seek, find, take in, and react or respond to information in order to learn about their surroundings. Key concepts include a) the five senses and corresponding sensing organs; and b) sensory descriptors used to describe common objects and phenomena.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • A particular sensing organ (eye~~s~~, ear~~s~~, nose, tongue, and skin) is associated with each of the five senses. • Using the senses, we can make careful observations about the world ~~and communicate those observations through descriptors~~. • To communicate what is observed, descriptors should be used.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify and describe the five senses: taste, touch, smell, hearing, and sight. • match each sensing organ (eye~~s~~, ear~~s~~, nose, tongue, and skin) with its associated sense. • match sensory descriptors with the senses (**taste**: sweet, sour, bitter, salty; **touch**: rough, smooth, hard, soft, cold, warm, hot; **hearing**: loud, soft, high, low; **sight**: bright, dull, color, black, ~~and~~ white; **smell**: strong, faint, bad, and good.)

Force, Motion, and Energy

This strand focuses on student understanding of what force, motion, and energy are and how the concepts are connected. The major topics developed in this strand include magnetism, types of motion, simple and compound machines, and energy forms and transformations, especially electricity, sound, and light. This strand includes science standards K.3, 1.2, 2.2, 3.2, 4.2, 4.3, 5.2, 5.3, 6.2, and 6.3.

K.3	The student will investigate and understand that magnets have an effect on some materials, make some things move without touching them, and have useful applications. Key concepts include a) magnetism and its effects; and b) useful applications of magnetism.

~~Understanding the Standard~~ Overview

Magnets have an effect on certain metals and can cause objects to move without physically touching them. Standard K.3 focuses on developing a basic understanding of magnetism that will be expanded in standards 2.2 and 4.3. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.3 The student will investigate and understand that magnets have an effect on some materials, make some things move without touching them, and have useful applications. Key concepts include
a) magnetism and its effects; and
b) useful applications of magnetism.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • A magnet has two ends called poles, one of which is called a north pole or north-seeking pole, and the other is called a south pole or south-seeking pole. • The north pole of one magnet attracts the south pole of a second magnet, while the north pole of one magnet repels the other magnet's north pole. One way to state this is that like poles repel and unlike poles attract. Repulsion is the force that pushes like poles of magnets apart. • A magnet creates an invisible area of magnetism all around it called a magnetic field. • The north ~~pole~~ end of a magnetic compass always points roughly toward Earth's North Pole and ~~vice-versa~~ the south end of the compass needle always points toward Earth's South Pole. That is because Earth itself contains magnetic materials and behaves like a gigantic magnet. • If you cut a bar magnet in half, you get two new, smaller magnets, each with its own north and south pole. • Magnets will attract certain metals (iron-bearing, nickel, and cobalt). • Magnets have an effect on some items and can cause them to move. Some items are not affected by magnets and remain stationary. • Because some metals are attracted to magnets, magnets have many simple useful applications in the home such as can openers, magnetized screwdrivers, magnetic cabinet door latches, and magnetic games. • The force of a magnet can move something without actually touching it. • Students will be introduced to the vocabulary attract/repel,	In order to meet this standard, it is expected that students ~~should be able to~~ will • predict and test which common objects will be attracted to magnets and which will not be attracted to magnets. • classify objects as being attracted or not attracted to magnets, such as an iron nail, an iron-bearing paper clip, cereal, and a book. • ~~explain in their own words essential vocabulary, including the concepts of attraction/nonattraction, push/pull, attract/repel, and metal/nonmetal.~~ • explain in their own words how an object such as an iron nail, an iron-bearing paper clip, cereal, or a book is affected by a magnet. • identify items in the home or school that contain a magnet or magnets, such as can openers, magnetized screwdrivers, magnetic games, magnetic cabinet door latches, ~~and~~ refrigerator magnets, and magnetic letters. • ~~evaluate the importance and usefulness of magnets in the home.~~

K.3 The student will investigate and understand that magnets have an effect on some materials, make some things move without touching them, and have useful applications. Key concepts include a) magnetism and its effects; and b) useful applications of magnetism.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
nonattraction, metal, and nonmetal in grade two. The focus of the investigations in this standard should be on the concepts, not the terminology.	

Kindergarten
Science Strand

Matter

This strand focuses on the description, physical properties, and basic structure of matter. The major topics developed in this strand include concepts related to the basic description of objects, ~~states~~ phases of matter (solids, liquids, and gases – especially water), phase changes, mass and volume, and the structure ~~of~~ and classification of matter. This strand includes science standards K.4, K.5, 1.3, 2.3, 3.3, 5.4, 6.4, 6.5, and 6.6.

K.4	The student will investigate and understand that the position, motion, and physical properties of an object can be described. Key concepts include a) colors of objects; b) shapes and forms of objects; c) textures and feel of objects; d) relative sizes and weights of objects; and e) relative positions and speed of objects.

~~Understanding the Standard~~ Overview

Standard K.4 focuses on student understanding that all objects have physical properties, which include color, shape or form, texture, and size. Position and speed, though not physical properties, can also be observed and described. A basic understanding of physical properties provides a foundation for observing, investigating, and studying matter. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.4 The student will investigate and understand that the position, motion, and physical properties of an object can be described. Key concepts include
a) colors of objects;
b) shapes and forms of objects;
c) textures and feel of objects;
d) relative sizes and weights of objects; and
e) relative positions and speed of objects.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following~~: • An object may have many properties that can be observed and described. • An ~~Objects~~ object can be described readily in terms of color~~, shape, and texture~~. • Visible light waves are the only electromagnetic waves that we can see with the naked eye. We see these waves as the colors of the rainbow. Each color has a different wavelength. Red has the longest wavelength and violet has the shortest wavelength. • When all the waves are seen together, they make white light. When white light shines through a prism, the white light is broken apart into colors. Water vapor in the atmosphere can act as a prism and break apart the white light, creating a rainbow. • The order of the colors in the visible spectrum are red, orange, yellow, green, blue, and violet. Most scientists no longer include the color indigo, which used to be included between blue and violet. • ~~Indigo and~~ At the kindergarten level, violet is referred to as purple. It is not required at the kindergarten level that students know the term violet. ~~are not required at the kindergarten level.~~ • Black and white are not spectral colors, but students should recognize them by name. Black is the total absence of light and is when a material absorbs all the light. White is a reflection of all visible light together. • An object can be described in terms of shape, size, and texture.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify and name ~~eight~~ six basic colors, including red, orange, yellow, green, blue, and purple~~.~~; and identify and name black and white. • identify and name a circle, triangle, square, and rectangle. • compare and contrast objects that are flexible, stiff, straight, and/or curved. • compare and contrast objects that are rough, smooth, hard, and/or soft. • compare objects using the concepts of heavy/light, long/short, wide/thin, big/little, and large/small. • measure objects, using nonstandard units, and direct comparisons. • identify the position of an object, using position words over/under, in/out, above/below, and left/right. • group objects according to their speed — fast or slow.

K.4	The student will investigate and understand that the position, motion, and physical properties of an object can be described. Key concepts include a) colors of objects; b) shapes and forms of objects; c) textures and feel of objects; d) relative sizes and weights of objects; and e) relative positions and speed of objects.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• An object can be described according to its position relative to another object and according to its motion. • Two different objects can have some of the same physical properties and some different physical properties.	

K.5	The student will investigate and understand that water flows and has properties that can be observed and tested. Key concepts include a) water occurs in different phases; b) water flows downhill; and c) some materials float in water, while others sink.

~~Understanding the Standard~~ Overview

Standard K.5 focuses on student understanding that water has identifying properties that can be observed and described. This standard serves as a basis for understanding physical properties and ~~states~~ phases of matter. Related primary standards include 1.3, 2.3, ~~and~~ 3.3, 5.4, and 6.5. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.5 The student will investigate and understand that water flows and has properties that can be observed and tested. Key concepts include
a) water occurs in different phases;
b) water flows downhill; and
c) some materials float in water, while others sink.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Water can be a solid, liquid, or gas. • The ~~state~~ phase of water can be changed by heating or cooling it. • The natural flow of water is from a higher to a lower level. • Some objects float in water, while others do not.	In order to meet this standard, it is expected that students ~~should be able to~~ will • ~~identify~~ classify examples of the different ~~states~~ phases of water (solid, liquid, and gas). • ~~classify examples of different states of matter as solid, liquid, or gas.~~ • describe the natural flow of water. • predict where a stream of water will flow. • predict whether items will float or sink when placed in water. Items to use include wood, metal, ~~fruits,~~ paper, and plastics.

Life Processes

This strand focuses on the life processes of plants and animals and the specific needs of each. The major topics developed in the strand include basic needs and life processes of organisms, their physical characteristics, orderly changes in life cycles, behavioral and physical adaptations, and survival and perpetuation of species. This strand includes science standards K.6, K.7, 1.4, 1.5, 2.4, 3.4, and 4.4.

K.6	The student will investigate and understand the differences between living organisms and nonliving objects. Key concepts include a) all things can be classified as living or nonliving; and b) living organisms have certain characteristics that distinguish them from nonliving objects including growth, movement, response to the environment, having offspring, and the need for food, air, and water.

~~Understanding the Standard~~ Overview

Standard K.6 focuses on student understanding that living organisms have identifying properties that distinguish them from nonliving objects and those properties can be observed and described. This standard serves as a basis for understanding the differences between living organisms and nonliving objects, and the interactions between living and nonliving things. Related elementary standards include 1.4, 1.5, 2.5, 3.4, and 4.4. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.6	The student will investigate and understand the differences between living organisms and nonliving objects. Key concepts include a) all things can be classified as living or nonliving; and b) living organisms have certain characteristics that distinguish them from nonliving objects including growth, movement, response to the environment, having offspring, and the need for food, air, and water.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Living is used to describe anything that is or has ever been alive (e.g., dog, flower, seed, log). • Nonliving is used to describe anything that is not now nor has ever been alive (e.g., rock, mountain, glass, wristwatch). • All living things grow, breathe, reproduce, excrete, respond to stimuli, and have similar basic needs like nourishment.	In order to meet this standard, it is expected that students will • identify and describe the basic characteristics of living things (growth, movement, response to the environment, having offspring, and the need for food, air, and water). • identify living organisms and nonliving objects found at home and at school. • classify items by living or nonliving.

K.7	The student will investigate and understand basic needs and life processes of plants and animals. Key concepts include a) animals need adequate food, water, shelter, air, and space to survive; b) plants need nutrients, water, air, light, and a place to grow to survive; c) plants and animals change as they grow, have varied life cycles, and eventually die; and d) offspring of plants and animals are similar but not identical to their parents or to one another.

~~Understanding the Standard~~ Overview

Standard ~~K.6~~ K.7 focuses on student understanding that all living things have basic life needs and life processes. This standard introduces basic life science concepts that progress through high school ~~B~~biology. ~~K.6~~ K.7 is very closely related to the concepts presented in 1.4 and 1.5. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.7 The student will investigate and understand basic needs and life processes of plants and animals. Key concepts include

a) animals need adequate food, water, shelter, air, and space to survive;
b) plants need nutrients, water, air, light, and a place to grow to survive;
c) plants and animals change as they grow, have varied life cycles, and eventually die; and
d) offspring of plants and animals are similar but not identical to their parents or to one another.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Plants and animals change as they grow. • Animals need adequate food, water, shelter, air, and space to survive. • Some animals are terrestrial animals, some animals are aquatic animals, and some are both. Terrestrial animals get their oxygen from the air they breathe and aquatic animals extract oxygen from water. • In order to survive, plants ~~and animals~~ need ~~food~~ nutrients, water, ~~and gases in the air to live~~ air, light, and a place that has adequate space for them to grow. ~~(Many animals and plants that live in water use the gases that are dissolved in the water.)~~ • Plants provide food for people and animals. • Some plants are terrestrial plants and some are aquatic plants. • Plants ~~make the~~ release oxygen as a product of photosynthesis and ~~that~~ oxygen is then used by other living things ~~breathe~~. ~~They produce the oxygen as part of the process of photosynthesis.~~ Carbon dioxide from the air enters a leaf through the stomata. Oxygen is produced by plants as a waste product and is released into the air through the stomata. • Plants and animals ~~live~~ change as they grow and eventually die. This is part of their life cycle. The life cycles of plants and animals vary by species. • Many offspring of plants and animals are like their parents but not identical to them or to one another.	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe the life needs of animals ~~and plants~~. The life needs are food, water, ~~and air~~ shelter, air, and space. • describe the life needs of plants. The life needs are nutrients, water, air, light, and a place that has adequate space for them to grow. • predict what will happen to animals and plants if life needs are not met. • describe some simple changes animals ~~and plants~~ undergo during the life cycles. ~~For animals t~~This may include changes in their body size, color, ~~body~~ covering, ~~and overall size~~ or shape. ~~For plants this may include size, presence of leaves and branches, and ability to produce flowers and fruits.~~ • describe some simple changes that plants undergo during their life cycles. This may include size, presence of leaves and branches, fruits, and seeds. • compare and contrast young plants and animals with their parents, using pictures and/or live organisms.

Interrelationships in Earth/Space Systems

This strand focuses on student understanding of relationships within and among Earth and space systems. The topics developed include shadows; relationships between the sun and the Earth; weather types, patterns, and instruments; properties of soil; characteristics of the ocean environment; and organization of the solar system. This strand includes science standards ~~K.7~~, K.8, 1.6, 2.6, 3.7, 4.6, 5.6, and 6.8.

K.8	The student will investigate and understand that shadows occur when light is blocked by an object. Key concepts include a) shadows occur in nature when sunlight is blocked by an object; and b) shadows can be produced by blocking artificial light sources.

~~Understanding the Standard~~ Overview

Standard ~~K.7~~ K.8 focuses on student understanding that shadows are produced when objects block light. This is a key concept for ~~student's~~ students' future understanding of more complex Earth and physical science concepts such as night and day and eclipses. Within the primary grades, related concepts are found in standards 1.6 and 3.8. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.8 The student will investigate and understand that shadows occur when light is blocked by an object. Key concepts include
a) shadows occur in nature when sunlight is blocked by an object; and
b) shadows can be produced by blocking artificial light sources.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • A shadow is an image of an object created when light is blocked by that object. • Shadows can occur whenever light is present. • People can make shadows. • Living and nonliving things can make shadows.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify a shadow ~~or variety of shadows~~. • describe how ~~to make a~~ shadows occur. • identify and describe sources of light — sun, electric lights, and flashlights — that can produce shadows. • match objects with the shadow they would create. • ~~analyze how~~ demonstrate that shadows change as the direction of the light source changes.

Earth Patterns, Cycles, and Change

This strand focuses on student understanding of patterns in nature, natural cycles, and changes that occur both quickly and slowly over time. An important idea represented in this strand is the relationship among Earth patterns, cycles, and change and their effects on living things. The topics developed include noting and measuring changes, weather and seasonal changes, the water cycle, cycles in the Earth-moon-sun system, our solar system, and change in ~~the~~ Earth's surface over time. This strand includes science standards ~~K.8,~~ K.9, K.10, 1.7, 2.7, 3.8, 3.9, 4.7, 4.8, and 5.7.

K.9	The student will investigate and understand that there are simple repeating patterns in his/her daily life. Key concepts include a) weather observations; b) the shapes and forms of many common natural objects including seeds, cones, and leaves; and c) animal and plant growth.

~~Understanding the Standard~~ Overview

Standard ~~K.8~~ K.9 focuses on student understanding of basic patterns in daily life. Careful observations of patterns help predict events. Patterns are found in weather; in natural objects, including seeds, cones, and leaves; in the growth of animals and plants; and in daily routines. The basic kindergarten concepts related to patterns will be further developed in the primary grades, especially basic concepts of cycles, sequences, and rate. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.9 The student will investigate and understand that there are simple repeating patterns in his/her daily life. Key concepts include
a) weather observations;
b) the shapes and forms of many common natural objects including seeds, cones, and leaves; and
c) animal and plant growth.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • One can make simple predictions in weather patterns. On a cloudy, warm day, it may rain. On a cloudy day that is very cold, it may snow. On a clear day there most likely will be no rain or snow. • As animals and plants grow, they get larger according to a pattern. • Natural objects such as leaves, seeds, and cones have patterns we can see. • ~~Home and school routines frequently follow a pattern.~~	In order to meet this standard, it is expected that students ~~should be able to~~ will • observe and identify daily weather conditions — sunny, rainy, cloudy, snowy, windy, warm, hot, cool, and cold. • predict daily weather based on basic observable conditions. • chart daily weather conditions. • identify simple patterns in natural objects — veins in a leaf, spiral patterns in cones, shapes and colors of common seeds. • ~~identify and describe patterns in their daily schedule at home.~~ • ~~identify and describe patterns in their daily schedule at school.~~ • ~~distinguish between the patterns in home activities and those in school activities.~~ • describe how animals and plants change as they grow. (Related to ~~K.6~~ K.7.)

K.10	The student will investigate and understand that change occurs over time and rates may be fast or slow. Key concepts include a) natural and human-made things may change over time; and b) changes can be observed and measured.

~~Understanding the Standard~~ Overview

Almost everything changes over time. Those changes can be observed and measured. Standard ~~K.9~~ K.10 focuses on student understanding of the basic aspects of change, especially in those things that can be easily observed and are within the experience of kindergarten children. Change is a key concept woven into most of the science standards throughout elementary, middle, and high school. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.10 The student will investigate and understand that change occurs over time and rates may be fast or slow. Key concepts include
a) natural and human-made things may change over time; and
b) changes can be observed and measured.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Change occurs over time. • Change can be fast or slow depending upon the object and conditions. • As people grow, they change. • Not all things change at a rate that can be observed easily. • Many changes can be measured.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify some changes that people experience over time — e.g., height, weight, and color of hair. • predict how their own height ~~and weight~~ will change over the school year. Measure and graph the information. • describe how people cause things to change — e.g., demolition of buildings, construction of buildings, cutting down trees, planting trees, and building highways. • describe how things change naturally. This includes seasonal changes, the growth in seeds and common plants, common animals, ~~including the butterfly,~~ and the weather. • identify examples of fast changes and slow changes. Slow changes should be the kinds of familiar changes that occur over weeks, months, or seasons. (Students are not responsible for long-term changes.)

Earth Resources

This strand focuses on student understanding of the role of natural resources and how people can utilize those resources in a sustainable way. Resource management is an important idea developed within the strand. This begins with basic ideas of conservation and proceeds in the sixth grade to the more abstract consideration of costs and benefits. The topics developed include the conservation of household materials, the importance of soil and plants as resources, energy use, water, Virginia's resources, and how public policy impacts the environment. This strand includes science standards ~~K.10,~~ K.11, 1.8, 2.8, 3.10, 3.11, ~~4.8,~~ 4.9, and 6.9.

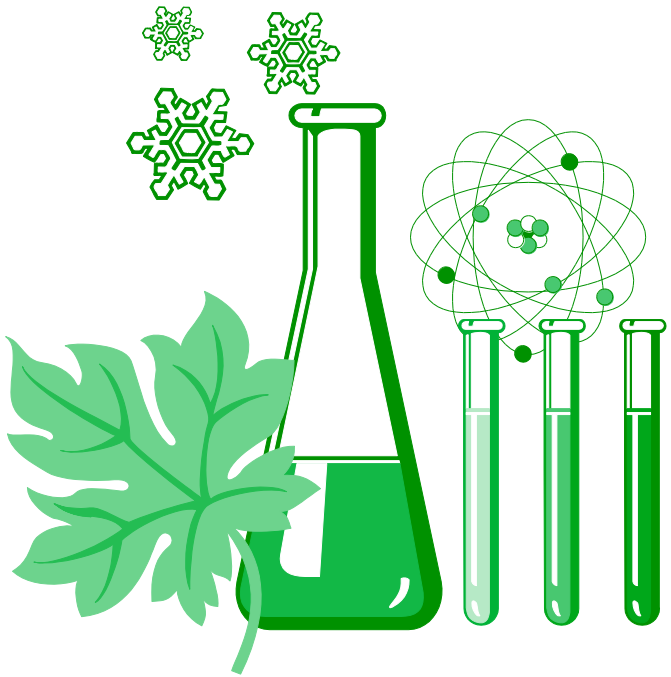
K.11	The student will investigate and understand that materials can be reused, recycled, and conserved. Key concepts include a) materials and objects can be used over and over again; b) everyday materials can be recycled; and c) water and energy conservation at home and in school helps ensure resources are available for future use.

~~Understanding the Standard~~ Overview

Standard ~~K.10~~ K.11 focuses on student understanding that materials can be reused, recycled, and conserved. This should include common objects and materials found in the school and home environment. ~~K.10~~ K.11 establishes a foundation for increasingly advanced conservation concepts developed in the primary standards. Note that science standard 1.8 is very closely related to ~~K.10~~ K.11. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (K.1 and K.2) in the context of the key concepts presented in this standard.

K.11 The student will investigate and understand that materials can be reused, recycled, and conserved. Key concepts include
a) materials and objects can be used over and over again;
b) everyday materials can be recycled; and
c) water and energy conservation at home and in school helps ensure resources are available for future use.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Natural resources such as water and energy should be conserved. • Recycling helps to save our natural resources. Recycling recovers used materials. Many materials can be recycled and used again, sometimes in different forms. Examples include newspapers that are turned into writing tablets. • Reusing materials means using them more than once. Examples include using dishes and utensils that are washed after use rather than using paper plates and plastic utensils and putting them in the trash. • Recycling, reusing, and conserving helps preserve resources for future use. • Resources will last longer if we recycle, reuse, and reduce consumption.	In order to meet this standard, it is expected that students ~~should be able to~~ will • give examples of objects, such as paper, plastic containers, and glass containers, that can be recycled. • identify materials that can be reused. • describe the difference between recycle and reuse. • name ways to conserve water and energy. • describe how to ~~recycle~~ properly dispose of a given material — paper, oil, aluminum, glass and plastics — by recycling. • predict what would happen if recycling and reusing were not practiced.



Science Standards of Learning Curriculum Framework

Grade One

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs or activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Grade One
Science Strand

Scientific Investigation, Reasoning, and Logic

This strand represents a set of systematic inquiry skills that defines what a student ~~should~~ will be able to do when conducting activities and investigations, and represents the student understanding of the nature of science. The various skill categories are described in the "Investigate and Understand" section of the Introduction to the *Science Standards of Learning*, and the skills in science standard 1.1 represent more specifically what a student should achieve during the course of instruction in the first grade. Across the grade levels, the skills in the first standards form a nearly continuous sequence of investigative skills and an understanding of the nature of science. ~~(Please note Appendix, "Science Skills, Scope, & Sequence").~~ It is important that the classroom teacher understand~~s~~ how the skills in standard 1.1 are a key part of this sequence (i.e., K.1, K.2, 1.1, 2.1, 3.1, 4.1, 5.1, and 6.1). ~~It is also important to note that 25 percent of items on the third and fifth grade SOL assessments measure the skills defined in the "Scientific Investigation, Reasoning, and Logic" strand.~~

1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) the senses are used to observe differences in physical properties;
b) observations are made from multiple positions to achieve a variety of perspectives and are repeated to ensure accuracy;
c) objects or events are classified and arranged according to characteristics or properties;
d) simple tools are used to enhance observations;
e) length, mass, volume, and temperature are measured using nonstandard units;
f) inferences are made and conclusions are drawn about familiar objects and events;
g) a question is developed from one or more observations;
h) predictions are made based on patterns of observations;
i) observations and data are recorded, analyzed, and communicated orally and with simple graphs, pictures, written statements, and numbers; and
j) simple investigations and experiments are conducted to answer questions.

~~Understanding the Standard~~ Overview

~~The skills described in s~~Standard 1.1 ~~are~~ is intended to define the "investigate" component of all other first-grade standards (1.2–1.8). The intent of standard 1.1 is that students will continue to develop a range of inquiry skills, ~~and~~ achieve proficiency with those skills, and continue to develop an understanding of the nature of science in the context of the concepts developed ~~at the~~ in first grade. **Standard 1.1 does not require a discrete unit be taught on scientific investigation because the ~~inquiry~~ skills that make up the standard should be incorporated in all other first-grade standards.** It is also intended that by developing these skills, students will achieve greater understanding of scientific inquiry and the nature of science as well as more fully grasp the content-related SOL concepts.

1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) the senses are used to observe differences in physical properties;
b) observations are made from multiple positions to achieve a variety of perspectives and are repeated to ensure accuracy;
c) objects or events are classified and arranged according to characteristics or properties;
d) simple tools are used to enhance observations;
e) length, mass, volume, and temperature are measured using nonstandard units;
f) inferences are made and conclusions are drawn about familiar objects and events;
g) a question is developed from one or more observations;
h) predictions are made based on patterns of observations;
i) observations and data are recorded, analyzed, and communicated orally and with simple graphs, pictures, written statements, and numbers; and
j) simple investigations and experiments are conducted to answer questions.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts: a) the natural world is understandable; b) science is based on evidence, both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. In grade one, an emphasis should be placed on concepts a, b, and e. • Science assumes that the natural world is understandable. Scientific inquiry can provide explanations about nature. This expands students' ~~knowledge~~ thinking from just a knowledge of facts to understanding ~~why~~ how ~~the~~ facts are relevant to everyday life.	In order to meet this standard, it is expected that students ~~should be able to~~ will • use their senses and simple tools, such as a magnifying glass~~, ruler, and thermometer,~~ and a balance to enhance their observations of physical properties. • make repeated observations of an object or event from multiple positions. • classify and arrange objects or events according to at least two attributes or properties so that similarities and differences become apparent. • measure length, mass, and volume, using ~~standard and~~ nonstandard units~~ and appropriate instruments~~. ~~By the third grade, students will be expected to have basic facility with metric measures, including centimeters, grams, and liters.~~ • use familiar events and objects to make inferences and draw conclusions.

1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) the senses are used to observe differences in physical properties;
b) observations are made from multiple positions to achieve a variety of perspectives and are repeated to ensure accuracy;
c) objects or events are classified and arranged according to characteristics or properties;
d) simple tools are used to enhance observations;
e) length, mass, volume, and temperature are measured using nonstandard units;
f) inferences are made and conclusions are drawn about familiar objects and events;
g) a question is developed from one or more observations;
h) predictions are made based on patterns of observations;
i) observations and data are recorded, analyzed, and communicated orally and with simple graphs, pictures, written statements, and numbers; and
j) simple investigations and experiments are conducted to answer questions.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Science demands evidence. Scientists develop their ideas based on evidence and they change their ideas when new evidence becomes available or the old evidence is viewed in a different way. • Science is a complex social endeavor. It is a complex social process for producing knowledge about the natural world. Scientific knowledge represents the current consensus as to what is the best explanation for phenomena in the natural world. This consensus does not arise automatically, since scientists with different backgrounds from all over the world may interpret the same data differently. To build a consensus, scientists communicate their findings to other scientists and attempt to replicate one another's findings. In order to model the work of professional scientists, it is essential for first-grade students to engage in frequent discussions with peers about their understanding of their investigations. • To communicate an observation accurately, one must provide a clear description of exactly what is observed and nothing more. • Observations should be made from multiple positions (e.g., observations of the same object from the front of the object, from the back of the object, looking down on the object, etc.) whenever possible to achieve a variety of perspectives.	• develop a question from one or more observations. • predict outcomes based on actual observations and evidence rather than random guesses. • communicate observations ~~made~~ and data ~~collected orally and~~ with simple graphs~~,~~ and pictures, oral and written statements, and with numbers. • answer questions by conducting simple experiments/investigations, using nonstandard measuring units and simple tools, such as ~~thermometer, ruler, or~~ a magnifying glass or ~~nonstandard measuring units~~ a balance. A simple experiment is one that changes only one thing at a time (tests only one variable), gives quick results, and provides easily observable changes. • record observations of movement (length/distance)~~,~~ using ~~standard (English/metric) and~~ nonstandard units. • compare the movement of objects, using graphs, pictures, and/or numbers.

1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) the senses are used to observe differences in physical properties;
b) observations are made from multiple positions to achieve a variety of perspectives and are repeated to ensure accuracy;
c) objects or events are classified and arranged according to characteristics or properties;
d) simple tools are used to enhance observations;
e) length, mass, volume, and temperature are measured using nonstandard units;
f) inferences are made and conclusions are drawn about familiar objects and events;
g) a question is developed from one or more observations;
h) predictions are made based on patterns of observations;
i) observations and data are recorded, analyzed, and communicated orally and with simple graphs, pictures, written statements, and numbers; and
j) simple investigations and experiments are conducted to answer questions.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Observations should be repeated multiple times to assure accuracy. • Once the characteristics of several objects or several events have been observed and recorded, the objects or events can be arranged by those characteristics (e.g., several objects sorted by color, several events sorted on a timeline by age, etc.). • Simple tools, such as a magnifying glass~~, ruler, and thermometer~~ and a balance~~,~~ can extend the observations that people can make. • ~~Standard measures are important for describing an object because standard measures are recognized by everyone. Many nonstandard measures, such as hand or finger length, vary considerably.~~ Nonstandard units such as paper clips, a student's foot, index cards, etc., can be used to measure the length of objects. The mass of two objects can be compared by holding each object in a different hand. The volume of various liquids can be compared by pouring them in cups of the same size. Variations in temperature of different objects can be compared by the difference that is felt when each object is touched. Variations in air temperature can be compared by observing the differences one feels when in different environments (e.g., inside the classroom vs. outside on the playground in winter, inside the freezer compartment of a refrigerator vs. inside a kitchen).	

1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) the senses are used to observe differences in physical properties;
b) observations are made from multiple positions to achieve a variety of perspectives and are repeated to ensure accuracy;
c) objects or events are classified and arranged according to characteristics or properties;
d) simple tools are used to enhance observations;
e) length, mass, volume, and temperature are measured using nonstandard units;
f) inferences are made and conclusions are drawn about familiar objects and events;
g) a question is developed from one or more observations;
h) predictions are made based on patterns of observations;
i) observations and data are recorded, analyzed, and communicated orally and with simple graphs, pictures, written statements, and numbers; and
j) simple investigations and experiments are conducted to answer questions.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• An inference is a ~~conclusion based on evidence about events that have already occurred~~ tentative explanation based on background knowledge and available data. • A conclusion is a summary statement based on data from the results of an investigation. • Questions about what is observed can be developed. • A prediction is a forecast about what may happen in some future situation. It is based on information and evidence. A prediction is different from a guess. • Graphs are powerful ways to display data, making it easier to recognize important information. Describing things as accurately as possible is important in science because it enables people to compare their observations with those of others. • Data should be displayed in bar graphs and picture graphs at the grade one level. • An experiment is a fair test designed to answer a question.	

Grade One
Science Strand

Force, Motion, and Energy

This strand focuses on student understanding of what force, motion, and energy are and how the concepts are connected. The major topics developed in this strand include magnetism, types of motion, simple and compound machines, and energy forms and transformations, especially electricity, sound, and light. This strand includes science standards K.3, 1.2, 2.2, 3.2, 4.2, 4.3, 5.2, 5.3, 6.2, and 6.3.

1.2	The student will investigate and understand that moving objects exhibit different kinds of motion. Key concepts include a) objects may have straight, circular, and back-and-forth motions; b) objects may vibrate and produce sound; and c) pushes or pulls can change the movement of an object.

~~Understanding the Standard~~ Overview

Physical science includes topics that give students a chance to increase their understanding of the characteristics of objects and materials that they encounter daily. Knowledge about objects develops through learning how they move and change position and shape in relation to the viewer, as when we look at objects from different angles. Students learn about objects by observing them and noting similarities and differences and by acting on them by applying force. This concept relates to science standard K.3, in which magnets push and pull objects. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (1.1) in the context of the key concepts presented in this standard.

1.2 The student will investigate and understand that moving objects exhibit different kinds of motion. Key concepts include
a) objects may have straight, circular, and back-and-forth motions;
b) objects may vibrate and produce sound; and
c) pushes or pulls can change the movement of an object.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • An object's motion may be described by tracing and measuring its position over time. The motion of objects may be straight, circular, curved, or back-and-forth. • One kind of back-and-forth motion is vibration. Vibrations may create sound. • Pushing or pulling can change the position and motion of objects. For the same object, the size of the change is related to the strength of the push or pull.	In order to meet this standard, it is expected that students ~~should be able to~~ will • make and communicate observations about moving objects. Examples should include balls, objects with wheels, windup toys, tops, rubber bands, and playground equipment. • predict an object's movement, using its size, shape, and the force of the push or pull on it. • ~~conduct a simple experiment to determine an object's movement.~~ • manipulate objects in order to describe and classify the motion of ~~an~~ each object as straight, circular, ~~curved,~~ or back-and-forth. • understand that vibrations may create sound, such as humming, strumming a guitar, or plucking a rubber band. • record observations of movement (length/distance), using ~~standard (English/metric) and~~ nonstandard units. • ~~compare the movement of objects, using graphs, pictures, and/or numbers.~~

Grade One
Science Strand

Matter

This strand focuses on the description, physical properties, and basic structure of matter. The major topics developed in this strand include concepts related to the basic description of objects, ~~states~~ phases of matter (solids, liquids, and gases – especially water), phase changes, mass and volume, and the structure of classification of matter. This strand includes science standards K.4, K.5, 1.3, 2.3, 3.3, 5.4, 6.4, 6.5, and 6.6.

1.3	The student will investigate and understand how different common materials interact with water. Key concepts include a) some liquids will separate when mixed with water, but others will not; b) some solids will dissolve in water, but others will not; and c) some substances will dissolve more readily in hot water than in cold water.

~~Understanding the Standard~~ Overview

Students continue their study of water by examining and qualitatively describing water and its behavior with other matter. When carefully observed, described, and measured, the properties of objects in or with water, and the changes that occur when materials interact with water, provide the necessary foundation for more abstract ideas in the upper grade levels. This concept is related to science standard K.5 in which students identify water in its different ~~states~~ phases (solid, liquid, gas). It is intended that students will actively develop scientific investigation, reasoning, and logic skills (1.1) in the context of the key concepts presented in this standard.

1.3	The student will investigate and understand how different common materials interact with water. Key concepts include a) some liquids will separate when mixed with water, but others will not; b) some solids will dissolve in water, but others will not; and c) some substances will dissolve more readily in hot water than in cold water.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Different types of materials ~~react~~ act differently when mixed with water. • Some liquids will mix with water, while others will not. • Some solids will dissolve in water, while others will not. • The temperature of the water affects how easily a substance will dissolve in it.	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe and apply the term dissolve. • predict and describe how various materials (vinegar, milk, baking soda, powdered drink mix, sugar, salt, sand, oil, soil, rocks) act when mixed with water. • classify liquids and solids into those that will dissolve in water and those that will not. Use ~~picture graphs,~~ tables~~,~~ and/or charts to record and display the information. • infer that some substances will dissolve more easily in hot water than in cold water by conducting investigations using water at different temperatures.

Grade One
Science Strand

Life Processes

This strand focuses on the life processes of plants and animals and the specific needs of each. The major topics developed in the strand include basic needs and life processes of organisms, their physical characteristics, orderly changes in life cycles, behavioral and physical adaptations, and survival and perpetuation of species. This strand includes science standards K.6, K.7, 1.4, 1.5, 2.4, 3.4, and 4.4.

1.4	The student will investigate and understand that plants have basic life needs and functional parts and can be classified according to certain characteristics. Key concepts include a) plants need nutrients, air, water, light, and a place to grow; b) basic parts of plants; and c) plants can be classified based on a variety of characteristics.

~~Understanding the Standard~~ Overview

Young children have a natural curiosity about the living things that they encounter. Observation is a method by which students can answer questions about how plants live, their parts, and characteristics. All plants need ~~nourishment~~ nutrients, air, water, light, and a place with sufficient space to grow. They have specific structures to meet their needs. Students need to know the concepts, not the definitions, of the terms edible, nonedible, evergreen, and deciduous. They need to know that we eat certain plants (edible) but not others (nonedible). They need to know that some plants stay green all year long (evergreen) while others lose their leaves each fall (deciduous). The concepts in this standard build upon the Life Processes strand (K.6 and K.7), in which students investigate and understand basic needs and life processes of plants and animals. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (1.1) in the context of the key concepts presented in this standard.

1.4	The student will investigate and understand that plants have basic life needs and functional parts and can be classified according to certain characteristics. Key concepts include a) plants need nutrients, air, water, light, and a place to grow; b) basic parts of plants; and c) plants can be classified based on a variety of characteristics.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Plants have basic needs, including ~~food~~ nutrients, air, water, light, and a place with sufficient space to grow. • Plants have different structures that serve different functions in growth, survival, and reproduction. • The functions of plant parts include the roots which hold~~ing~~ plants in place and absorb~~ing~~ water, seeds which ~~making~~ make new plants, leaves which ~~making~~ make food for the plant, and stems which hold~~ing~~ the plants upright and transport~~ing~~ materials up and down the plant. • Plants can be categorized by their different characteristics, such as edible/nonedible, flowering/nonflowering, and evergreen/deciduous. **Students do not need to know the terms nonedible, edible, evergreen, and deciduous. The focus should be on the concept, not the terminology.**	In order to meet this standard, it is expected that students ~~should be able to~~ will • conduct simple experiments/investigations related to plant needs by changing one variable (~~food~~ nutrients, air, water, light, or place to grow) at a time. **Students do not need to know the term variable**. • create and interpret a model/drawing of a plant, including seeds, roots, stems, leaves, ~~blossoms~~ flowers, and fruits. • identify the functions of the seed, root, stem, and leaf. • classify plants by the characteristics of edible/nonedible, flowering/nonflowering, and evergreen/deciduous, using ~~tables,~~ charts~~, and picture graphs~~.

1.5	The student will investigate and understand that animals, including humans, have basic needs and certain distinguishing characteristics. Key concepts include a) basic needs include adequate air, food, water, shelter, and space (habitat); b) animals, including humans, have many different physical characteristics; and c) animals can be classified according to a variety of characteristics.

~~Understanding the Standard~~ Overview

This standard focuses on the idea that animals move, need food, breathe, and reproduce. Animals have a variety of ways in which they accomplish these activities. Each type of animal has features that allow it to function in unique and specific ways to obtain food, reproduce, and survive in a particular place. This standard builds upon the Life Processes strand (K.6 and K.7), in which students are introduced to the concept of living and nonliving, and investigate and understand basic needs and life processes of plants and animals. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (1.1) in the context of the key concepts presented in this standard.

1.5 The student will investigate and understand that animals, including humans, have basic needs and certain distinguishing characteristics. Key concepts include

a) basic needs include adequate air, food, water, shelter, and space (habitat);
b) animals, including humans, have many different physical characteristics; and
c) animals can be classified according to a variety of characteristics.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Animals, including people, have basic life needs, including air, food, water, ~~and a suitable place to live~~ shelter, and space (habitat). **Students do not need to know the term habitat. The focus should be on the items that are necessary components of a habitat, not on the terminology.** • Body coverings include hair, fur, feathers, scales, and shells. • Appendages are parts, such as arms, legs, wings, fins, and tails, ~~that~~ which extend from the main body and ~~that~~ have specific functions. **Students do not need to know the term appendage. The focus should be on the concept, not the terminology.** • Methods of movement may include walking, crawling, flying, and swimming. • Simple ways to classify animals are whether they are wild or ~~tame~~ domestic and whether they live on land or in water.	In order to meet this standard, it is expected that students ~~should be able to~~ will • make and communicate observations of live animals, including ~~people~~ humans, about their needs, physical characteristics, and where they live. • describe the life needs of animals, including air, food, water, ~~and a suitable place to live~~ shelter, and space. • identify and chart simple characteristics by which animals can be classified, including body coverings (hair, fur, feathers, scales, and shells), body shape, appendages (arms, legs, wings, fins, and tails), methods of movement (walking, crawling, flying, and swimming), wild or ~~tame~~ domestic, and water homes or land homes. • distinguish between wild animals (raccoon, hawk, squirrel, shark) and ~~tame~~ domestic animals (dog, cat, sheep) and recognize examples of each. • infer types of animal homes (water or land), using the physical characteristics of the animals, such as scales and fins that allow fish to live and move in water or fur and legs that allow dogs to live and move on land. • classify animals by where they live (their homes).

Grade One
Science Strand

Interrelationships in Earth/Space Systems

This strand focuses on student understanding of relationships within and among Earth and space systems. The topics developed include shadows; relationships between the sun and the Earth; weather types, patterns, and instruments; properties of soil; characteristics of the ocean environment; and organization of the solar system. This strand includes science standards ~~K.7~~ K.8, 1.6, 2.6, 3.7, 4.6, 5.6, and 6.8.

1.6	The student will investigate and understand the basic relationships between the sun and Earth. Key concepts include a) the sun is the source of energy and light that warms the land, air, and water; and b) the sun's relative position in the morning is east and in the late afternoon is west.

~~Understanding the Standard~~ Overview

This standard focuses on some of the important relationships between the sun and ~~the~~ Earth. ~~Day and night occur because Earth turns or rotates on its axis. Earth turns on its axis once a day. Students need to understand the concepts of rotation and axis, but they do not need to know the terms.~~ Students need to understand that the sun is a source of energy, and that energy provides light and warmth for Earth. This standard builds upon science standard ~~K.7~~ K.8 about light and shadow. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (1.1) in the context of the key concepts presented in this standard.

1.6 The student will investigate and understand the basic relationships between the sun and Earth. Key concepts include
a) the sun is the source of energy and light that warms the land, air, and water; and
b) the sun's relative position in the morning is east and in the late afternoon is west.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The sun ~~is~~ provides Earth ~~the a source of~~ with light (a form of radiant energy) and ~~heat~~ thermal energy ~~on Earth~~. • By transferring thermal energy to Earth, Earth's atmosphere and land are heated. ~~Heat is a form of energy.~~ ~~Heat~~ Thermal energy may be transferred from one substance to another by three means: conduction, convection, and radiation. • The sun provides ~~heat~~ energy, which warms the land, air, and water on Earth. • ~~The rotation of Earth means that Earth turns once a day. The part of Earth facing the sun has daytime and the part not facing the sun has nighttime.~~ • ~~Rotation of the Earth causes day and night.~~ • The sun's relative position in the morning is east and in the late afternoon is west.	In order to meet this standard, it is expected that students ~~should be able to~~ will • infer that sunlight striking an object makes the object warmer. • conduct simple experiments to show how sunlight changes the temperature of land, air, and water. • ~~demonstrate and describe the concept of rotation.~~ • ~~comprehend that day and night are caused by Earth's rotation.~~ • ~~compare and contrast day and night by characteristic changes in temperature and light.~~ • ~~model the rotation of Earth and its physical relationship to the sun.~~ • interpret the relationship between the sun's position in the sky and the general time of day. This includes the sun's relative position in the morning (east), at noon, and in the late afternoon (west).

Grade One
Science Strand

Earth Patterns, Cycles, and Change

This strand focuses on student understanding of patterns in nature, natural cycles, and changes that occur both quickly and slowly over time. An important idea represented in this strand is the relationship among Earth patterns, cycles, and change and their effects on living things. The topics developed include noting and measuring changes, weather and seasonal changes, the water cycle, cycles in the Earth-moon-sun system, our solar system, and change in ~~the~~ Earth's surface over time. This strand includes science standards ~~K.8,~~ K.9, K.10 1.7, 2.7, 3.8, 3.9, 4.7, and 5.7.

1.7	The student will investigate and understand weather and seasonal changes. Key concepts include a) changes in temperature, light, and precipitation affect plants and animals, including humans; b) there are relationships between daily and seasonal changes; and c) changes in temperature, light, and precipitation can be observed and recorded over time.

~~Understanding the Standard~~ Overview

The focus of this standard is on temperature, light, and precipitation as they relate to life changes in plants, animals, and people. There are many ways to acquaint children with Earth science-related phenomena that they will come to understand later as being cyclic, and this standard introduces those ideas. It is enough for young children to observe the pattern of daily changes without getting deeply into the nature of climate. They should notice how these changes affect plants and animals. This is observable and can be charted over short and intermediate time periods. Students need to understand the concepts of migration, hibernation, and habitat, but they do not necessarily need to know the terms at first grade. This standard builds upon science standard ~~K.8~~ K.9 in which students investigate and understand simple patterns in their daily lives. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (1.1) in the context of the key concepts presented in this standard.

1.7 The student will investigate and understand weather and seasonal changes. Key concepts include
a) changes in temperature, light, and precipitation affect plants and animals, including humans;
b) there are relationships between daily and seasonal changes; and
c) changes in temperature, light, and precipitation can be observed and recorded over time.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Seasonal changes bring about changes in plants, animals, and people. • With seasonal changes come changes in weather, including temperature, light, and precipitation. • Precipitation includes rain, snow, and ice. • Changes in plants include budding, growth, ~~wilting,~~ and losing leaves. • Some animals hibernate and some animals migrate as a result of seasonal changes, resulting in changes in habitat. **Students do not need to know the terms migration, hibernation, and habitat. The focus should be on the concepts, not the terminology.** • Hibernation is a state of greatly reduced metabolic activity and lowered body temperature adopted by certain mammals as an adaptation to adverse winter conditions. Most animals are not "true hibernators" but rely on a combination of reserve body fat, stored food supplies (in rodents only), and a protected den to enable it to survive the winter. At intervals of several weeks the animal elevates its body temperature, awakens, moves about, feeds, and then returns to its state of torpor. • Migration is the regular, usually seasonal, movement of all or part of an animal population to and from a given area. The distance traveled may be a few miles or several thousands of miles. Animals migrate for many different reasons. Some animals migrate to find better sources of food, water, or shelter. Other animals migrate to visit particular breeding grounds, rear their young, or find warmer climates. The frequency of animals' migrations also differs. • An animal's living place is called its habitat. Most animals are only adapted to live in one or two habitats. Earth has many different	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify types of precipitation as rain, snow, and ice and the temperature conditions that result in each one. • relate a temperature, light, and precipitation chart to the corresponding season (daily or weekly). • ~~measure~~ observe and chart changes in plants, including budding, growth, ~~wilting,~~ and losing leaves. Recognize in what season budding and ~~wilting~~ losing leaves will most likely occur. • predict how an outdoor plant would change through the seasons. • compare and contrast the four seasons of spring, summer, fall (autumn) and winter in terms of temperature, light, and precipitation. • compare and contrast the activities of some common animals (e.g., squirrels, chipmunks, butterflies, bees, ants, bats, ~~and~~ frogs, and humans) during summer and winter by describing changes in their behaviors and body covering. • compare and contrast how some common plants (e.g., oak trees, pine trees, and lawn grass) appear during summer and winter. • comprehend at an introductory level that some animals respond to seasonal changes by hibernating (e.g., frogs, bats) or migrating (e.g., some birds and butterflies) ~~the concepts of hibernation, migration, and habitat, and describe how these relate to seasonal changes~~. (It may be useful to recognize common Virginia animals that hibernate and migrate, but the specific names of animals is not the focus of student learning here.)

1.7 The student will investigate and understand weather and seasonal changes. Key concepts include a) changes in temperature, light, and precipitation affect plants and animals, including humans; b) there are relationships between daily and seasonal changes; and c) changes in temperature, light, and precipitation can be observed and recorded over time.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
environments, varying in temperature, moisture, light, and many other factors. Each of these habitats has distinct life forms living in it, forming complex communities of interdependent organisms. A habitat must include a source of food for the animal, a source of water for the animal, access to some sort of shelter for the animal, and an adequate amount of space so that enough habitat components are available to the animal. Some animals' habitats are very small, but some animals require a large amount of space. • The body coverings of some animals change with the seasons. This includes thickness of fur and coloration. • Changes ~~in~~ made by people include their dress, recreation, and work.	• infer what the season is from people's dress, recreational activities, and work activities.

Grade One
Science Strand

Earth Resources

This strand focuses on student understanding of the role of resources in the natural world and how people can utilize those resources in a sustainable way. An important idea represented in this strand is the concept of management of resource use. This begins with basic ideas of conservation and proceeds to more abstract consideration of costs and benefits. The topics developed include conservation of materials, soil and plants as resources, energy use, water, Virginia's resources, and how public policy impacts the environment. This strand includes science standards ~~K.10~~ K.11, 1.8, 2.8, 3.10, 3.11, ~~4.8~~ 4.9, and 6.9.

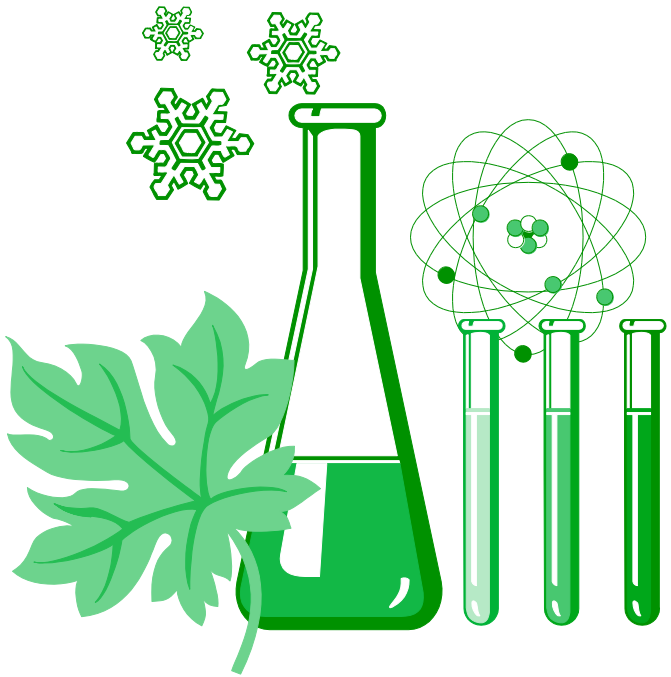
1.8	The student will investigate and understand that natural resources are limited. Key concepts include a) identification of natural resources; b) factors that affect air and water quality; and c) recycling, reusing, and reducing consumption of natural resources.

~~Understanding the Standard~~ Overview

This standard focuses on identifying what natural resources are; basic ways we can help conserve those natural resources, especially water and air; and the preservation of land to use as parks. The standard extends the perception of young students from the present to the future and from self to their community. Standard ~~K.10~~ K.11 establishes a foundation for this standard. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (1.1) in the context of the key concepts presented in this standard.

1.8 The student will investigate and understand that natural resources are limited. Key concepts include
a) identification of natural resources;
b) factors that affect air and water quality; and
c) recycling, reusing, and reducing consumption of natural resources.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Natural resources provide us with the things we need in order to live, including food, clothing, water, air, shelter, land, and energy. • What we put into the air, especially the products of the fuels we burn, affects the quality of the air. Waste produced by ~~A~~animals, including humans, and factor~~y~~ies ~~wastes~~ can affect the quality of water. Some pollution washes from yards, streets, and farms. • Many natural resources are limited and cannot be renewed. Other resources are limited and cannot be renewed, but they may last a very long time. • Recycling recovers used materials. Many materials can by recycled and used again, sometimes in different forms. Recycling helps to save our natural resources. An example of a recycled material is newspapers that are turned into writing tablets. • Reusing materials means using them more than once. Examples include using dishes and utensils that are washed after use rather than using paper plates and plastic utensils and putting them in the trash. • Resources will last longer if we recycle them, reuse them, or reduce consumption of them. • The creation of parks can help preserve land. Parks have many uses, including recreation.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify natural resources such as plants and animals, water, air, land, minerals, forests, and soil. • recognize that many natural resources are limited. • compare and contrast ways of conserving resources. This includes recycling, reusing, and reducing consumption of natural resources. • classify factors that affect air and water quality. • describe ways students and schools can help improve water and air quality in our communities. • determine some basic factors that affect water quality by conducting simple investigations in the school environment. Students should be able to make and record observations of what happens to runoff water on rainy days. (Related to 1.3.) • predict what would happen if natural resources were used up, and explain ways to prevent this from happening. • discuss the value of parks to wildlife and to people.



Science Standards of Learning Curriculum Framework

Grade Two

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs or activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Grade Two
Science Strand

Scientific Investigation, Reasoning, and Logic

This strand represents a set of systematic inquiry skills that defines what a student ~~should~~ will be able to do when conducting activities and investigations, and represents the student understanding of the nature of science. The various skill categories are described in the "Investigate and Understand" section of the Introduction to the *Science Standards of Learning*, and the skills in science standard 2.1 represent more specifically what a student should achieve during the course of instruction in the second grade. Across the grade levels, the skills in the first standards form a nearly continuous sequence of investigative skills and an understanding of the nature of science. ~~(Please note Appendix, "Science Skills, Scope, & Sequence.").~~ It is very important that the second grade classroom teacher be familiar with the skills in the sequence leading up to standard 2.1. For example in K.1 and in 1.1, nonstandard units are used to measure common objects~~, and in 1.1, standard and nonstandard units are used~~. In grade two, 2.1 specifies metric and English units of measure. A second-grade curriculum should ensure that skills from preceding grades are continuously reinforced and developed. ~~It is also important to note that 25 percent of items on the third and fifth grade SOL assessments measure the skills defined in the "Scientific Investigation, Reasoning, and Logic" strand.~~

2.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) observations and predictions are made and questions are formed; b) observations are differentiated from personal interpretation; c) observations are repeated to ensure accuracy; d) two or more characteristics or properties are used to classify items; e) length, volume, mass, and temperature are measured in metric units and standard English units using the proper tools; f) time is measured using the proper tools; g) conditions that influence a change are identified and inferences are made; h) data are collected and recorded, and bar graphs are constructed using numbered axes; i) data are analyzed, and unexpected or unusual quantitative data are recognized; j) conclusions are drawn; k) observations and data are communicated; l) simple physical models are designed and constructed to clarify explanations and show relationships; and m) current applications are used to reinforce science concepts.

~~Understanding the Standard~~ Overview

~~The skills defined in s~~Standard 2.1 ~~are~~ is intended to ~~define the "investigate" to~~ develop investigative and inquiry ~~component~~ skills and the understanding of the nature of science ~~of~~ for all of the other second-grade standards. Standard 2.1 requires students to continue developing a range of inquiry skills and achieve proficiency with those skills, and develop and reinforce their understanding of the nature of science in the context of the concepts developed ~~at the~~ in second grade. **Standard 2.1 does not require a discrete unit be taught on scientific investigation and the nature of science because the ~~inquiry~~ skills that make up the standard should be incorporated in all the other second grade standards.** It is also intended that by developing these skills, students will achieve greater understanding of scientific inquiry and the nature of science as well as more fully grasp the content-related concepts.

2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations and predictions are made and questions are formed;
b) observations are differentiated from personal interpretation;
c) observations are repeated to ensure accuracy;
d) two or more characteristics or properties are used to classify items;
e) length, volume, mass, and temperature are measured in metric units and standard English units using the proper tools;
f) time is measured using the proper tools;
g) conditions that influence a change are identified and inferences are made;
h) data are collected and recorded, and bar graphs are constructed using numbered axes;
i) data are analyzed, and unexpected or unusual quantitative data are recognized;
j) conclusions are drawn;
k) observations and data are communicated;
l) simple physical models are designed and constructed to clarify explanations and show relationships; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts: a) the natural world is understandable; b) science is based on evidence, both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. In grade two, an emphasis should be placed on concepts a, b, and e. • Science assumes that the natural world is understandable. Scientific inquiry can provide explanations about nature. This expands students' ~~knowledge~~ thinking from just a knowledge of facts to understanding	In order to meet this standard, it is expected that students ~~should be able to~~ will • conduct simple experiments, make predictions, gather data from those experiments, repeat observations to improve accuracy, and draw conclusions. • differentiate among simple observations and personal interpretations. ~~This requires students to comprehend what an observation is and apply the term in novel situations related to second-grade SOL concepts.~~ • classify items, using two or more attributes such as size, shape, color, texture, and weight. • use centimeters, meters, liters, degrees Celsius, grams, and kilograms in measurement. • use inches, feet, yards, quarts, gallons, degrees Fahrenheit, ounces, and pounds in measurement. • measure time using both digital and analog clocks.

2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations and predictions are made and questions are formed;
b) observations are differentiated from personal interpretation;
c) observations are repeated to ensure accuracy;
d) two or more characteristics or properties are used to classify items;
e) length, volume, mass, and temperature are measured in metric units and standard English units using the proper tools;
f) time is measured using the proper tools;
g) conditions that influence a change are identified and inferences are made;
h) data are collected and recorded, and bar graphs are constructed using numbered axes;
i) data are analyzed, and unexpected or unusual quantitative data are recognized;
j) conclusions are drawn;
k) observations and data are communicated;
l) simple physical models are designed and constructed to clarify explanations and show relationships; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~why~~ how ~~the~~ facts are relevant to everyday life. • Science demands evidence. Scientists develop their ideas based on evidence and they change their ideas when new evidence becomes available or the old evidence is viewed in a different way. • Science is a complex social endeavor. It is a complex social process for producing knowledge about the natural world. Scientific knowledge represents the current consensus as to what is the best explanation for phenomena in the natural world. This consensus does not arise automatically, since scientists with different backgrounds from all over the world may interpret the same data differently. To build a consensus, scientists communicate their findings to other scientists and attempt to replicate one another's findings. In order to model the work of professional scientists, it is essential for second-grade students to engage in frequent discussions with peers about their understanding of their investigations. • In order to communicate accurately, it is necessary to provide a clear description of exactly what is observed. There is a difference between what one can observe and what can be interpreted from an observation.	• identify conditions that influence a change in an experiment. • construct and interpret simple models (~~for example~~ e.g., weathering and erosion of land surfaces — 2.7). • analyze sets of objects, numerical data, or pictures, and create basic categories to organize the data (descriptive or numerical). • judge which, if any, collected data in a small set appear to be unexpected or unusual. • construct and interpret picture and bar graphs with numbered axes depicting the distribution of data. • communicate observations and data.

2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations and predictions are made and questions are formed;
b) observations are differentiated from personal interpretation;
c) observations are repeated to ensure accuracy;
d) two or more characteristics or properties are used to classify items;
e) length, volume, mass, and temperature are measured in metric units and standard English units using the proper tools;
f) time is measured using the proper tools;
g) conditions that influence a change are identified and inferences are made;
h) data are collected and recorded, and bar graphs are constructed using numbered axes;
i) data are analyzed, and unexpected or unusual quantitative data are recognized;
j) conclusions are drawn;
k) observations and data are communicated;
l) simple physical models are designed and constructed to clarify explanations and show relationships; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• An observation is what you actually see, feel, taste, hear, or smell. • The more times an observation is repeated, the greater the chance of ensuring the accuracy of the observation. • It is easier to see how things are related if objects are classified according to their common characteristics. • By constructing and studying simple models, it is sometimes easier to understand how real things work. • Scientific investigations require standard measures, ~~reliable~~ proper tools (e.g., balance scale, thermometer, ruler, magnifying glasses), and organized collection and reporting of data. The way the data are displayed can make it easier to interpret important information. • When using any standard measurement scale, measure to the marked increment and estimate one more decimal place. Scientists do not round their measurements as this would be inaccurate. • Students should communicate observations and data publicly.	

Grade Two
Science Strand

Force, Motion, and Energy

This strand focuses on student understanding of what force, motion, and energy are and how the concepts are connected. The major topics developed in this strand include magnetism, types of motion, simple and compound machines, and energy forms and transformations, especially electricity, sound, and light. This strand includes science standards K.3, 1.2, 2.2, 3.2, 4.2, 4.3, 5.2, 5.3, 6.2, and 6.3.

2.2	The student will investigate and understand that natural and artificial magnets have certain characteristics and attract specific types of metals. Key concepts include a) magnetism, iron, magnetic/nonmagnetic, poles, attract/repel; and b) important applications of magnetism.

~~Understanding the Standard~~ Overview

This standard continues the focus on magnets. In K.3 students investigate and learn that magnets can be used to make some things move without touching them by either attracting them or repelling them. In 2.2, the study of magnets ~~are revisited~~ is expanded ~~and~~ as students investigate and understand that magnets can be artificial or natural and have certain characteristics. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (2.1) in the context of the key concepts presented in this standard.

2.2 The student will investigate and understand that natural and artificial magnets have certain characteristics and attract specific types of metals. Key concepts include
a) magnetism, iron, magnetic/nonmagnetic, poles, attract/repel; and
b) important applications of magnetism.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Magnets have a north and a south pole. • Unlike magnetic poles attract~~,~~ and like poles repel. The north pole of one magnet attracts the south pole of a second magnet, while the north pole of one magnet repels the other magnet's north pole. • A magnet creates an invisible area of magnetism all around it called a magnetic field. • The north ~~pole~~ end of a magnetic compass always points roughly toward Earth's North Pole and ~~vice-versa~~ the south end of the compass needle always points toward Earth's South Pole. That is because Earth itself contains magnetic materials and behaves like a gigantic magnet. • When a magnetized metal, such as a compass needle, is allowed to swing freely, it displays the interesting property of aligning with the Earth's magnetic fields. • A magnet is strongest at its poles. • The farther away the magnetic poles are from each other, the weaker the magnetic force. • If you cut a bar magnet in half, you get two new, smaller magnets, each with its own north and south pole. • Magnets can attract objects made of iron, ~~or~~ nickel, or cobalt. • Magnets can be artificially made from special metals or can occur naturally. Naturally occurring magnets are composed of a mineral called magnetite ~~(~~ or lodestone~~)~~. • Magnets have important applications and uses in everyday life.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify the north and south magnetic poles of magnets. • use magnetic compasses to determine the directions of north and south poles. • predict which materials will be attracted to magnets, test the predictions, and create a chart that shows the results, classifying materials as to whether they are attracted to magnets or not. • conduct an investigation to determine how the different poles of magnets react to the poles of other magnets. • identify important applications of magnets in everyday life: - refrigerator magnets and chalkboard letters - toys - door latches - paper clip holders - computers - motors - credit card magnetic strips. • compare natural magnets (lodestone or magnetite) and artificial magnets. • create a new application for using a magnet.

Matter

This strand focuses on the description, physical properties, and basic structure of matter. The major topics developed in this strand include concepts related to the basic description of objects, ~~states~~ phases of matter (solids, liquids, and gases – especially water), phase changes, mass and volume, and the structure of classification of matter. This strand includes science standards K.4, K.5, 1.3, 2.3, 3.3, 5.4, 6.4, 6.5, and 6.6.

2.3	The student will investigate and understand basic properties of solids, liquids, and gases. Key concepts include a) identification of distinguishing characteristics of solids, liquids, and gases; b) measurement of the mass and volume of solids and liquids; and c) changes in phases of matter with the addition or removal of energy.

~~Understanding the Standard~~ Overview

This standard continues to focus on matter. In 2.3 students build upon the knowledge introduced in K.4 and 1.3. In K.4 physical properties of matter are investigated and the properties of water are observed and tested. In 1.3 students investigate how common materials interact with water. In 2.3 students investigate, by conducting simple experiments, the properties of solids, liquids, and gases. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (2.1) in the context of the key concepts presented in this standard.

2.3 The student will investigate and understand basic properties of solids, liquids, and gases. Key concepts include
a) identification of distinguishing characteristics of solids, liquids, and gases;
b) measurement of the mass and volume of solids and liquids; and
c) changes in phases of matter with the addition or removal of energy.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • All ~~common~~ substances are made of matter. • Matter is anything that has mass and takes up space. • Solids have a defined shape and volume. • Liquids have a definite volume and take the shape of the container. • Gases will completely fill any closed container (take the shape of its container) and assume the volume of its container. (e.g., Helium gas put into a balloon takes the shape of the balloon because the balloon defines its shape.) • Mass is a measure of the amount of matter. • Weight is the measure of the gravitational pull on an object. • Volume is the measure of the amount of space occupied by matter. • Matter most commonly occurs in three ~~states~~ phases: solids, liquids, and gases. • Matter can change from one ~~state~~ phase to another. • When matter changes from one ~~state~~ phase to another, these changes are referred to as physical changes. • Changes from solid to liquid to gas require ~~heat~~ the addition of energy.	In order to meet this standard, it is expected that students ~~should be able to~~ will • classify materials as to whether they are liquids, solids, or gases. • describe and identify examples of condensation, evaporation, melting, and freezing of water. • measure the mass of solids and the volume of liquids in metric and standard English units. • examine and describe the transformation of matter from one ~~state~~ phase to another, i.e., solid water (ice) to liquid (water) to gas (steam). • conduct an investigation to observe the condensation of water. • design and conduct an investigation to determine basic factors that affect the evaporation of water. • identify the phases of water and the uses of water in its various phases in the home and at school.

Life Processes

This strand focuses on the life processes of plants and animals and the specific needs of each. The major topics developed in the strand include basic needs and life processes of organisms, their physical characteristics, orderly changes in life cycles, behavioral and physical adaptations, and survival and perpetuation of species. This strand includes science standards K.6, K.7, 1.4, 1.5, 2.4, 3.4, and 4.4.

2.4	The student will investigate and understand that plants and animals undergo a series of orderly changes as they mature and grow. Key concepts include a) animal life cycles; and b) plant life cycles.

~~Understanding the Standard~~ Overview

In 2.4 students investigate and understand that plants and animals undergo change throughout their lives. This concept builds upon K.6 in which students learn about classifying things as living and nonliving. In K.7 ~~in~~ ~~which~~ students learn about the basic needs and life processes of animals~~;~~. ~~And~~ In 1.4, ~~in which~~ they learn that plants have life needs, ~~and~~ functional parts, and can be classified according to certain characteristics. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (2.1) in the context of the key concepts presented in this standard.

2.4	The student will investigate and understand that plants and animals undergo a series of orderly changes as they mature and grow. Key concepts include a) animal life cycles; and b) plant life cycles.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Throughout their lives, plants and animals undergo a series of orderly and identifiable changes. • Changes in ~~living things~~ organisms over time occur in cycles and differ among the various plants and animals. • Some animals, such as mealworms, pill bugs, frogs, and butterflies~~,~~ go through distinct stages as they mature to adults. Other animals, such as crickets, praying mantis, gray squirrels, and white-tailed deer, resemble their parents from birth to maturity and do not have distinct stages. • White-tailed deer are the largest herbivores in Virginia. They are found in all areas of Virginia including forests, open fields, mountain tops, coastal islands, and in cities and towns. Their diet consists of grasses, leaves, nuts, fruits, and fungi. Virginia's white-tailed deer have few predators. Predation in Virginia is mainly in the form of harassment by dogs. Fawns may be taken by bobcat. Mortality factors include hunting, motor vehicles, poaching, depredation, dogs, fences, cripples, and trains respectively. • Newborn white-tailed deer are called fawns. They become yearlings at 14 to 18 months of age. As adults, males are called bucks and females are called does. White-tailed deer are tan or reddish brown in the summer and grayish brown in the winter. The underside and throat are white, and the tail is brown above and white below. • A white-tailed deer's lifespan averages eight years. • Of the more than 200,000 kinds of vascular plants in the world today over 95 percent flower at some time in their lives. The best-known flowers are bright and colorful but others, like those of grasses, are small	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe changes in the life cycle of ~~a frog and~~ a butterfly and a white-tailed deer. • ~~identify and describe changes in a plant from flower (blossom) to fruit.~~ • compare and contrast life cycles of ~~a frog and~~ a butterfly and a white-tailed deer. • identify the stages in the life cycle of a flowering plant. • construct and interpret models/diagrams of animal and plant life cycles.

2.4 The student will investigate and understand that plants and animals undergo a series of orderly changes as they mature and grow. Key concepts include a) animal life cycles; and b) plant life cycles.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
and inconspicuous. • The basic stages in the life cycle of flowering plants include: seeds, germination of the seed, growth of the stem and roots, growth of leaves, growth of flowers, fertilization (pollination) of the flowers, production of fruit/new seeds, and death. • ~~An important part of the life cycle of a flowering plant is the formation of the flower to the development of the fruit.~~	

Grade Two
Science Strand

Living Systems

This strand begins in second grade and builds from basic to more complex understandings of a system, both at the ecosystem level and at the level of the cell. The concept of kingdoms of living ~~things~~ organisms and a general classifying of organisms are also presented. The other major topics developed in the strand include the types of relationships among organisms in a food chain, different types of environments and the organisms they support, and the relationship between organisms and their nonliving environment. This strand includes science standards 2.5, 3.5, 3.6, 4.5, 5.5, and 6.7.

2.5	The student will investigate and understand that living things are part of a system. Key concepts include a) living organisms are interdependent with their living and nonliving surroundings; b) an animal's habitat includes adequate food, water, shelter or cover, and space; c) habitats change over time due to many influences; and d) fossils provide information about living systems that were on Earth years ago.

~~Understanding the Standard~~ Overview

In K.6 students are introduced to the concept of living and nonliving. Students are introduced to living systems in 2.5 and investigate and understand that living ~~things~~ organisms interact with other living ~~things~~ organisms and their surroundings. The formal word system is introduced in this standard. The expectation is that students understand the concept in terms of the interactions between living and nonliving things. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (2.1) in the context of the key concepts presented in this standard.

2.5 The student will investigate and understand that living things are part of a system. Key concepts include
a) living organisms are interdependent with their living and nonliving surroundings;
b) an animal's habitat includes adequate food, water, shelter or cover, and space;
c) habitats change over time due to many influences; and
d) fossils provide information about living systems that were on Earth years ago.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Living ~~things~~ organisms are dependent on other living ~~things~~ organisms and their nonliving surroundings for survival. • All of the interactions between and among living ~~things~~ organisms and their nonliving surroundings are referred to as a system. • Shelter may be living (coral, tree) or nonliving (caves, houses). • The habitat of an animal includes adequate food, water, shelter or cover, and space. If any of the basic elements of an animal's habitat are absent, the animal's survival is threatened. The animal may adapt or leave the area. • The habitats of living ~~things~~ organisms, such as forests, grasslands, rivers, and streams, change due to many human or natural influences (e.g., forest fires, hurricanes, and droughts). Habitats change from season to season. • Fossils found provide scientists with information about plants and animals that lived on Earth many years ago. (e.g., The rise and fall of sea level is recorded in the richly fossiliferous rocks of Virginia's coastal plain. An abundance of marine fossils – fossil clams, snails, sand dollars, shark's teeth, and whalebones – can be found in Virginia's coastal plains.) • Virginia's state fossil, Chesapecten jeffersonius, is a large extinct species of scallop that dates to approximately 4.5 million years ago. It was the first fossil ever described in North America and is named after Thomas Jefferson, one of our founding fathers, and an amateur paleontologist.	In order to meet this standard, it is expected that students ~~should be able to~~ will • classify objects as to whether they are living or nonliving. • describe the basic components of an animal habitat (food, water, shelter or cover, and space). • classify the parts of an animal's habitat as living or nonliving. • ~~describe the nonliving components of an organism's surroundings, including water, space, and shelter. (Shelter may be living or nonliving.)~~ • construct and interpret simple models of different kinds of habitats, including a forest and a stream. • predict and describe seasonal changes in habitat and their effects on plants and animals, for example, how trees change through the seasons and how animals respond to changes in the seasons. • describe how animals are dependent on their surroundings, for example, how squirrels and other animals are affected by the loss of forest habitat. • describe how scientists use the study of fossils to show past weather/climate conditions~~-~~and environmental characteristics.

Grade Two
Science Strand

Interrelationships in Earth/Space Systems

This strand focuses on student understanding of how Earth systems are connected and how the Earth interacts with other members of the solar system. The topics developed include shadows; relationships between the sun and the Earth; weather types, patterns, and instruments; properties of soil; characteristics of the ocean environment; and organization of the solar system. This strand includes science standards ~~K.7~~ K.8, 1.6, 2.6, 3.7, 4.6, 5.6, and 6.8.

2.6	The student will investigate and understand basic types, changes, and patterns of weather. Key concepts include a) identification of common storms and other weather phenomena; b) the uses and importance of measuring, recording, and interpreting weather data; and c) the uses and importance of tracking weather data over time.

~~Understanding the Standard~~ Overview

In ~~K.8~~ K.9 students conduct weather observations~~, and~~. ~~i~~In 1.6 and 1.7 students are introduced to the concept that the sun is the source of ~~heat energy and light~~ energy for the Earth, and ~~to the ways~~ that ~~heat energy, light~~ the sun's energy~~,~~ and precipitation affect people and other living things. In 2.6 students investigate and understand types of weather and weather patterns and measure and record current weather data. Students also explore the uses of tracking weather data over time. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (2.1) in the context of the key concepts presented in this standard.

2.6 The student will investigate and understand basic types, changes, and patterns of weather. Key concepts include
a) identification of common storms and other weather phenomena;
b) the uses and importance of measuring, recording, and interpreting weather data; and
c) the uses and importance of tracking weather data over time.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The Earth's weather changes continuously from day to day. • Changes in the weather are characterized by daily differences in wind, temperature, and precipitation. • Precipitation occurs when water, previously evaporated, condenses out of the air and changes ~~state~~ its phase from a gas to a liquid (rain) or to a solid (snow or sleet). • Extremes in the weather, such as too little or too much precipitation, can result in droughts or floods. • Storms have powerful winds, which may be accompanied by rain, snow, or other kinds of precipitation. • Weather data ~~is~~ are collected and recorded using instruments. This information is very useful for predicting weather and determining weather patterns. • Weather influences human activity. • Scientists collect weather data over time to study trends and patterns. These trends and patterns help them to make future weather predictions.	In order to meet this standard, it is expected that students ~~should be able to~~ will • observe and describe seasonal weather patterns and local variations. • observe and record daily weather conditions, such as sunny, cloudy, windy, rainy, or snowy. • record and interpret daily temperature, using a graph with numbered axes. • measure and record weather data, using weather instruments, including a thermometer, rain gauge, and weather vane (standard English and metric measures). • describe weather in terms of temperature, wind, and precipitation. • observe and describe precipitation in terms of evaporation and condensation of water. • observe and describe types of precipitation, including rain, snow, and ice (sleet and hail). • describe how tracking weather data over time helps scientists make future weather predictions. • evaluate the influence of daily weather conditions on personal activities and dress. • identify common types of storms. Examples include hurricanes, tornadoes, blizzards, and thunderstorms. • compare and contrast droughts and floods.

Earth Patterns, Cycles, and Change

This strand focuses on student understanding of patterns in nature, natural cycles, and changes that occur both quickly and slowly over time. An important idea represented in this strand is the relationship among Earth patterns, cycles, and change and their effects on living things. The topics developed include noting and measuring changes, weather and seasonal changes, the water cycle, cycles in the Earth-moon-sun system, our solar system, and change in the Earth's surface over time. This strand includes science standards ~~K.8,~~ K.9, K.10, 1.7, 2.7, 3.8, 3.9, 4.7, 4.8, and 5.7.

2.7	The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings. Key concepts include a) effects of weather and seasonal changes on the growth and behavior of living things; and b) weathering and erosion of land surfaces.

~~Understanding the Standard~~ Overview

Students are introduced to the concepts of patterns, cycles, and change in standards ~~K.8~~ K.9 and ~~K.9~~ K.10. These concepts include, in ~~K.8~~ K.9, weather observations, shapes and forms of common natural objects (seeds, cones, and leaves), and animal and plant growth~~, and home and school routine~~. ~~K.9~~ K.10 introduces concepts that include natural and human-made ~~things~~ objects that change over time, either fast or slow, and that change can be measured. In 1.7 students investigate and understand the relationship between seasonal change and weather. Important concepts include how plants, animals, and people respond to changes in light, temperature, and precipitation. In 2.7 the students investigate and understand that weather and seasons affect plants, animals, and their surroundings. The effects of weather and seasonal changes on weathering and erosion of the land surface are included in 2.7. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (2.1) in the context of the key concepts presented in this standard.

2.7 The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings. Key concepts include

a) effects of weather and seasonal changes on the growth and behavior of living things; and
b) weathering and erosion of land surfaces.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Living ~~things~~ organisms respond to weather and seasonal changes. This can be reflected in changes in growth and behavior. • ~~Adverse~~ Conditions of weather may slow the growth and development of plants and animals ~~*(dormancy)*~~, whereas optimal weather conditions may accelerate the growth and development of plants and animals. • Dormancy is a state of reduced metabolic activity adopted by many organisms (both plants and animals) under conditions of environmental stress or when such stressful conditions are likely to appear, such as in winter. • Many trees produce new leaves in the spring and lose them in the fall due to seasonal changes in temperature and light. • The outward coloration and coloration patterns of many animals are similar in appearance to the plants in the places in which they live. This similarity to background is referred to as camouflage, and it enables animals to hide and avoid those that may eat or harm them. • Some animals (e.g., geese, monarch butterflies, tundra swans) ~~migrate~~ travel from one place to another and back again (migration) in search of a new temporary habitat because of climate, availability of food, season of the year, or reproduction. • Some animals (e.g., groundhogs, black bears) ~~or~~ go into a deep sleep (hibernation) due to seasonal changes. Hibernation is a condition of biological rest or inactivity where growth, development, and metabolic processes slow down. • ~~Some animals (geese, monarch butterflies) Some animals (bears,~~	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify growth and behavioral responses of plants and animals to weather and seasonal changes. Examples of responses that are adaptive include migration, hibernation, camouflage, and dormancy. • identify animals that migrate, hibernate, or show other changes throughout the seasons or in the presence of adverse environmental conditions. • evaluate the usefulness of camouflage in an animal's habitat (for example, coloration patterns ~~in~~ of frogs). • compare and contrast the responses of plants and animals to weather and seasonal changes. • model the effects of weathering and erosion on the land surface.

2.7	The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings. Key concepts include a) effects of weather and seasonal changes on the growth and behavior of living things; and b) weathering and erosion of land surfaces.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~groundhogs) hibernate.~~ • Some animals undergo physical changes (e.g., thickening of dog fur in the winter and shedding in the summer) from season to season. • Land surfaces are subject to the agents of weathering and erosion. Land surfaces that are not covered with or protected by plants are more likely to be subject to the loss of soil by wind and water. • Weathering is the breaking down of rocks, which usually happens over long periods of time. • Erosion is the process by which the products of weathering are moved from one place to another. Erosion may happen quickly (e.g., during a flood or a hurricane) or over a long period of time.	

Earth Resources

This strand focuses on student understanding of the role of resources in the natural world and how people can utilize those resources in a sustainable way. An important idea represented in this strand is the concept of management of resource use. This begins with basic ideas of conservation and proceeds to more abstract consideration of costs and benefits. The topics developed include conservation of materials, soil and plants as resources, energy use, water, Virginia's resources, and how public policy impacts the environment. This strand includes science standards ~~K.10~~ K.11, 1.8, 2.8, 3.10, 3.11, ~~4.8~~ 4.9, and 6.9.

2.8	The student will investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits in nature. Key concepts include a) important plant products are identified and classified; b) the availability of plant products affects the development of a geographic area; c) plants provide oxygen, homes, and food for many animals; and d) plants can help reduce erosion.

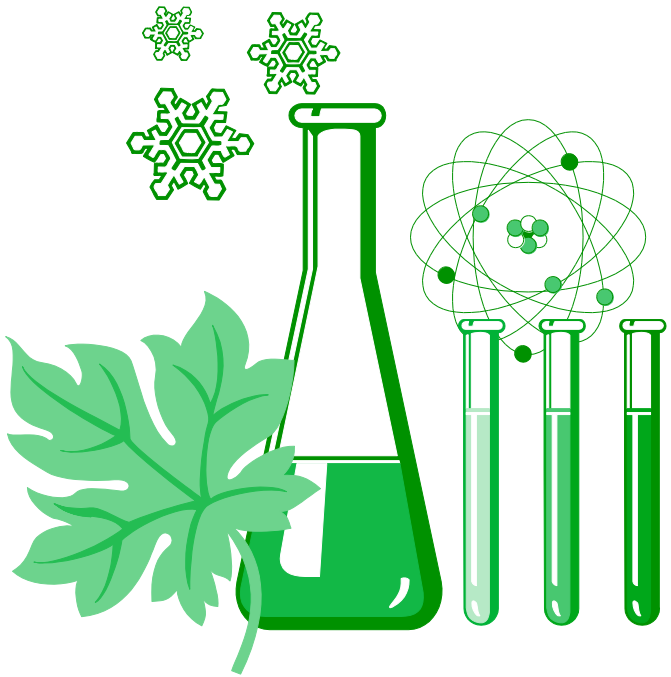
~~Understanding the Standard~~ Overview

In ~~K.10~~ K.11 students investigate and understand that materials can be used, recycled, and conserved, while in 1.8 students investigate and understand that natural resources, which are identified as plants, animals, water, air, land, minerals, forests, and soil, are limited. In 2.8 students investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits in nature. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (2.1) in the context of the key concepts presented in this standard.

2.8 The student will investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits in nature. Key concepts include

a) important plant products are identified and classified;
b) the availability of plant products affects the development of a geographic area;
c) plants provide oxygen, homes, and food for many animals; and
d) plants can help reduce erosion.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Plants provide many useful products and materials, which benefit human beings as well as other living ~~things~~ organisms. • Plant products include such essentials as oxygen and food, as well as materials useful for clothing and shelter. • Plants may grow well ~~only~~ in certain geographic areas, thus enabling the production of plant products that allow humans to live in ~~as well as to~~ and ~~develop~~ thrive in those areas. • Some examples of plants that grow in Virginia's geographic regions include: - Coastal Plains (Tidewater): peanuts, cotton, soybeans; - Piedmont: apples, tobacco, cabbage; - Blue Ridge Mountains: evergreens, apples, corn; - Valleys and Ridges: evergreens, apples, corn; and - Appalachian Plateau: tobacco. • Plants provide homes and food sources for many animals. • Plants ~~are also~~ are important ~~agents~~ in the prevention of soil erosion. • Products from plants include, but are not limited to, cinnamon from the bark of trees; fiber from reeds, grasses and trees; ~~and~~ cotton from a cotton plant~~.~~; ~~S~~spices ~~come~~ from various plant parts~~,~~; lumber ~~comes~~ from wood~~,~~; rubber ~~comes~~ from rubber trees~~,~~; and medicines (e.g., aloe vera from the aloe plant, quinine from the bark of Cinchona trees found in South America to treat malaria).	In order to meet this standard, it is expected that students ~~should be able to~~ will • ~~comprehend~~ understand that plants produce oxygen and food. • classify and identify the sources and uses of plant products, such as fiber, cotton, oil, spices, lumber, rubber, medicines, and paper. • describe how the availability of certain plant products in a geographic area would affect the development of that area. • describe plant products grown in Virginia that are useful to people, including wood, fruits, and vegetables. List and classify plant products (e.g., peanuts, cotton, soybeans, apples, evergreens). • compare and contrast different ways animals use plants as homes and shelters. • construct and interpret a chart illustrating the plant foods consumed by different animals. • construct and interpret a model that demonstrates how plants ~~prevent~~ reduce soil erosion.



Science Standards of Learning Curriculum Framework

Grade Three

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs or activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Grade Three
Science Strand

Scientific Investigation, Reasoning, and Logic

This strand represents a set of systematic inquiry skills that defines what a student ~~should~~ will be able to do when conducting activities and investigations, and represents the student understanding of the nature of science. The various skill categories are described in the "Investigate and Understand" section of the Introduction to the *Science Standards of Learning*, and the skills in science standard 3.1 represent more specifically what a student should be able to do as a result of science experiences in third grade. Across the grade levels, the skills in the "Scientific Investigation, Reasoning, and Logic" strand form a nearly continuous sequence of investigative skills and an understanding of the nature of science. ~~(Please note Appendix, "Science Skills, Scope, & Sequence.")~~ It is important that the classroom teacher understand~~s~~ how the skills in standard 3.1 are a key part of this sequence (i.e., K.1, K.2, 1.1, 2.1, 3.1, 4.1, 5.1, and 6.1). The third-grade curriculum should ensure that skills from preceding grades are continuously reinforced and developed. ~~It is also important to note that 25 percent of items on the third and fifth grade SOL assessments measure the skills defined in the "Scientific Investigation, Reasoning, and Logic" strand.~~

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made and are repeated to ensure accuracy;
b) predictions are formulated using a variety of sources of information;
c) objects with similar characteristics or properties are classified into at least two sets and two subsets;
d) natural events are sequenced chronologically;
e) length, volume, mass, and temperature are estimated and measured in metric and standard English units using proper tools and techniques;
f) time is measured to the nearest minute using proper tools and techniques;
g) questions are developed to formulate hypotheses;
h) data are gathered, charted, graphed, and analyzed;
i) unexpected or unusual quantitative data are recognized;
j) inferences are made and conclusions are drawn;
k) data are communicated;
l) models are designed and built; and
m) current applications are used to reinforce science concepts.

~~Understanding the Standard~~ Overview

The skills defined in standard 3.1 are intended to define the "investigate" component and the understanding of the nature of science ~~of~~ for all of the other third-grade standards (3.2–3.11). The intent of standard 3.1 is that students will continue to develop a range of inquiry skills and achieve proficiency with those skills in the context of the concepts developed at the third grade, and continue to strengthen their understanding of the components of the nature of science. **Standard 3.1 does not require a discrete unit be taught on scientific investigation and the nature of science because the ~~inquiry~~ skills that make up the standard should be incorporated in all the other third-grade standards.** For example, it is not expected that teachers should develop a separate unit on the metric system, but that they should integrate metric measurement into the teaching of the rest of the third-grade standards. It is also intended that by developing these skills, students will achieve greater understanding of scientific inquiry and the nature of science as well as more fully grasp the content-related concepts.

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made and are repeated to ensure accuracy;
b) predictions are formulated using a variety of sources of information;
c) objects with similar characteristics or properties are classified into at least two sets and two subsets;
d) natural events are sequenced chronologically;
e) length, volume, mass, and temperature are estimated and measured in metric and standard English units using proper tools and techniques;
f) time is measured to the nearest minute using proper tools and techniques;
g) questions are developed to formulate hypotheses;
h) data are gathered, charted, graphed, and analyzed;
i) unexpected or unusual quantitative data are recognized;
j) inferences are made and conclusions are drawn;
k) data are communicated;
l) models are designed and built; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts: a) the natural world is understandable; b) science is based on evidence, both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. In grade three, an emphasis should be placed on concepts a, b, c, and e. • Science assumes that the natural world is understandable. Scientific inquiry can provide explanations about nature. This expands students' ~~knowledge~~ thinking from just a knowledge of facts to understanding ~~why~~ how ~~the~~ facts are relevant to everyday life.	In order to meet this standard, it is expected that students ~~should be able to~~ will • make and communicate careful observations. • demonstrate that observations should be repeated to ensure accuracy. • classify objects into at least two major sets and subsets based on similar characteristics, such as predator/prey and herbivore, carnivore, and omnivore. • sequence natural events chronologically~~.~~ (Example: ~~3.9~~ 3.8 — plant and animal life cycles, phases of the moon, the water cycle, and tidal change). • measure length to the nearest centimeter, mass to the nearest gram, volume to the nearest milliliter, temperature to the nearest degree Celsius, and time to the nearest minute, using the appropriate instrument. • develop hypotheses from simple questions. These questions should be related to the concepts in the third-grade standards. Hypotheses should

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made and are repeated to ensure accuracy;
b) predictions are formulated using a variety of sources of information;
c) objects with similar characteristics or properties are classified into at least two sets and two subsets;
d) natural events are sequenced chronologically;
e) length, volume, mass, and temperature are estimated and measured in metric and standard English units using proper tools and techniques;
f) time is measured to the nearest minute using proper tools and techniques;
g) questions are developed to formulate hypotheses;
h) data are gathered, charted, graphed, and analyzed;
i) unexpected or unusual quantitative data are recognized;
j) inferences are made and conclusions are drawn;
k) data are communicated;
l) models are designed and built; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Science demands evidence. Scientists develop their ideas based on evidence and they change their ideas when new evidence becomes available or the old evidence is viewed in a different way. • Science uses both logic and innovation. Innovation has always been an important part of science. Scientists draw upon their creativity to visualize how nature works, using analogies, metaphors, and mathematics. • Science is a complex social activity. It is a complex social process for producing knowledge about the natural world. Scientific knowledge represents the current consensus as to what is the best explanation for phenomena in the natural world. This consensus does not arise automatically, since scientists with different backgrounds from all over the world may interpret the same data differently. To build a consensus, scientists communicate their findings to other scientists and attempt to replicate one another's findings. In order to model the work of professional scientists, it is essential for third-grade students to engage in frequent discussions with peers about their understanding of their investigations.	be stated in terms such as: "If an object is cut into smaller pieces, then the physical properties of the object and its smaller pieces will remain the same." • analyze data that have been gathered and organized. • communicate results of investigations by displaying data in the form of tables, charts, and graphs. Students will construct bar and picture graphs and line plots to display data~~.~~ (Example: 3.7 — comparison of types of soil and their effect on plant growth). • communicate any unexpected or unusual quantitative data that are noted. • make and communicate predictions about the outcomes of investigations. • design and build a model to show experimental results.

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made and are repeated to ensure accuracy;
b) predictions are formulated using a variety of sources of information;
c) objects with similar characteristics or properties are classified into at least two sets and two subsets;
d) natural events are sequenced chronologically;
e) length, volume, mass, and temperature are estimated and measured in metric and standard English units using proper tools and techniques;
f) time is measured to the nearest minute using proper tools and techniques;
g) questions are developed to formulate hypotheses;
h) data are gathered, charted, graphed, and analyzed;
i) unexpected or unusual quantitative data are recognized;
j) inferences are made and conclusions are drawn;
k) data are communicated;
l) models are designed and built; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Questions frequently arise from observations. Hypotheses can be developed from those questions. Data gathered from an investigation may support a hypothesis. A hypothesis is a statement written in a manner that describes the cause and effect relationship between the independent and dependent variables in an experiment. At the third-grade level, a method for helping students understand how to develop a hypothesis is to have them build "if/then" statements (e.g., If heat is added to ice, then the ice will melt.). • Complete observations are made using all of the senses. Simple instruments can help extend the senses (e.g., magnifying glass enhances the vision of an item). • Predictions are statements of what is expected to happen in the future based on past experiences and observations. • In order for data from an investigation to be most useful, it must be organized so that it can be examined more easily. • Charts and graphs are powerful tools for reporting and organizing data. • It is sometimes useful to organize objects according to similarities and	

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made and are repeated to ensure accuracy;
b) predictions are formulated using a variety of sources of information;
c) objects with similar characteristics or properties are classified into at least two sets and two subsets;
d) natural events are sequenced chronologically;
e) length, volume, mass, and temperature are estimated and measured in metric and standard English units using proper tools and techniques;
f) time is measured to the nearest minute using proper tools and techniques;
g) questions are developed to formulate hypotheses;
h) data are gathered, charted, graphed, and analyzed;
i) unexpected or unusual quantitative data are recognized;
j) inferences are made and conclusions are drawn;
k) data are communicated;
l) models are designed and built; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
differences. By organizing objects in sets and subsets, it may be easier to determine a specific type of characteristic. • An inference is a ~~conclusion~~ tentative explanation based on ~~evidence~~ background knowledge and available data. • A conclusion is a summary statement based on the results of an investigation. • Putting natural events in a sequence allows us to notice change over time. • Metric measures, including centimeters, grams, milliliters, and degrees Celsius, are a standard way to record measurements. The metric system is recognized everywhere around the world. • When using any standard measurement scale, measure to the marked increment and estimate one more decimal place. Scientists do not round their measurements as this would be inaccurate. • A bar graph can be horizontal or vertical, and it compares amounts. Both the X- and Y-axis need to be identified. ~~Discrete data are found on a bar graph.~~	

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made and are repeated to ensure accuracy;
b) predictions are formulated using a variety of sources of information;
c) objects with similar characteristics or properties are classified into at least two sets and two subsets;
d) natural events are sequenced chronologically;
e) length, volume, mass, and temperature are estimated and measured in metric and standard English units using proper tools and techniques;
f) time is measured to the nearest minute using proper tools and techniques;
g) questions are developed to formulate hypotheses;
h) data are gathered, charted, graphed, and analyzed;
i) unexpected or unusual quantitative data are recognized;
j) inferences are made and conclusions are drawn;
k) data are communicated;
l) models are designed and built; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• A line plot shows the spread of data. *(See Grade 3 Mathematics Curriculum Framework, Standard ~~3.21~~ 3.17, page ~~32~~ 31.)* • A picture graph is similar to a bar graph except that it uses symbols to represent quantities. • Scientists use a variety of modes to communicate about their work. Examples of ways they communicate include oral presentations; graphs and charts created to visualize, analyze and present information about their data; and written reports. • In science, it is important that experiments and the observations recorded are replicable. There are two different types of data – qualitative and quantitative. Qualitative data deal with descriptions and data that can be observed, but not measured precisely. Quantitative data are data that can be counted or measured and the results can be recorded using numbers. Quantitative data can be represented visually in graphs and charts. Quantitative data define, whereas qualitative data describe. Quantitative data are more valuable in science because they allow direct comparisons between observations made by different people or at different times.	

3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made and are repeated to ensure accuracy;
b) predictions are formulated using a variety of sources of information;
c) objects with similar characteristics or properties are classified into at least two sets and two subsets;
d) natural events are sequenced chronologically;
e) length, volume, mass, and temperature are estimated and measured in metric and standard English units using proper tools and techniques;
f) time is measured to the nearest minute using proper tools and techniques;
g) questions are developed to formulate hypotheses;
h) data are gathered, charted, graphed, and analyzed;
i) unexpected or unusual quantitative data are recognized;
j) inferences are made and conclusions are drawn;
k) data are communicated;
l) models are designed and built; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes

Example of Qualitative Data vs. Quantitative Data

Third-Grade Class

Qualitative Data	Quantitative Data
• Friendly • Like science • Positive about schoolwork	• 25 students • 10 girls, 15 boys • 68 percent have perfect attendance

Force, Motion, and Energy

This strand focuses on student understanding of what force, motion, and energy are and how the concepts are connected. The major topics developed in this strand include magnetism, types of motion, simple and compound machines, and energy forms and transformations, especially electricity, sound, and light. This strand includes science standards K.3, 1.2, 2.2, 3.2, 4.2, 4.3, 5.2, 5.3, 6.2, and 6.3.

3.2	The student will investigate and understand simple machines and their uses. Key concepts include a) purpose and function of simple machines; b) types of simple machines; c) compound machines; and d) examples of simple and compound machines found in the school, home, and work environments.

~~Understanding the Standard~~ Overview

This standard introduces students to six types of simple machines, their uses, and examples of these six machines found in everyday environments. These simple machines function to make doing work easier. Activities should focus on identifying the six simple machines, explaining how they operate, and locating examples in everyday life that make a task easier at home, in school, and in the workplace. The students should have experiences using the simple and compound machines to determine how each makes a task easier. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.2 The student will investigate and understand simple machines and their uses. Key concepts include
a) purpose and function of simple machines;
b) types of simple machines;
c) compound machines; and
d) examples of simple and compound machines found in the school, home, and work environments.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Simple machines are tools that make work easier. Examples of tasks made easier include lifting a heavy weight, moving a heavy object over a distance, pushing things apart, changing the direction of a force, or holding an object together. • The six simple machines are the lever, inclined plane, wedge, wheel and axle, screw, and pulley. • The lever is a stiff bar that moves about a fixed point (fulcrum). It is a simple machine that is used to push, pull, or lift things. Examples include a seesaw, crowbar, and shovel. • The inclined plane is a flat surface that is raised so one end is higher than the other. The inclined plane helps move heavy objects up or down. An example is a ramp. • The wedge is wide at one end and pointed at the other to help cut or split other objects. Examples include a knife or ax. • The wheel and axle consists of a rod attached to a wheel. A wheel and axle makes it easier to move or turn things. Examples include bicycle wheels, roller skates, and a door knob. • The screw is an inclined plane wrapped around a cylinder or cone. A common use of the screw is to hold objects together. Examples include a jar lid and wood screw. • The pulley is a wheel that has a rope wrapped around it. Pulleys can be used to lift heavy objects by changing the direction or amount of the force. Examples include a flagpole.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify and differentiate the six types of simple machines: lever, screw, pulley, wheel and axle, inclined plane, and wedge. • differentiate and classify specific examples of simple machines found in school and household items. These include a screwdriver, nutcracker, screw, flagpole pulley, ramp, and seesaw. • analyze the application of and explain the function of each of the six types of simple machines. An example would be that an inclined plane is a ramp to make it easier for a heavy object to be moved up or down. • identify and classify the simple machines which compose a compound machine, such as scissors, wheelbarrow, and bicycle. • design and construct an apparatus that contains a simple machine.

3.2 The student will investigate and understand simple machines and their uses. Key concepts include a) purpose and function of simple machines; b) types of simple machines; c) compound machines; and d) examples of simple and compound machines found in the school, home, and work environments.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
• A compound machine is a combination of two or more simple machines. Examples include scissors, wheelbarrow, and bicycle.	

Matter

This strand focuses on the description, physical properties, and basic structure of matter. The major topics developed in this strand include concepts related to the basic description of objects, ~~states~~ phases of matter (solids, liquids, and gases – especially water), phase changes, mass and volume, and the structure of classification of matter. This strand includes science standards K.4, K.5, 1.3, 2.3, 3.3, 5.4, 6.4, 6.5, and 6.6.

3.3	The student will investigate and understand that objects are made of materials that can be described by their physical properties. Key concepts include a) objects are made of one or more materials; b) physical properties remain the same as the material is changed in visible size; and c) visible physical changes are identified.

~~Understanding the Standard~~ Overview

Students should understand that all objects are made of materials that have observable physical properties. Every object that takes up space is made of matter. Materials can be different colors, shapes, textures, or sizes. They can be hard or soft. The properties of objects can be used to sort or classify them. If materials are broken down into smaller visible parts, each of these smaller parts still has the same physical properties as the original material. (Clear examples include plastics, metal, paper, and ice. Substances that are coarse mixtures, ~~i.e.,~~ e.g., many types of rock, are not good examples.) ~~This standard introduces the concept that materials are made up of smaller parts that are too small to be seen without magnification.~~ It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.3 The student will investigate and understand that objects are made of materials that can be described by their physical properties. Key concepts include

a) objects are made of one or more materials;
b) physical properties remain the same as the material is changed in visible size; and
c) visible physical changes are identified.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Objects are made of one or more materials (e.g., toys, shoes, and furniture). • ~~All materials are composed of parts too small to be seen without magnification.~~ • Physical properties (e.g., color, texture, phase, temperature, ability to dissolve in water) remain the same even if the visible material (e.g., plastic, paper, metal, ice) is reduced in size. • Nanotechnology is the study of materials at the molecular (atomic) scale. Items at this scale are so small they are no longer visible with the naked eye. Nanotechnology has shown that the behavior and properties of some substances at the nanoscale (a nanometer is one-billionth of a meter) contradict how they behave and what their properties are at the visible scale.	In order to meet this standard, it is expected that students ~~should be able to~~ will • explain that physical properties are observable characteristics that enable one to differentiate objects. • infer that objects are made of one or more materials based on observations of the physical properties that are common to each individual object. • compare the physical properties of smaller, visible pieces of a material to those physical properties of the entire material. • conclude that materials have their own set of physical properties that are observable. • design an investigation to determine if the physical properties of a material will remain the same if the material is reduced in size.

Life Processes

This strand focuses on the life processes of plants and animals and the specific needs of each. The major topics developed in the strand include basic needs and life processes of organisms, their physical characteristics, orderly changes in life cycles, behavioral and physical adaptations, and survival and perpetuation of species. This strand includes science standards K.6, K.7, 1.4, 1.5, 2.4, 3.4, and 4.4.

3.4	The student will investigate and understand that adaptations allow animals to satisfy life needs and respond to the environment. Key concepts include a) behavioral adaptations; and b) physical adaptations.

~~Understanding the Standard~~ Overview

Students will compare and contrast the physical and behavioral characteristics of different animals that allow the animals to adapt and respond to life needs. The students will need to describe specific examples of how animals gather food, find shelter, defend themselves, and rear young. The concepts of hibernation, migration, camouflage, mimicry, instinct, and learned behavior are specific ways in which animals respond to their environment. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.4 The student will investigate and understand that adaptations allow animals to satisfy life needs and respond to the environment. Key concepts include
a) behavioral adaptations; and
b) physical adaptations.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • In order to survive, animals act in different ways to gather and store food, find shelter, defend themselves, and rear their young. • Physical adaptations help animals survive in their environment (~~Examples include~~ e.g., camouflage, ~~and~~ mimicry). • Various animals possess adaptations which help them blend into their environments to protect themselves from enemies (camouflage). Camouflage is the means by which animals escape the notice of predators, usually because of a resemblance to their surroundings using coloration or outer coverage patterns. • Mimicry occurs when a species has features similar to another species. Either one or both are protected when a third species cannot tell them apart. (Mimicry happens in both animal and plant species.) Some animals look like other animals to avoid being eaten (mimicry). This adaptation helps protect them from their predators. (For example, the viceroy butterfly tastes good to birds, but the monarch butterfly tastes bad. Because the viceroy looks like the monarch butterfly, it is safer from predators.) Mimicry can also occur as mimicked behaviors, mimicked sounds, or mimicked scents~~, or mimicked locations~~. • Behavioral adaptations allow animals to respond to life needs. Examples include hibernation, migration, dormancy, instinct, and learned behavior. • Some animals (e.g., groundhogs, black bears) go into a deep ~~winter~~ sleep in which their body activities slow down due to seasonal changes and they can live off stored food (hibernation). Hibernation is a condition of biological rest or inactivity where growth, development, and metabolic processes slow down.	In order to meet this standard, it is expected that students ~~should be able to~~ will • give examples of methods that animals use to gather and store food, find shelter, defend themselves, and rear young. • describe and explain the terms ~~hibernation, migration,~~ camouflage, mimicry, hibernation, migration, dormancy, instinct, and learned behavior. • explain how an animal's behavioral adaptations help it live in its specific habitat. • distinguish between physical and behavioral adaptations of animals. • compare the physical characteristics of animals, and explain how the animals are adapted to a certain environment. • compare and contrast instinct and learned behavior. • create (model) a camouflage pattern for an animal living in a specific dry-land or water-related environment. (Relates to 3.6.) • design and construct a model of a habitat for an animal with a specific adaptation.

3.4	The student will investigate and understand that adaptations allow animals to satisfy life needs and respond to the environment. Key concepts include a) behavioral adaptations; and b) physical adaptations.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Some animals (e.g., geese, monarch butterflies, tundra swans) go on a long-distance journey from one place to another ~~as seasons change~~ (migration) in search of a new temporary habitat because of climate, availability of food, season of the year, or reproduction. • Dormancy is a state of reduced metabolic activity adopted by many organisms (both plants and animals) under conditions of environmental stress or, when such stressful conditions are likely to appear, as in winter. • Some animals are born with natural behaviors that they need in order to survive in their environments (instincts). These behaviors are not learned but are instinctive, such as a beaver building a dam or a spider spinning a web. • Some behaviors need to be taught in order for the animal to survive, such as a bear cub learning to hunt (learned behavior).	

Grade Three
Science Strand

Living Systems

This strand begins in second grade and builds from basic to more complex understandings of a system, both at the ecosystem level and at the level of the cell. The concept of kingdoms of living ~~things~~ organisms and a general classifying of ~~organisms~~ them are also presented. The other major topics developed in the strand include the types of relationships among organisms in a food chain, different types of environments and the organisms they support, and the relationship between organisms and their nonliving environment. This strand includes science standards 2.5, 3.5, 3.6, 4.5, 5.5, and 6.7.

3.5	The student will investigate and understand relationships among organisms in aquatic and terrestrial food chains. Key concepts include a) producer, consumer, decomposer; b) herbivore, carnivore, omnivore; and c) predator and prey.

~~Understanding the Standard~~ Overview

This standard focuses on student understanding of the food chain in water and land environments. It focuses on the types of relationships among living ~~things~~ organisms and their dependence on each other for survival. The strand focuses on the life processes of plants and animals and the specific needs of each. The major topics developed in the strand include the basic needs and life processes of organisms, their physical characteristics, orderly changes in life cycles, behavioral and physical adaptations, and survival and perpetuation of species. This strand includes science standards ~~K.6~~ K.7, 1.4, 1.5, 2.4, 3.4, 4.4, and 6.7. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.5 The student will investigate and understand relationships among organisms in aquatic and terrestrial food chains. Key concepts include
a) producer, consumer, decomposer;
b) herbivore, carnivore, omnivore; and
c) predator and prey.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • A food chain shows a food relationship among plants and animals in a specific area or environment. • Terrestrial organisms are found on land habitats such as deserts, grasslands, and forests. Aquatic organisms are found in water habitats such as ponds, marshes, swamps, rivers, and oceans. • A green plant makes it own food ~~from~~ using sunlight, air, and water. Green plants are producers. • A consumer is an animal that eats living organisms (plant or animal). • Certain organisms break down decayed plants and animals into smaller pieces that can be used again by other living ~~things~~ organisms. These organisms are decomposers. • A food chain, which shows part of a food web, can have an animal that eats only plants (herbivore). It can have an animal that eats only other animals (carnivore). It can also have an animal that eats both plants and animals (omnivore). • An animal can hunt other animals to get its food (predator). • An animal can be hunted by another animal for food (prey).	In order to meet this standard, it is expected that students ~~should be able to~~ will • differentiate between predators and prey. • distinguish among producers, consumers, herbivores, omnivores, carnivores, and decomposers. • infer that most food chains begin with a green plant. • identify sequences of feeding relationships in a food chain. • explain how a change in one part of a food chain might affect the rest of the food chain. • create and interpret a model of a food chain showing producers and consumers.

3.6	The student will investigate and understand that ecosystems support a diversity of plants and animals that share limited resources. Key concepts include a) aquatic ecosystems; b) terrestrial ecosystems; c) populations and communities; and d) the human role in conserving limited resources.

~~Understanding the Standard~~ Overview

Students should become familiar with several specific examples of aquatic and terrestrial ~~environments~~ ecosystems and the plants and animals unique to them. The water-related ~~environments~~ ecosystems to be discussed are the pond, marshland, swamp, stream, river, and ocean, and the dry-land ~~environments~~ ecosystems to be discussed are the desert, grassland, rain forest, and forest. Water-related and dry-land ~~environments~~ ecosystems contain many types of plants and animals that often compete for the same natural resources. These resources are often shared. Students will also explore the human role in protecting and conserving limited resources in the various ecosystems. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.6 The student will investigate and understand that ecosystems support a diversity of plants and animals that share limited resources. Key concepts include

a) aquatic ecosystems;
b) terrestrial ecosystems;
c) populations and communities; and
d) the human role in conserving limited resources.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Water-related ~~environments~~ ecosystems include those with fresh water or salt water. Examples include ponds, marshes, swamps, streams, rivers, and oceans. • Dry-land ~~environments~~ ecosystems include deserts, grasslands, rain forests, and forests. • There are distinct differences among pond, marshland, swamp, stream, river, ocean, desert, grassland, rainforest, and forest ~~environments~~ ecosystems. • A population is a group of organisms of the same kind that lives in the same place. Examples of a population are a ~~group~~ flock of swans in a pond, a school of fish in a river, and a herd of cattle in the grassland. • A community is all of the populations that live together in the same place. An example of a dry-land community would be a forest made up of trees, squirrels, worms, rabbits, and hawks. An example of a water-related community would be an ocean made up of fish, crabs, and seaweed. • Organisms compete for the limited resources in their specific ~~environment~~ ecosystem. • Humans need to help conserve limited resources.	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe major water-related ~~environments~~ ecosystems and examples of animals and plants that live in each. • describe major dry-land ~~environments~~ ecosystems and examples of animals and plants that live in each. • compare and contrast water-related and dry-land ~~environments~~ ecosystems. • explain how animals and plants use resources in their ~~environment~~ ecosystem. • distinguish between a population and a community. • predict what would occur if a population in a specific ~~environment~~ ecosystem ~~were~~ was to die. • analyze models or diagrams of different water-related ~~environments~~ ecosystems in order to describe the community of organisms each contains and interpret how the organisms use the resources in that ~~environment~~ ecosystem. • analyze models or diagrams of different dry-land ~~environments~~ ecosystems in order to describe the community of organisms each contains and interpret how the organisms use the resources in that environment. • list ways that humans can help conserve limited resources.

Grade Three
Science Strand

Interrelationships in Earth/Space Systems

This strand focuses on student understanding of how Earth systems are connected and how the Earth interacts with other members of the solar system. The topics developed include shadows; relationships between the sun and the Earth; weather types, patterns, and instruments; properties of soil; characteristics of the ocean environment; and organization of the solar system. This strand includes science standards ~~K.7,~~ K.8, 1.6, 2.6, 3.7, 4.6, 5.6, and 6.8.

3.7	The student will investigate and understand the major components of soil, its origin, and its importance to plants and animals including humans. Key concepts include a) soil provides the support and nutrients necessary for plant growth; b) topsoil is a natural product of subsoil and bedrock; c) rock, clay, silt, sand, and humus are components of soils; and d) soil is a natural resource and should be conserved.

~~Understanding the Standard~~ Overview

Students should know that most plants grow in soil and that people and many other animals are dependent on plants for food. The nutrients in soil are materials that plants and animals need to live and grow. Soil takes a long time to form; therefore, it should be conserved. Soil is made up of humus, silt, rock, and sand. Humus is decayed (once living) matter in soil. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.7 The student will investigate and understand the major components of soil, its origin, and its importance to plants and animals including humans. Key concepts include

a) soil provides the support and nutrients necessary for plant growth;
b) topsoil is a natural product of subsoil and bedrock;
c) rock, clay, silt, sand, and humus are components of soils; and
d) soil is a natural resource and should be conserved.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Soil is important because many plants grow in soil, and it provides support and nutrients for the plants. • Over many years, weather, water, and living ~~things~~ organisms help break down rocks and create soil (weathering). • Nutrients are materials that plants and animals need to live and grow. • Rock, clay, silt, sand, and humus are components of soil. • Topsoil is the upper soil surface and a natural product of subsoil and bedrock. Topsoil is best for plant growth. • Subsoil and bedrock are layers of soil under the topsoil that are formed over a long period of time by the action of water. • Subsoil and bedrock are not as good for growing plants as is topsoil. • Humus is decayed matter in soil. It adds nutrients to the soil. It is located in the topsoil. • Clay contains tiny particles of soil that hold water well and provides nutrients. • Sand is made up of small grains of worn-down rock, has few nutrients, and does not hold water well. • Silt is made up of very small broken pieces of rock. Its particles are larger than clay and smaller than sand. • Since soil takes a long time to form, it should be conserved, not wasted.	In order to meet this standard, it is expected that students ~~should be able to~~ will • observe and recognize that soil, as a natural resource, provides the support and nutrients necessary for plant growth. • ~~comprehend~~ understand the key terminology related to soil, including humus, nutrients, topsoil, and bedrock. • interpret and illustrate a basic diagram showing major soil layers, including bedrock, subsoil, and topsoil. • analyze and describe the different components of soil, including rock fragments, clay, silt, sand, and humus. • explain how soil forms over time. • design an investigation to compare how different types of soil affect plant growth. This includes organizing data in tables and constructing simple graphs. • collect, chart, and analyze data on soil conservation on the school grounds. • evaluate the importance of soil to people. • describe how soil can be conserved.

Grade Three
Science Strand

Earth Patterns, Cycles, and Change

This strand focuses on student understanding of patterns in nature, natural cycles, and changes that occur both quickly and slowly over time. An important idea represented in this strand is the relationship among Earth patterns, cycles, and change and their effects on living ~~things~~ organisms. The topics developed include noting and measuring changes, weather and seasonal changes, the water cycle, cycles in the Earth-moon-sun system, and change in the Earth's surface over time. This strand includes science standards ~~K.8,~~ K.9, K.10, 1.7, 2.7, 3.8, 3.9, 4.7, 4.8, and 5.7.

3.8	The student will investigate and understand basic patterns and cycles occurring in nature. Key concepts include a) patterns of natural events such as day and night, seasonal changes, simple phases of the moon, and tides; b) animal life cycles; and c) plant life cycles.

~~Understanding the Standard~~ Overview

This standard focuses on students understanding that many events on Earth happen in cycles or patterns. Examples of these patterns are day turning into night and night into day. Seasons cycle from fall to winter to spring to summer and back to fall. Light reflecting from the sun causes the moon to appear illuminated. The phases of the moon appear in sequence as the moon makes one revolution around ~~the~~ Earth. Seasons are caused by the tilt of ~~the~~ Earth as it revolves around the sun. The main cause of the tides is the gravitational attraction between ~~the~~ Earth and the moon. Plants and animals also undergo life cycles from birth to death. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.8 The student will investigate and understand basic patterns and cycles occurring in nature. Key concepts include
a) patterns of natural events such as day and night, seasonal changes, simple phases of the moon, and tides;
b) animal life cycles; and
c) plant life cycles.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • A cycle is a repeated pattern. A sequence is a series of events that occur in a natural order. • The pattern of day and night is caused by the rotation of ~~the~~ Earth. One complete rotation occurs every 24 hours. The part of ~~the~~ Earth toward the sun has daylight while the part of ~~the~~ Earth away from the sun has night. • The pattern of seasonal changes takes place because ~~the~~ Earth's axis is tilted toward or away from the sun during its revolution around the sun. Because the tilt of Earth on its axis is 23.5°, the sun's energy is not equally intense at different latitudes. Rays striking Earth near the equator do so at close to a 90° angle. Rays striking Earth near the poles do so at a much smaller angle and thus the same amount of sunlight is spread over a larger area. For this reason, the same amount of energy from the sun will be less intense nearer the poles and these areas will have a colder climate. ~~The~~ Earth takes 365 ¼ days, or one year, to make one revolution. • The cycle of moon phases ~~of the moon~~ occurs as the moon makes one revolution around ~~the~~ Earth. The ~~shapes~~ visible portion of the moon that we see each night follows a pattern. • The tides follow a pattern of two high and two low tides every 24 hours. This pattern is caused for the most part by the gravitational attraction between ~~the~~ Earth and the moon. • Plants and animals undergo life cycles~~. For example,~~ (e.g., Frogs begin as eggs in water. The eggs grow into tadpoles, the tadpoles eventually become frogs, and the adult frogs lay eggs to start ~~the~~ a new life cycle over again. In the plant life cycle, a seed grows into a new plant that	In order to meet this standard, it is expected that students ~~should be able to~~ will • explain how some events in nature occur in a pattern or cycle, such as the seasons, day and night, phases of the moon (first quarter, full, last [third] quarter, new), tides, and life cycles. • recognize that the relationships that exist between and among ~~the~~ Earth, sun, and moon result in day and night, seasonal changes, phases of the moon, and the tides. • model and describe how ~~the~~ Earth's rotation causes day and night. • model and describe how the sun's rays strike the Earth to cause seasons. • observe, chart, and illustrate phases of the moon (first quarter, full, last [third] quarter, new), and describe the changing pattern of the moon as it revolves around ~~the~~ Earth. • collect and analyze data from simple tide tables to determine a pattern of high and low tides. • explain the pattern of growth and change that organisms, such as the ~~butterfly and~~ frog and butterfly undergo during their life cycle.

3.8 The student will investigate and understand basic patterns and cycles occurring in nature. Key concepts include a) patterns of natural events such as day and night, seasonal changes, simple phases of the moon, and tides; b) animal life cycles; and c) plant life cycles.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
forms seeds. Then the new seeds repeat the life cycle.)	

3.9	The student will investigate and understand the water cycle and its relationship to life on Earth. Key concepts include a) there are many sources of water on Earth; b) the energy from the sun drives the water cycle; c) the water cycle involves several processes; d) water is essential for living things; and e) water on Earth is limited and needs to be conserved.

~~Understanding the Standard~~ Overview

This standard introduces students to the movement of water on ~~the~~ Earth by evaporation, condensation, and precipitation, which is called the water cycle. All the water on Earth is part of the water cycle. Water is stored in ponds, lakes, streams, rivers, ground water, and oceans. Water is essential to maintain life on Earth and should be conserved as a natural resource. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.9 The student will investigate and understand the water cycle and its relationship to life on Earth. Key concepts include

a) there are many sources of water on Earth;
b) the energy from the sun drives the water cycle;
c) the water cycle involves several processes;
d) water is essential for living things; and
e) water on Earth is limited and needs to be conserved.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The water cycle is the movement of water from the ground to the air and back to the ground by evaporation, condensation, and precipitation. The energy that drives this cycle comes from the sun. • During the water cycle, liquid water is heated and changed to a gas (water vapor). ~~(~~This process is called evaporation~~)~~. The gas (water vapor) is cooled and changed back to a liquid. ~~(~~This process is called condensation~~)~~. ~~A~~ Water as a liquid or a solid falls to the ground as precipitation. • Our water supply on Earth is limited. Pollution reduces the amount of usable water; therefore, the supply should be conserved carefully. • Water is a simple compound essential for life on Earth. Living cells are mostly water. In each cell, the chemicals necessary for life are dissolved in water.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify the sun as the origin of energy that drives the water cycle. • describe the processes of evaporation, condensation, and precipitation as they relate to the water cycle. • construct and interpret a model of the water cycle. • ~~realize living things~~ identify the different ways that organisms get water from the environment ~~in different ways~~. • identify major water sources for a community, including rivers, reservoirs, and wells. Describe the major water sources for the local community. • explain methods of water conservation in the home and school. • ~~appraise~~ identify and communicate the importance of water to people and to other living ~~things~~ organisms. • analyze possible sources of water pollution in their neighborhoods, at school, and in the local community. This includes runoff from over-fertilized lawns and fields, oil from parking lots, eroding soil, and animal waste.

Earth Resources

This strand focuses on student understanding of the role of resources in the natural world and how people can utilize those resources in a sustainable way. An important idea represented in this strand is the concept of management of resource use. This begins with basic ideas of conservation and proceeds to more abstract consideration of costs and benefits. The topics developed include conservation of materials, soil and plants as resources, energy use, water, Virginia's resources, and how public policy impacts the environment. This strand includes science standards ~~K.10~~ K.11, 1.8, 2.8, 3.10, 3.11, ~~4.8~~ 4.9, and 6.9.

3.10	The student will investigate and understand that natural events and human influences can affect the survival of species. Key concepts include a) the interdependency of plants and animals; b) the effects of human activity on the quality of air, water, and habitat; c) the effects of fire, flood, disease, and erosion on organisms; and d) conservation and resource renewal.

~~Understanding the Standard~~ Overview

This standard reinforces the concept that plants and animals are dependent upon each other for survival. Living ~~things~~ organisms depend on other living ~~thing~~ organisms to survive. Human and natural events can change habitats. Natural disasters such as fire, flood, disease, and erosion can kill organisms and destroy their habitats. Methods of ensuring the survival of plant and animal species include specific conservation measures. These are resource renewal, habitat management procedures, and species monitoring practices. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.10 The student will investigate and understand that natural events and human influences can affect the survival of species. Key concepts include
a) the interdependency of plants and animals;
b) the effects of human activity on the quality of air, water, and habitat;
c) the effects of fire, flood, disease, and erosion on organisms; and
d) conservation and resource renewal.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Every ~~living thing~~ organism depends on ~~every~~ other ~~living things~~ organisms to survive. This is called interdependency. • Human actions, such as polluting, can affect the survival of plants and animals. • Natural events, such as fires, floods, diseases, and erosion, can also affect the survival of plant and animal species. • Conservation is the careful use and preservation of our natural resources. • Resource renewal is a conservation practice in which species are protected. An example would be protecting endangered plants by saving their seeds, growing the seeds indoors, and later putting the new plants back in their natural habitats.	In order to meet this standard, it is expected that students ~~should be able to~~ will • explain how ~~living things~~ organisms in an area are dependent on each other. • compare and contrast human influences on the quality of air, water, and habitats. • analyze the effects of fire, flood, disease, and erosion on organisms and habitats. • describe how conservation practices can affect the survival of a species. • describe a conservation practice in the local community.

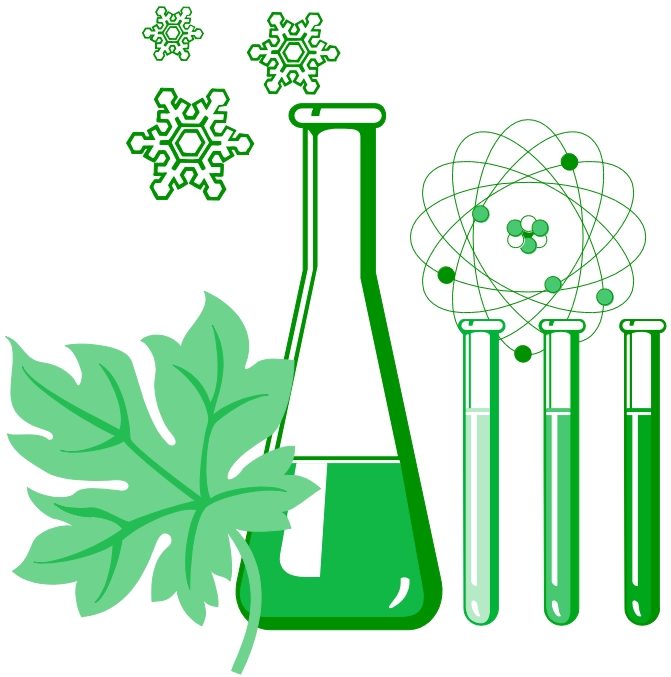
3.11	The student will investigate and understand different sources of energy. Key concepts include a) energy from the sun; b) sources of renewable energy; and c) sources of nonrenewable energy.

~~Understanding the Standard~~ Overview

This standard focuses on ~~the~~ Earth's major types of energy sources. The sun produces light and ~~heat~~ thermal energy. Natural forms of energy include sunlight, water, and wind. Important fossil fuels are coal, oil, and natural gas, which were formed over millions of years by decaying plants and animals buried in layers of rock. Sources of energy are classified either as renewable or nonrenewable. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (3.1) in the context of the key concepts presented in this standard.

3.11 The student will investigate and understand different sources of energy. Key concepts include
a) energy from the sun;
b) sources of renewable energy; and
c) sources of nonrenewable energy.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The sun is the source of almost all energy on Earth. The sun is the direct source of light and ~~heat~~ thermal energy. • Sunlight, water, and wind are sources of energy. The force of flowing water and moving air (wind) can also be used to generate electricity. • Wood comes from trees. It has many important uses, including its use as a fuel. • Some energy sources are renewable. That means that they can be replaced. Some energy sources are nonrenewable. That means that once they are used up, they are gone and cannot be replaced. Coal, oil, and natural gas are nonrenewable resources. • Fossil fuels, such as coal, oil, and natural gas, are formed from decayed plants and animals. The formation of fossil fuels takes millions of years.	In order to meet this standard, it is expected that students ~~should be able to~~ will • explain that the sun is the major source of energy for ~~the~~ Earth. • identify sources of energy and their uses. • describe how solar energy, wind, and moving water can be used to produce electricity. • describe how fossil fuels are used as an energy source. • compare and contrast renewable and nonrenewable energy sources. • analyze the advantages and disadvantages of using different naturally occurring energy sources. • design a basic investigation to determine the effects of sunlight on warming various objects and materials, including water.



Science Standards of Learning Curriculum Framework

Grade Four

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs or activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Grade Four
Science Strand

Scientific Investigation, Reasoning, and Logic

This strand represents a set of systematic inquiry skills that defines what a student ~~should~~ will be able to do when conducting activities and investigations and represents the student understanding of the nature of science. The various skill categories are described in the "Investigate and Understand" section of the Introduction to the *Science Standards of Learning*, and the skills in science standard 4.1 represent more specifically what a student should be able to do as a result of science experiences in fourth grade. Across the grade levels, the skills in the "Scientific Investigation, Reasoning, and Logic" strand form a nearly continuous sequence of investigative skills and an understanding of the nature of science. ~~(Please note Appendix, "Science Skills, Scope, & Sequence.")~~ It is important that the classroom teacher understand~~s~~ how the skills in standard 4.1 are a key part of this sequence (i.e., K.1, K.2, 1.1, 2.1, 3.1, 4.1, 5.1, and 6.1). The fourth-grade curriculum should ensure that skills from preceding grades are continuously reinforced and developed. ~~It is also important to note that 25 percent of items on the third and fifth grade SOL assessments measure the skills defined in this strand.~~

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) distinctions are made among observations, conclusions, inferences, and predictions;
b) objects or events are classified and arranged according to characteristics or properties;
c) appropriate instruments are selected and used to measure length, mass, volume, and temperature in metric units;
d) appropriate instruments are selected and used to measure elapsed time;
e) predictions and inferences are made, and conclusions are drawn based on data from a variety of sources;
f) independent and dependent variables are identified;
g) constants in an experimental situation are identified;
h) hypotheses are developed as cause and effect relationships;
i) data are collected, recorded, analyzed, and displayed using bar and basic line graphs;
j) numerical data that are contradictory or unusual in experimental results are recognized;
k) data are communicated with simple graphs, pictures, written statements, and numbers;
l) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
m) current applications are used to reinforce science concepts.

~~Understanding the Standard~~ Overview

The skills described in standard 4.1 are intended to define the "investigate" component of all of the other fourth-grade standards (4.2–4.8). The intent of standard 4.1 is that students will continue to develop a range of inquiry skills, ~~and~~ achieve proficiency with those skills in the context of the concepts developed at the fourth-grade level, and strengthen their understanding of the nature of science. **Standard 4.1 does not require a discrete unit be taught on scientific investigation and the nature of science because the ~~inquiry~~ skills that make up the standard should be incorporated in all the other fourth-grade standards.** It is also intended that by developing these skills, students will achieve greater understanding of scientific inquiry and the nature of science as well as more fully grasp the content-related concepts.

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) distinctions are made among observations, conclusions, inferences, and predictions;
b) objects or events are classified and arranged according to characteristics or properties;
c) appropriate instruments are selected and used to measure length, mass, volume, and temperature in metric units;
d) appropriate instruments are selected and used to measure elapsed time;
e) predictions and inferences are made, and conclusions are drawn based on data from a variety of sources;
f) independent and dependent variables are identified;
g) constants in an experimental situation are identified;
h) hypotheses are developed as cause and effect relationships;
i) data are collected, recorded, analyzed, and displayed using bar and basic line graphs;
j) numerical data that are contradictory or unusual in experimental results are recognized;
k) data are communicated with simple graphs, pictures, written statements, and numbers;
l) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard

(Background Information for Instructor Use Only)

~~The concepts developed in this standard include the following:~~

- The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts:
  a) the natural world is understandable;
  b) science is based on evidence, both observational and experimental;
  c) science is a blend of logic and innovation;
  d) scientific ideas are durable yet subject to change as new data are collected;
  e) science is a complex social endeavor; and
  f) scientists try to remain objective and engage in peer review to help avoid bias.

  In grade four, an emphasis should be placed on concepts a, b, c, d, and e.
- Science assumes that the natural world is understandable. Scientific inquiry can provide explanations about nature. This expands students' ~~knowledge~~ thinking from just a knowledge of facts to understanding ~~why~~ how ~~the~~ facts are relevant to everyday life.

Essential Knowledge, Skills, and Processes

In order to meet this standard, it is expected that students ~~should be able to~~ will

- differentiate among simple observations, conclusions, inferences, and predictions, and correctly apply the terminology in oral and written work. ~~This requires students to comprehend the basic terminology and apply it in novel situations related to fourth grade SOL concepts.~~
- analyze a set of 20 or fewer objects~~, measures,~~ or pictures~~;~~, ~~classify~~ Sort them into ~~basic~~ categories to organize the data (~~descriptive or numerical~~ qualitative or quantitative); and construct bar graphs and line graphs depicting the distribution of those data based on characteristics or properties.
- use millimeters, centimeters, meters, kilometers, grams, kilograms, milliliters, liters, ~~grams, and kilograms~~ and degrees Celsius in measurement.
- choose the appropriate instruments, including centimeter rulers, meter sticks, scales, balances, graduated cylinders, beakers, ~~scales and balances,~~ and Celsius thermometers, for making basic metric

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) distinctions are made among observations, conclusions, inferences, and predictions;
b) objects or events are classified and arranged according to characteristics or properties;
c) appropriate instruments are selected and used to measure length, mass, volume, and temperature in metric units;
d) appropriate instruments are selected and used to measure elapsed time;
e) predictions and inferences are made, and conclusions are drawn based on data from a variety of sources;
f) independent and dependent variables are identified;
g) constants in an experimental situation are identified;
h) hypotheses are developed as cause and effect relationships;
i) data are collected, recorded, analyzed, and displayed using bar and basic line graphs;
j) numerical data that are contradictory or unusual in experimental results are recognized;
k) data are communicated with simple graphs, pictures, written statements, and numbers;
l) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Science demands evidence. Scientists develop their ideas based on evidence and they change their ideas when new evidence becomes available or the old evidence is viewed in a different way. • Science uses both logic and innovation. Innovation has always been an important part of science. Scientists draw upon their creativity to visualize how nature works, using analogies, metaphors, and mathematics. • Scientific ideas are durable yet subject to change as new data are collected. The main body of scientific knowledge is very stable and grows by being corrected slowly and having its boundaries extended gradually. Scientists themselves accept the notion that scientific knowledge is always open to improvement and can never be declared absolutely certain. New questions arise, new theories are proposed, new instruments are invented, and new techniques are developed. • Science is a complex social endeavor. It is a complex social process for producing knowledge about the natural world. Scientific knowledge represents the current consensus among scientists as to what is the best explanation for phenomena in the natural world. This consensus does	measures. • measure elapsed time using a stopwatch or a clock. • make predictions, inferences, and draw conclusions using a variety of sources such as ~~based on~~ picture graphs, bar graphs, and basic line graphs. • analyze the variables in a simple experiment~~,~~, ~~and decide~~ Identify the independent variable and the dependent variable. Decide which other variable(s) must be held constant (not allowed to change) in order for the investigation to represent a fair test. ~~This requires students to comprehend what "variables" are and to apply that idea in new situations related to fourth grade SOL related concepts. Variables are either manipulated or responding.~~ • create a plausible hypothesis, stated in terms of cause (if) and effect (then), from a set of basic observations that can be tested. ~~This requires a student to comprehend what "cause and effect" is and to be able to apply that idea in new situations. The application should occur in terms of fourth grade SOL related concepts or other concrete situations.~~ Hypotheses ~~should~~ can be stated in terms such as: "If the

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) distinctions are made among observations, conclusions, inferences, and predictions;
b) objects or events are classified and arranged according to characteristics or properties;
c) appropriate instruments are selected and used to measure length, mass, volume, and temperature in metric units;
d) appropriate instruments are selected and used to measure elapsed time;
e) predictions and inferences are made, and conclusions are drawn based on data from a variety of sources;
f) independent and dependent variables are identified;
g) constants in an experimental situation are identified;
h) hypotheses are developed as cause and effect relationships;
i) data are collected, recorded, analyzed, and displayed using bar and basic line graphs;
j) numerical data that are contradictory or unusual in experimental results are recognized;
k) data are communicated with simple graphs, pictures, written statements, and numbers;
l) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
not arise automatically, since scientists with different backgrounds from all over the world may interpret the same data differently. To build a consensus, scientists communicate their findings to other scientists and attempt to replicate one another's findings. In order to model the work of professional scientists, it is essential for fourth-grade students to engage in frequent discussions with peers about their understanding of their investigations. • An observation is what you see, feel, taste, hear, or smell. Scientists construct knowledge from observations and inferences, not observations alone. To communicate an observation accurately, one must provide a clear description of exactly what is observed and nothing more. Those conducting investigations need to understand the difference between what is seen and what inferences, conclusions, or interpretations can be drawn from the observation. • An inference is ~~a conclusion~~ a tentative explanation based on ~~evidence about events that have already occurred~~ background knowledge and available data. • Accurate observations and evidence are necessary to draw realistic and plausible conclusions. A conclusion is a summary statement based on	water temperature is increased, then the amount of sugar that can be dissolved in it will increase." • organize and analyze data from a simple experiment. Construct bar graphs and line graphs depicting the data. • judge which, if any, data in a simple set of results (generally 10 or fewer in number) appear to be ~~considerably outside the expected range. Students should be able to determine the significance of unusual data~~ contradictory or unusual. • present results of a simple experiment using graphs, pictures, statements, and numbers. • construct a physical model to clarify an explanation, demonstrate a relationship, or solve a need ~~using information related to fourth-grade SOL concepts~~.

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) distinctions are made among observations, conclusions, inferences, and predictions;
b) objects or events are classified and arranged according to characteristics or properties;
c) appropriate instruments are selected and used to measure length, mass, volume, and temperature in metric units;
d) appropriate instruments are selected and used to measure elapsed time;
e) predictions and inferences are made, and conclusions are drawn based on data from a variety of sources;
f) independent and dependent variables are identified;
g) constants in an experimental situation are identified;
h) hypotheses are developed as cause and effect relationships;
i) data are collected, recorded, analyzed, and displayed using bar and basic line graphs;
j) numerical data that are contradictory or unusual in experimental results are recognized;
k) data are communicated with simple graphs, pictures, written statements, and numbers;
l) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
the results of an investigation. • A scientific prediction ~~is a forecast about~~ tells what may happen in some future situation. It is based on the application of scientific principles and factual information. • ~~When drawing a conclusion, you make a~~ Conclusions are drawn by making judgments after considering all the information you have gathered. Conclusions are based on details and facts. • Systematic investigations require standard measures (metric), consistent and reliable tools, and organized reporting of data. The way the data are displayed can make it easier to uncover important information. This can assist in making reliable scientific forecasts of future events. • Elapsed time is the amount of time that has passed between two given times. (*See Grade Four Mathematics Curriculum Framework, Standard 4.9, page 24.*) • An experiment is a fair test driven by a hypothesis. A fair test is one in which only one variable is compared. • A hypothesis is a prediction about the relationship between variables. A	

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) distinctions are made among observations, conclusions, inferences, and predictions;
b) objects or events are classified and arranged according to characteristics or properties;
c) appropriate instruments are selected and used to measure length, mass, volume, and temperature in metric units;
d) appropriate instruments are selected and used to measure elapsed time;
e) predictions and inferences are made, and conclusions are drawn based on data from a variety of sources;
f) independent and dependent variables are identified;
g) constants in an experimental situation are identified;
h) hypotheses are developed as cause and effect relationships;
i) data are collected, recorded, analyzed, and displayed using bar and basic line graphs;
j) numerical data that are contradictory or unusual in experimental results are recognized;
k) data are communicated with simple graphs, pictures, written statements, and numbers;
l) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
hypothesis is an educated guess/prediction about what will happen based on what you already know and what you have already learned from your research. It must be worded so that it is "testable." • In order to conduct an experiment, one must recognize all of the potential variables or changes that can affect its outcome. • An ~~*manipulated*~~ independent variable is the factor in an experiment that is altered by the experimenter. The independent variable is purposely changed or manipulated. • A ~~*responding*~~ dependent variable is the factor in an experiment that changes as a result of the ~~change applied to the manipulated~~ manipulation of the independent variable. • The constants in an experiment are those things that are purposefully not changed ~~but~~ and remain the same throughout the experiment. • In science, it is important that experiments and the observations recorded are repeatable. There are two different types of data – qualitative and quantitative. Qualitative data deal with descriptions and data that can be observed, but not measured. Quantitative data are data that can be counted or measured and the results can be recorded using numbers.	

4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) distinctions are made among observations, conclusions, inferences, and predictions;
b) objects or events are classified and arranged according to characteristics or properties;
c) appropriate instruments are selected and used to measure length, mass, volume, and temperature in metric units;
d) appropriate instruments are selected and used to measure elapsed time;
e) predictions and inferences are made, and conclusions are drawn based on data from a variety of sources;
f) independent and dependent variables are identified;
g) constants in an experimental situation are identified;
h) hypotheses are developed as cause and effect relationships;
i) data are collected, recorded, analyzed, and displayed using bar and basic line graphs;
j) numerical data that are contradictory or unusual in experimental results are recognized;
k) data are communicated with simple graphs, pictures, written statements, and numbers;
l) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
m) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard

(Background Information for Instructor Use Only)

Quantitative data can be represented visually in graphs and charts. Quantitative data define whereas qualitative data describe. Quantitative data are more valuable in science because they allow direct comparisons between observations made by different people or at different times.

Example of Qualitative vs. Quantitative Data

Main Street Elementary School Science Club

Qualitative	Quantitative
• Friendly • Like science • Positive about schoolwork	• 10 fourth-grade students and 12 fifth-grade students • 14 girls, 8 boys • 92 percent participated in the divisionwide science fair last year

- It is important for students to apply the science content they have learned to current events and applications ~~to bring realism to their learning~~.

Essential Knowledge, Skills, and Processes

Grade Four
Science Strand

Force, Motion, and Energy

This strand focuses on student understanding of what force, motion, and energy are and how the concepts are connected. The major topics developed in this strand include magnetism, types of motion, simple and compound machines, and energy forms and transformations, especially electricity, sound, and light. This strand includes science standards K.3, 1.2, 2.2, 3.2, 4.2, 4.3, 5.2, 5.3, 6.2, and 6.3.

4.2	The student will investigate and understand characteristics and interactions of moving objects. Key concepts include a) motion is described by an object's direction and speed; b) changes in motion are related to force and mass; c) friction is a force that opposes motion; and d) moving objects have kinetic energy.

~~Understanding the Standard~~ Overview

This standard is introduced in first-grade and prepares students for a more in-depth study of energy in eighth-grade. This standard focuses on the characteristics of moving objects. Key concepts include the effect of forces, such as friction, on moving objects. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

4.2 The student will investigate and understand characteristics and interactions of moving objects. Key concepts include
a) motion is described by an object's direction and speed;
b) changes in motion are related to force and mass;
c) friction is a force that opposes motion; and
d) moving objects have kinetic energy.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The position of an object can be described by locating it relative to another object or to the background. • Tracing and measuring an object's position over time can describe its motion. • Speed describes how fast an object is moving. • Energy may exist in two states: kinetic or potential. • Kinetic energy is the energy of motion. • A force is any push or pull that causes an object to move, stop, or change speed or direction. • The greater the force, the greater the change in motion will be. The more massive an object, the less effect a given force will have on the object. • Friction is the resistance to motion created by two objects moving against each other. Friction creates heat. • Unless acted on by a force, objects in motion tend to stay in motion and objects at rest remain at rest.	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe the position of an object. • collect and display in a table and line graph time and position data for a moving object. • explain that speed is a measure of motion. • interpret data to determine if the speed of an object is increasing, decreasing, or remaining the same. • identify the forces that cause an object's motion. • describe the direction of an object's motion: up, down, forward, backward. • infer that objects have kinetic energy. • design an investigation to test the following hypothesis: "If the mass of an object increases, then the force needed to move it will increase." • design an investigation to determine the effect of friction on moving objects. Write a testable hypothesis~~,~~ and identify the dependent variable, the independent variable, and the constants. Conduct a fair test, collect and record the data, analyze the data, and report the results of the data.

4.3	The student will investigate and understand the characteristics of electricity. Key concepts include a) conductors and insulators; b) basic circuits; c) static electricity; d) the ability of electrical energy to be transformed into light and motion, and to produce heat; e) simple electromagnets and magnetism; and f) historical contributions in understanding electricity.

~~Understanding the Standard~~ Overview

This standard focuses on the characteristics of electricity as related to circuits and circuit components, magnetism, static charges, and historical contributions important to the understanding of electricity. As electrical energy is an integral part of modern civilization (e.g., powering our computers; lighting, heating and cooling our homes and businesses; and making the information age possible), it is critical that students begin to understand basic electricity concepts. This standard will be the basis for a more in-depth study in the eighth grade. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

4.3 The student will investigate and understand the characteristics of electricity. Key concepts include
a) conductors and insulators;
b) basic circuits;
c) static electricity;
d) the ability of electrical energy to be transformed into light and motion, and to produce heat;
e) simple electromagnets and magnetism; and
f) historical contributions in understanding electricity.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • A continuous flow of negative charges (electrons) creates an electric current. The pathway taken by an electric current is a circuit. Closed circuits allow the movement of electrical energy. Open circuits prevent the movement of electrical energy. • Electrical energy moves through materials that are conductors (metals). Insulators (rubber, plastic, wood) do not conduct electricity well. • Among conducting materials, ~~energy passes more or less easily because of the material's resistance~~ the rate at which energy flows depends on the material's resistance. • In a series circuit, there is only one pathway for the current, but in a parallel circuit there are two or more pathways for it. • Rubbing certain materials together creates static electricity. • Lightning is the discharge of static electricity in the atmosphere. • Electrical energy can be transformed into ~~heat,~~ light~~,~~ or motion, and ~~to~~ can produce ~~heat~~ thermal energy ~~mechanical energy~~. • Certain iron-bearing metals attract other such metals (also nickel and cobalt). • Lines of force extend from the poles of a magnet in an arched pattern defining the area over which magnetic force is exerted. • An electric current creates a magnetic field, and a moving magnetic field	In order to meet this standard, it is expected that students ~~should be able to~~ will • apply the terms insulators, conductors, open and closed in describing electrical circuits. • differentiate between an open and closed electric circuit. • use the dry cell symbols (–) and (+). • create and diagram a functioning series circuit using dry cells, wires, switches, bulbs, and bulb holders. • create and diagram a functioning parallel circuit using dry cells, wires, switches, bulbs, and bulb holders. • differentiate between a parallel and series circuit. • describe the types of energies (i.e., ~~light, heat, motion~~ thermal, radiant, and mechanical) that are transformed by various household appliances (e.g., lamp, toaster, fan). • create a diagram of a magnetic field using a magnet. • compare and contrast a permanent magnet and an electromagnet. • explain how electricity is generated by a moving magnetic field. • design an investigation using static electricity to attract or repel a variety of materials. • explain how static electricity is created and occurs in nature.

4.3 The student will investigate and understand the characteristics of electricity. Key concepts include

a) conductors and insulators;
b) basic circuits;
c) static electricity;
d) the ability of electrical energy to be transformed into light and motion, and to produce heat;
e) simple electromagnets and magnetism; and
f) historical contributions in understanding electricity.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
creates an electric current. • A current flowing through a wire creates a magnetic field. Wrapping a wire around certain iron-bearing metals (iron nail) and creating a closed circuit is an example of a simple electromagnet. • Benjamin Franklin, Michael Faraday, and Thomas Edison made important discoveries about electricity.	• construct a simple electromagnet using a wire, nail, or other iron-bearing object, and a dry cell. • design and perform an investigation to determine the strength of an electromagnet. (The ~~manipulated~~ independent variable could be the number of coils of wire and the ~~responding~~ dependent variable could be the number of paperclips the magnet can attract.) • describe the contributions of Ben Franklin, Michael Faraday, and Thomas Edison to the understanding and harnessing of electricity.

Grade Four
Science Strand

Life Processes

This strand focuses on the life processes of plants and animals and the specific needs of each. The major topics developed in the strand include basic needs and life processes of organisms, their physical characteristics, orderly changes in life cycles, behavioral and physical adaptations, and survival and perpetuation of species. This strand includes science standards K.6, K.7, 1.4, 1.5, 2.4, 3.4, and 4.4.

4.4	The student will investigate and understand basic plant anatomy and life processes. Key concepts include a) the structures of typical plants and the function of each structure; b) processes and structures involved with plant reproduction; c) photosynthesis; and d) adaptations allow plants to satisfy life needs and respond to the environment.

~~Understanding the Standard~~ Overview

This standard focuses on the basic life processes and anatomy of plants. It represents a more in-depth treatment of the plant structures and the processes associated with plant reproduction. Photosynthesis is introduced in this standard. Closely related standards from previous grades include K.6, 1.4, and 2.4. This standard also is closely connected with concepts presented in science standard 4.5. It is intended that students will actively develop scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

4.4 The student will investigate and understand basic plant anatomy and life processes. Key concepts include
a) the structures of typical plants and the function of each structure;
b) processes and structures involved with plant reproduction;
c) photosynthesis; and
d) adaptations allow plants to satisfy life needs and respond to the environment.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • For many typical green plants, there are anatomical structures that perform certain basic functions. For example, roots anchor the plants and take water and nutrients from the soil. Plant stems provide support and allow movement of water and nutrients. • ~~The plant kingdom~~ Plants can be divided into two general groups: those that produce seeds and those that produce spores. • Many seed-producing plants have roots, stems, leaves, and flowers. • Seeds vary considerably in size. Orchids, for example, produce seeds as small as dust particles. The coconut is one of the largest seeds in the plant kingdom. In many seeds, the protective outer seed coat is resistant to physical damage and may also contain waxes and oils that help prevent water loss. • The embryo within the seed begins as a single cell, the zygote. The basic organs of the plant body can be found in the embryo. In some seeds the embryonic leaves are quite large, filling most of the volume of the seed. The embryonic leaves are a major source of stored food for the embryo. Beans are an example of plants with large embryonic leaves. In many other plants the embryonic leaves are relatively small, and the embryo is nourished by a tissue called endosperm. • Pollination is part of the reproductive process of flowering plants. Pollination is the process by which pollen is transferred from the stamens to the stigma. • The stamen and pistil are reproductive parts of the flower. The sepals are the small leaves that form the housing of the developing flower.	In order to meet this standard, it is expected that students ~~should be able to~~ will • analyze a common plant: identify the roots, stems, leaves, and flowers, and explain the function of each. • create a model/diagram illustrating the parts of a flower and its reproductive processes. ~~e~~Explain your model/diagram using the following terminology: pollination, ~~(~~stamen, stigma, pistil, sepal, embryo, spore, ~~ovary, ovuole,~~ seed~~)~~. • ~~create a model/diagram illustrating the reproductive processes in typical flowering plants, and explain the processes.~~ • compare and contrast different ways plants are pollinated. • explain that ferns and mosses reproduce with spores rather than seeds. • explain the process of photosynthesis, using the following terminology: sunlight, chlorophyll, water, carbon dioxide, oxygen, and sugar. • ~~design an investigation to determine the relationship between the presence of sunlight and plant growth.~~ • explain the role of ~~dormancy for~~ adaptations of common plants to include dormancy, response to light, and response to moisture.

4.4 The student will investigate and understand basic plant anatomy and life processes. Key concepts include a) the structures of typical plants and the function of each structure; b) processes and structures involved with plant reproduction; c) photosynthesis; and d) adaptations allow plants to satisfy life needs and respond to the environment.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
• Some plants reproduce with spores. These include ferns and mosses. • Green plants produce their own food through the process of photosynthesis. Green plants use chlorophyll to produce food (sugar), using carbon dioxide, water, ~~nutrients~~ enzymes and other chemicals, and sunlight. Leaves are the primary food producing part of these plants. • Oxygen is ~~produced~~ released during photosynthesis. • Plants adapt to changes in their environment in order to survive. Dormancy is a plant adaptation. Dormancy is a period of suspended life processes brought on by changes in the environment.	

Grade Four
Science Strand

Living Systems

This strand begins in second grade and builds from basic to more complex understandings of a system, both at the ecosystem level and at the level of the cell. The concept of kingdoms of living things and a general classifying of organisms are also presented. The other major topics developed in the strand include the types of relationships among organisms in a food chain, different types of environments and the organisms they support, and the relationship between organisms and their nonliving environment. This strand includes science standards 2.5, 3.5, 3.6, 4.5, 5.5, and 6.7.

4.5	The student will investigate and understand how plants and animals, including humans, in an ecosystem interact with one another and with the nonliving components in the ecosystem. Key concepts include a) plant and animal adaptations; b) organization of populations, communities, and ecosystems and how they interrelate; c) flow of energy through food webs; d) habitats and niches; e) changes in an organism's niche at various stages in its life cycle; and f) influences of human activity on ecosystems.

~~Understanding the Standard~~ Overview

This standard focuses on the relationships among plants, animals, and the nonliving environment and brings together several elements of both Life Processes and Living Systems. This standard assumes students have a basic understanding that all living ~~things~~ organisms are interrelated and dependent in some way on other living ~~things~~ organisms and their environment. Plants and animals in ecological systems live in a web of interdependence in which each species contributes to the functioning of the overall system. Organisms live in a habitat to which they are structurally and behaviorally adapted. Certain conditions within environments determine which organisms and communities succeed there. This standard builds upon previous standards 1.5, 2.4, 2.5. 3.4, 3.5 and 3.6. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

4.5 The student will investigate and understand how plants and animals, including humans, in an ecosystem interact with one another and with the nonliving components in the ecosystem. Key concepts include

a) plant and animal adaptations;
b) organization of populations, communities, and ecosystems and how they interrelate;
c) flow of energy through food webs;
d) habitats and niches;
e) changes in an organism's niche at various stages in its life cycle; and
f) influences of human activity on ecosystems.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Organisms have structural adaptations, or physical attributes, that help them meet a life need. • Organisms also have behavioral adaptations, or certain types of activities they perform, which help them meet a life need. • All the organisms of the same species that live in the same place at the same time are a population. • Populations of species that live in the same place at the same time together make up a community. • The organization of communities is based on the utilization of the energy from the sun within a given ecosystem. The greatest amount of energy in a community is in the producers. • Within a community, organisms are dependent on the survival of other organisms. Energy is passed from one organism to another. • All the populations and the nonliving components in an environment that interact with each other form an ecosystem. • The sun's energy cycles through ecosystems from producers through consumers and back into the nutrient pool through decomposers. • A habitat is the place or kind of place in which an animal or plant naturally lives. An organism's habitat provides food, water, shelter, and space. The size of the habitat depends on the organism's needs.	In order to meet this standard, it is expected that students ~~should be able to~~ will • distinguish between structural (physical) and behavioral adaptations. • investigate and infer the function of basic adaptations ~~and provide evidence for the conclusion~~. • understand that adaptations allow an organism to succeed in a given environment. • explain how different organisms use their unique adaptations to meet their needs. • describe why certain communities exist in given habitats. • illustrate the food webs in a local area. • ~~and~~ compare and contrast the niches of several different organisms within the community. • compare and contrast the differing ways an organism interacts with its surroundings at various stages of its life cycle. Specific examples include a frog and a butterfly. • differentiate among positive and negative influences of human activity on ecosystems.

4.5	The student will investigate and understand how plants and animals, including humans, in an ecosystem interact with one another and with the nonliving components in the ecosystem. Key concepts include a) plant and animal adaptations; b) organization of populations, communities, and ecosystems and how they interrelate; c) flow of energy through food webs; d) habitats and niches; e) changes in an organism's niche at various stages in its life cycle; and f) influences of human activity on ecosystems.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• A niche is the function that an organism performs in the food web of that community. A niche also includes everything else the organism does and needs in its environment. No two types of organisms occupy exactly the same niche in a community. • The organization of a community is defined by the interrelated niches within it. • During its life cycle, an organism's role in the community — its niche — may change. For example, what an animal eats, what eats it, and other relationships will change. • Humans can have a major impact on ecosystems.	

Grade Four
Science Strand

Interrelationships in Earth/Space Systems

This strand focuses on student understanding of how Earth systems are connected and how ~~the~~ Earth interacts with other members of the solar system. The topics developed include shadows; relationships between the sun and ~~the~~ Earth; weather types, patterns, and instruments; properties of soil; characteristics of the ocean environment; and organization of the solar system. This strand includes science standards ~~K.7~~ K.8, 1.6, 2.6, 3.7, 4.6, 5.6, and 6.8.

4.6	The student will investigate and understand how weather conditions and phenomena occur and can be predicted. Key concepts include a) weather phenomena; b) weather measurements and meteorological tools; and c) use of weather measurements and weather phenomena to make weather predictions.

~~Understanding the Standard~~ Overview

This standard focuses on weather conditions and a more technical understanding of the tools and methods used to forecast future atmospheric conditions. Weather is introduced in science standard 2.6. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

4.6 The student will investigate and understand how weather conditions and phenomena occur and can be predicted. Key concepts include
a) weather phenomena;
b) weather measurements and meteorological tools; and
c) use of weather measurements and weather phenomena to make weather predictions.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Temperature is the measure of the amount of ~~heat~~ thermal energy in the atmosphere. • Air pressure is due to the weight of the air and is determined by several factors including the temperature of the air. • A front is the boundary between air masses of different temperature and humidity. • Cirrus, stratus, cumulus, and cumulo-nimbus clouds are associated with certain weather conditions. • Cumulus clouds are fluffy and white with flat bottoms. They usually indicate fair weather. However, when they get larger and darker on the bottom, they ~~produce thunderstorms~~ become cumulo-nimbus clouds. Cumulo-nimbus clouds may produce thunderstorms. • Stratus clouds are smooth, gray clouds that cover the whole sky (block out direct sunlight). Light rain and drizzle are usually associated with stratus clouds. • Cirrus clouds are feathery clouds. They are associated with fair weather. Cirrus clouds often indicate that rain or snow will fall within several hours. • Extreme atmospheric conditions create various kinds of storms such as thunderstorms, hurricanes, and tornadoes. • Different atmospheric conditions create different types of precipitation. • Meteorologists gather data by using a variety of instruments. • Meteorologists use data to predict weather patterns.	In order to meet this standard, it is expected that students ~~should be able to~~ will • ~~use a thermometer~~ design an investigation in which a thermometer is used to compare air temperatures over a period of time. • analyze the changes in air pressure occurring over time, using a barometer, and predict what the changes mean in terms of changing weather patterns. • illustrate and label high and low pressures on a map. • differentiate between the types of weather associated with high and low pressure air masses. Illustrate and label high and low pressure air masses and warm and cold fronts. • differentiate between cloud types (i.e., cirrus, stratus, cumulus, and cumulo-nimbus clouds) and the associated weather. • compare and contrast the formation of different types of precipitation (e.g., rain, snow, sleet, and hail). • recognize a variety of storm types, describe the weather conditions associated with each, and explain when they occur (e.g., thunderstorms, hurricanes, and tornadoes). • analyze and report information about temperature and precipitation on weather maps. • measure wind speed, using an anemometer. • measure precipitation with a rain gauge. • design an investigation in which weather data are gathered using meteorological tools and charted to make weather predictions.

4.6	The student will investigate and understand how weather conditions and phenomena occur and can be predicted. Key concepts include a) weather phenomena; b) weather measurements and meteorological tools; and c) use of weather measurements and weather phenomena to make weather predictions.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• A barometer measures air pressure. • An anemometer measures wind speed. • A rain gauge measures the amount of precipitation. • A thermometer measures the temperature of the air.	

Grade Four
Science Strand

Earth Patterns, Cycles, and Change

This strand focuses on student understanding of patterns in nature, natural cycles, and changes that occur both quickly and slowly over time. An important idea represented in this strand is the relationship among Earth patterns, cycles, and change and their effects on living things. The topics developed include noting and measuring changes, weather and seasonal changes, the water cycle, cycles in the Earth-moon-sun system, our solar system, and change in ~~the~~ Earth's surface over time. This strand includes science standards ~~K.8,~~ K.9, K.10, 1.7, 2.7, 3.8, 3.9, 4.7, 4.8, and 5.7.

4.7	The student will investigate and understand the organization of the solar system. Key concepts include a) the planets in the solar system; b) the order of the planets in the solar system; and c) the relative sizes of the planets.

~~Understanding the Standard~~ Overview

This standard focuses on providing an introduction to our solar system. This includes the introduction to the planets in the solar system, their order in the solar system in relation to the sun, and the sizes of the planets in relation to the size of Earth. A more in-depth study of the solar system is in standard 6.8. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

4.7 The student will investigate and understand the organization of the solar system. Key concepts include
a) the planets in the solar system;
b) the order of the planets in the solar system; and
c) the relative sizes of the planets.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Our solar system is ancient. Early astronomers believed that Earth was the center of the universe and all other heavenly bodies orbited around Earth. We now know that our sun is the center of our solar system and eight planets, a handful of dwarf planets, 170 named moons, dust, gas, and thousands of asteroids and comets orbit around the sun. • Our solar system is made up of eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. • Mercury, Venus, Earth, and Mars are considered terrestrial planets. Jupiter, Saturn, Uranus, and Neptune are called gas giants. • Mercury is closest to the sun and is a small, heavily cratered planet. Mercury looks like our moon. Since Pluto's ~~downgrade~~ reclassification from planet to dwarf planet, Mercury is now the smallest planet in our solar system. • Venus is second from the sun. It is similar to Earth in size and mass, and has a permanent blanket of clouds that trap so much heat that the temperatures on the surface of Venus are hot enough to melt lead. • Earth is third from the sun. Earth's atmosphere, the liquid water found on Earth, and its distance from the sun, among many other factors, make Earth a haven for life. • Mars is fourth from the sun. ~~Mars'~~ The atmosphere on Mars is thin and there is a vast network of canyons and riverbeds on the red planet. Scientists hypothesize that Mars once supported a wet, warm Earth-like climate. • Jupiter is fifth from the sun. Jupiter is the largest planet in the solar	In order to meet this standard, it is expected that students ~~should be able to~~ will • name the eight planets and describe whether they are a terrestrial planet or a gas giant. • sequence the eight planets in the solar system based on their position from the sun. (Mercury is the first from the sun, Venus is the second, etc.) • sequence the eight planets in the solar system based on size (Jupiter is the largest, Saturn is next, etc.) • construct a simple model of the sun and the planets in our solar system.

4.7 The student will investigate and understand the organization of the solar system. Key concepts include
a) the planets in the solar system;
b) the order of the planets in the solar system; and
c) the relative sizes of the planets.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
system and is considered a gas giant. Jupiter has no solid surface. • Saturn is sixth from the sun. ~~Ancient~~ Early scientists thought Saturn was the only planet with rings, but we now know that all four gas giants (Jupiter, Saturn, Uranus, and Neptune) have rings. • Uranus is seventh from the sun. Uranus is a gas giant. • Neptune is eighth from the sun. Neptune appears blue through telescopes and is a gas giant. • The eight planets sorted by size from largest to smallest are: Jupiter, Saturn, Uranus, Neptune, Earth, Venus, Mars, and Mercury. • Pluto is no longer included in the list of planets in our solar system due to its small size and irregular orbit. Many astronomers questioned whether Pluto should be grouped with worlds like Earth and Jupiter. In 2006, this debate led the International Astronomical Union (IAU), the recognized authority in naming heavenly objects, to formally reclassify Pluto. On August 24, 2006, Pluto's status was officially changed from planet to dwarf planet. • A new distinct class of objects called "dwarf planets" was identified in 2006. It was agreed that "planets" and "dwarf planets" are two distinct classes of objects. The first members of the dwarf planet category are Ceres, Pluto and 2003 UB313, given the name Eris. More dwarf planets are expected to be announced by the IAU in the future. • What differentiates a dwarf planet from a planet? For the most part, they are identical, but there is one key difference: A dwarf planet has not "cleared the neighborhood" around its orbit, which means it has not become gravitationally dominant and it shares its orbital space with other bodies of a similar size. • Pluto is smaller than seven of the moons in our solar system and cannot	

4.7 The student will investigate and understand the organization of the solar system. Key concepts include a) the planets in the solar system; b) the order of the planets in the solar system; and c) the relative sizes of the planets.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
be seen without a telescope.	

4.8	The student will investigate and understand the relationships among Earth, the moon, and the sun. Key concepts include a) the motions of Earth, the moon, and the sun; b) the causes for Earth's seasons; c) the causes for the phases of the moon; d) the relative size, position, age, and makeup of Earth, the moon, and the sun; and e) historical contributions in understanding the Earth-moon-sun system.

~~Understanding the Standard~~ Overview

This standard focuses on the Earth-moon-sun system and includes knowledge related to the motions of this system and the results of our unique position in it. This includes the presence of an atmosphere, liquid water, and life. The standard is built on concepts developed in science standards ~~K.7~~ K.8, 1.6, and 3.8 and that will be further expanded in 6.8. A more in-depth study of ~~the~~ Earth's makeup is in standard 5.7. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

Standard 4.8

4.8 The student will investigate and understand the relationships among Earth, the moon, and the sun. Key concepts include

a) the motions of Earth, the moon, and the sun;
b) the causes for Earth's seasons;
c) the causes for the phases of the moon;
d) the relative size, position, age, and makeup of Earth, the moon, and the sun; and
e) historical contributions in understanding the Earth-moon-sun system.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • ~~The~~ Earth completes one revolution around the sun every 365 ¼ days. The moon revolves around ~~the~~ Earth about once every month. • Due to its axial tilt, ~~the~~ Earth experiences seasons during its revolution around the sun. • The phases of the moon are caused by its position relative to ~~the~~ Earth and the sun. The phases of the moon include the new, waxing crescent, first quarter, waxing gibbous, full, waning gibbous, last (third) quarter, and waning crescent. • The sun is an average-sized yellow star, about 110 times the diameter of ~~the~~ Earth. The sun is approximately 4.6 billion years old. • Our moon is a small rocky satellite, having about one-quarter the diameter of ~~the~~ Earth and one-eightieth its mass. It has extremes of temperature, virtually no atmosphere~~, no water, and no~~ or life, and very little water. • ~~The~~ Earth is one of ~~nine~~ eight planets that revolve around the sun and comprise the solar system. ~~The~~ Earth, the third planet from the sun, is one of the four ~~rocky~~ terrestrial inner planets. It is about 150 million kilometers from the sun. ~~(The emphasis is placed on the Earth, rather than the other planets.)~~ • ~~The~~ Earth is a geologically active planet with a surface that is constantly changing. Unlike the other three inner planets (see previous bullet), it	In order to meet this standard, it is expected that students ~~should be able to~~ will • differentiate between rotation and revolution. • describe how ~~the~~ Earth's axial tilt causes the seasons. • model the formation of the eight moon phases, sequence the phases in order, and describe how the phases occur. • describe the major characteristics of the sun, including its approximate size, color, age, and overall composition. • create and describe a model of the Earth-moon-sun system with approximate scale distances and sizes. • compare and contrast the surface conditions of ~~the~~ Earth, the moon, and the sun. • compare and contrast an Earth-centered to the sun-centered model of the solar system. • analyze the differences in what Aristotle, Ptolemy, Copernicus, and Galileo observed and what influenced their conclusions. • describe a contribution of the NASA Apollo missions to our understanding of the moon.

Standard 4.8

4.8 The student will investigate and understand the relationships among Earth, the moon, and the sun. Key concepts include

a) the motions of Earth, the moon, and the sun;
b) the causes for Earth's seasons;
c) the causes for the phases of the moon;
d) the relative size, position, age, and makeup of Earth, the moon, and the sun; and
e) historical contributions in understanding the Earth-moon-sun system.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
has large amounts of life-supporting water and an oxygen-rich atmosphere. ~~The~~ Earth's protective atmosphere blocks out most of the sun's damaging rays. • Our understanding of the solar system has changed from an Earth-centered model of Aristotle and Ptolemy to the sun-centered model of Copernicus and Galileo. • The NASA Apollo missions added greatly to our understanding of the moon. • Our understanding of the sun, moon, and the solar system continues to change with new scientific discoveries.	

Earth Resources

This strand focuses on student understanding the role of resources in the natural world and how people can utilize those resources in a sustainable way. An important idea represented in this strand is the concept of management of resource use. This begins with basic ideas of conservation and proceeds to more abstract consideration of costs and benefits. The topics developed include conservation of materials, soil and plants as resources, energy use, water, Virginia's resources, and how public policy impacts the environment. This strand includes science standards ~~K.10,~~ K.11, 1.8, 2.8, 3.10, 3.11, ~~4.8,~~ 4.9, and 6.9.

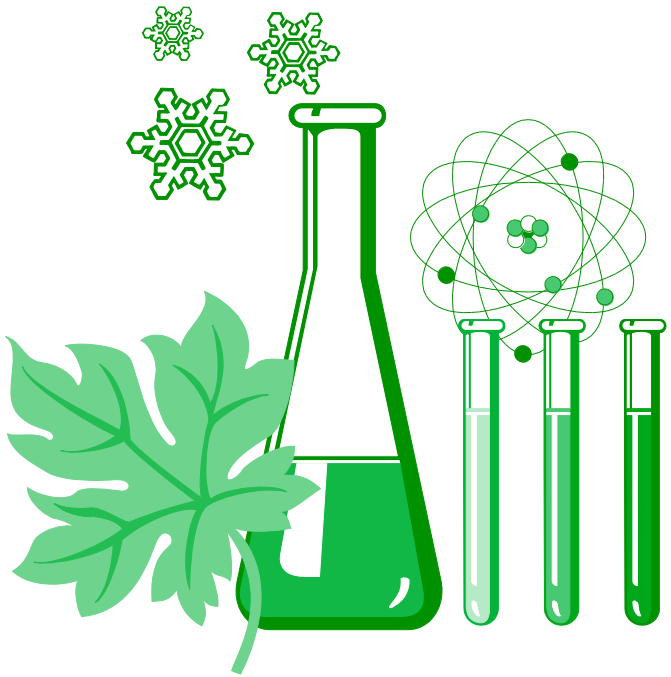
4.9	The student will investigate and understand important Virginia natural resources. Key concepts include a) watersheds and water resources; b) animals and plants; c) minerals, rocks, ores, and energy sources; and d) forests, soil, and land.

~~Understanding the Standard~~ Overview

Virginia has a rich variety of natural resources. These provide the raw materials for our daily lives and sustain our economy. Natural resources are finite and must be used wisely to ~~insure~~ ensure their continued availability. This concept of natural resources is introduced in 1.8 and extended in 6.9. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (4.1) in the context of the key concepts presented in this standard.

4.9 The student will investigate and understand important Virginia natural resources. Key concepts include
a) watersheds and water resources;
b) animals and plants;
c) minerals, rocks, ores, and energy sources; and
d) forests, soil, and land.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Virginia is rich in a wide variety of natural resources, including forests, arable (farmable) land, coal, sand and aggregates (rocks), wildlife and aquatic organisms, clean water and air, and beautiful scenery. • A watershed is an area over which surface water (and the materials it carries) flows to a single collection place. The Chesapeake Bay watershed covers approximately half of Virginia's land area. The other two major watershed systems are the Gulf of Mexico and the North Carolina Sounds. • Virginia's water resources include groundwater, lakes, reservoirs, rivers, bays, and the Atlantic Ocean. • Virginia has a great variety of plant and animal resources. • Natural and cultivated forests are a widespread resource in Virginia. • Virginia's soil and land support a great variety of life, provide space for many economic activities, and offer a variety of recreational opportunities.	In order to meet this standard, it is expected that students ~~should be able to~~ will • compare and contrast natural and ~~man-made~~ human-made resources. • distinguish among rivers, lakes, and bays; describe characteristics of each; and name an example of each in Virginia. • create and interpret a model of a watershed. Evaluate the statement: "We all live downstream." • identify watershed addresses. • recognize the importance of Virginia's mineral resources, including coal, limestone, granite, and sand and gravel. • appraise the importance of natural and cultivated forests in Virginia. • describe a variety of soil and land uses important in Virginia.



Science Standards of Learning Curriculum Framework

Grade Five

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs or activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Grade Five
Science Strand

Scientific Investigation, Reasoning, and Logic

This strand represents a set of systematic inquiry skills that defines what a student ~~should~~ will be able to do when conducting activities and investigations, and represents the student understanding of the nature of science. The various skill categories are described in the "Investigate and Understand" section of the Introduction to the *Science Standards of Learning*, and the skills in science standard 5.1 represent more specifically what a student should be able to do as a result of science experiences in fifth grade. Across the grade levels, the skills in the "Scientific Investigation, Reasoning, and Logic" strand form a nearly continuous sequence of investigative skills and an understanding of the nature of science. ~~(Please note Appendix, "Science Skills, Scope, & Sequence.")~~ It is important that the classroom teacher understand~~s~~ how the skills in standard 5.1 are a key part of this sequence (i.e., K.1, K.2, 1.1, 2.1, 3.1, 4.1, 5.1, and 6.1). The fifth-grade curriculum should ensure that skills from preceding grades are continuously reinforced and developed. ~~It is also important to note that 25 percent of items on the third and fifth grade SOL assessments measure the skills defined in the "Scientific Investigation, Reasoning, and Logic" strand.~~

5.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) items such as rocks, minerals, and organisms are identified using various classification keys;
b) estimates are made and accurate measurements of length, mass, volume, and temperature are made in metric units using proper tools;
c) estimates are made and accurate measurements of elapsed time are made using proper tools;
d) hypotheses are formed from testable questions;
e) independent and dependent variables are identified;
f) constants in an experimental situation are identified;
g) data are collected, recorded, analyzed, and communicated using proper graphical representations and metric measurements;
h) predictions are made using patterns from data collected, and simple graphical data are generated;
i) inferences are made and conclusions are drawn;
j) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
k) current applications are used to reinforce science concepts.

~~Understanding the Standard~~ Overview

The skills in standard 5.1 are intended to define the "investigate" component and the understanding of the nature of science ~~of~~ for all of the other fifth-grade standards (5.2–5.7). The intent of standard 5.1 is for students to continue to develop a range of inquiry skills, ~~and~~ achieve proficiency with those skills, and develop and reinforce their understanding of the nature of science in the context of the concepts developed at the fifth-grade level. **Standard 5.1 does not require a discrete unit be taught on scientific investigation because the ~~inquiry~~ skills that make up the standard should be incorporated in all the other fifth-grade standards.** It is also intended that by developing these skills, students will achieve a greater understanding of scientific inquiry and the nature of science and will more fully grasp the content-related concepts.

5.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) items such as rocks, minerals, and organisms are identified using various classification keys;
b) estimates are made and accurate measurements of length, mass, volume, and temperature are made in metric units using proper tools;
c) estimates are made and accurate measurements of elapsed time are made using proper tools;
d) hypotheses are formed from testable questions;
e) independent and dependent variables are identified;
f) constants in an experimental situation are identified;
g) data are collected, recorded, analyzed, and communicated using proper graphical representations and metric measurements;
h) predictions are made using patterns from data collected, and simple graphical data are generated;
i) inferences are made and conclusions are drawn;
j) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
k) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts: a) the natural world is understandable; b) science is based on evidence, both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. In grade five, an emphasis should be placed on concepts a, b, c, d, and e. • Science assumes that the natural world is understandable. Scientific inquiry can provide explanations about nature. This expands students' ~~knowledge~~ thinking from just a knowledge of facts to understanding ~~why~~ how ~~the~~ facts are relevant to everyday life. • Science demands evidence. Scientists develop their ideas based on	In order to meet this standard, it is expected that students ~~should be able to~~ will • use classification keys to identify rocks, minerals, and organisms. • select and use the appropriate instruments, including centimeter rulers, meter sticks, graduated cylinders, balances, stopwatches, and thermometers for making basic measurements. • make ~~plausible~~ reasonable estimations of length, mass, ~~and~~ volume, and elapsed time. • measure ~~temperature,~~ length, mass, ~~and~~ volume, and temperature using metric measures. This includes millimeters, centimeters, meters, kilometers, grams, kilograms, milliliters, liters, and degrees Celsius. • use a testable question to form a hypothesis as a~~n~~ cause and effect (e.g., "if…, then…") statement. • analyze the variables in a simple experiment and identify the ~~manipulated (~~independent~~)~~ and ~~responding (~~dependent~~)~~ variables, and the constants. • collect, record, analyze, and report data, using charts and tables, and

5.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) items such as rocks, minerals, and organisms are identified using various classification keys;
b) estimates are made and accurate measurements of length, mass, volume, and temperature are made in metric units using proper tools;
c) estimates are made and accurate measurements of elapsed time are made using proper tools;
d) hypotheses are formed from testable questions;
e) independent and dependent variables are identified;
f) constants in an experimental situation are identified;
g) data are collected, recorded, analyzed, and communicated using proper graphical representations and metric measurements;
h) predictions are made using patterns from data collected, and simple graphical data are generated;
i) inferences are made and conclusions are drawn;
j) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
k) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
evidence and they change their ideas when new evidence becomes available or the old evidence is viewed in a different way. • Science uses both logic and innovation. Innovation has always been an important part of science. Scientists draw upon their creativity to visualize how nature works, using analogies, metaphors, and mathematics. • Scientific ideas are durable yet subject to change as new data are collected. The main body of scientific knowledge is very stable and grows by being corrected slowly and having its boundaries extended gradually. Scientists themselves accept the notion that scientific knowledge is always open to improvement and can never be declared absolutely certain. New questions arise, new theories are proposed, new instruments are invented, and new techniques are developed. • Science is a complex social endeavor. It is a complex social process for producing knowledge about the natural world. Scientific knowledge represents the current consensus among scientists as to what is the best explanation for phenomena in the natural world. This consensus does not arise automatically, since scientists with different backgrounds from all over the world may interpret the same data differently. To build a consensus, scientists communicate their findings to other scientists and attempt to replicate one another's findings. In order to model the work	translate numerical data into bar or line graphs. • make predictions based on trends in data. This requires the recognition of patterns and trends and determination of what those trends may represent. • ~~define/~~make ~~observations and~~ inferences and draw conclusions. • distinguish between ~~observations and~~ inferences and conclusions. • ~~measure, record, identify, collect, and organize observations. Distinguish between qualitative and quantitative observations.~~ • construct a physical model to clarify an explanation, demonstrate a relationship, or solve a need.

5.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) items such as rocks, minerals, and organisms are identified using various classification keys;
b) estimates are made and accurate measurements of length, mass, volume, and temperature are made in metric units using proper tools;
c) estimates are made and accurate measurements of elapsed time are made using proper tools;
d) hypotheses are formed from testable questions;
e) independent and dependent variables are identified;
f) constants in an experimental situation are identified;
g) data are collected, recorded, analyzed, and communicated using proper graphical representations and metric measurements;
h) predictions are made using patterns from data collected, and simple graphical data are generated;
i) inferences are made and conclusions are drawn;
j) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
k) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
of professional scientists, it is essential for fifth-grade students to engage in frequent discussions with peers about their understanding of their investigations. • Systematic investigations require standard measures and consistent and reliable tools. Metric measures are a standard way to make measurements and are recognized around the world. • A classification key is an important tool used to help identify objects and organisms. It consists of a branching set of choices organized in levels, with most levels of the key having two choices. Each level provides more specific descriptors, eventually leading to identification. • A hypothesis is an educated guess/prediction about what will happen based on what you already know and what you have already learned from your research. It must be worded so that it is "testable." The hypothesis should be written as an "If…, then…." statement, such as "If all light is blocked from a plant for two weeks, then the plant will die." • An ~~*manipulated*~~ independent variable is the factor in an experiment that is altered by the experimenter. The independent variable is purposely changed or manipulated. • A ~~*responding*~~ dependent variable is the factor in an experiment that changes as a result of the ~~manipulated changes made to~~ manipulation of	

5.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) items such as rocks, minerals, and organisms are identified using various classification keys;
b) estimates are made and accurate measurements of length, mass, volume, and temperature are made in metric units using proper tools;
c) estimates are made and accurate measurements of elapsed time are made using proper tools;
d) hypotheses are formed from testable questions;
e) independent and dependent variables are identified;
f) constants in an experimental situation are identified;
g) data are collected, recorded, analyzed, and communicated using proper graphical representations and metric measurements;
h) predictions are made using patterns from data collected, and simple graphical data are generated;
i) inferences are made and conclusions are drawn;
j) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
k) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
the independent variable. • The constants in an experiment are those things that are ~~not changed~~ purposefully kept the same throughout the experiment. ~~Constants are all the factors that remain the same throughout the experiment.~~ • When conducting experiments, data are collected, recorded, analyzed, and communicated using proper graphical representations and metric measurements. • Systematic investigations require organized reporting of data. The way the data are displayed can make it easier to see important patterns, trends, and relationships. Bar graphs and line graphs are useful tools for reporting discrete data and continuous data, respectively. • A scientific prediction is a forecast about what may happen in some future situation. It is based on the application of factual information and principles and recognition of trends and patterns. • Estimation is a useful tool for making approximate measures and giving general descriptions. In order to make reliable estimates, one must have experience using the particular unit. • ~~Observation is the use of senses to collect information about the environment.~~ An ~~I~~inference is a tentative explanation based on	

5.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) items such as rocks, minerals, and organisms are identified using various classification keys;
b) estimates are made and accurate measurements of length, mass, volume, and temperature are made in metric units using proper tools;
c) estimates are made and accurate measurements of elapsed time are made using proper tools;
d) hypotheses are formed from testable questions;
e) independent and dependent variables are identified;
f) constants in an experimental situation are identified;
g) data are collected, recorded, analyzed, and communicated using proper graphical representations and metric measurements;
h) predictions are made using patterns from data collected, and simple graphical data are generated;
i) inferences are made and conclusions are drawn;
j) models are constructed to clarify explanations, demonstrate relationships, and solve needs; and
k) current applications are used to reinforce science concepts.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
background knowledge and available data. ~~the use of prior knowledge and experience to generate conclusions about those observations.~~ • A conclusion is a summary statement based on the results of an investigation. Scientific conclusions are based ~~both~~ on verifiable observations (science is empirical) ~~and on inferences~~. • Scientific modeling is the process of generating abstract, conceptual, graphical and/or mathematical models. It is an approximation or simulation of a real system that omits all but the most essential variables of the system. In order to create a model, a scientist must first make some assumptions about the essential structure and relationships of objects and/or events in the real world. These assumptions are about what is necessary or important to explain the phenomena. • It is important for students to apply the science content that they have learned to current issues and applications.	

Force, Motion, and Energy

This strand focuses on student understanding of what force, motion, and energy are and how the concepts are connected. The major topics developed in this strand include magnetism, types of motion, simple and compound machines, and energy forms and transformations, especially electricity, sound, and light. This strand includes science standards K.3, 1.2, 2.2, 3.2, 4.2, 4.3, 5.2, 5.3, 6.2, and 6.3.

5.2	The student will investigate and understand how sound is created and transmitted, and how it is used. Key concepts include a) compression waves; b) vibration, compression, wavelength, frequency, amplitude; c) the ability of different media (solids, liquids, and gases) to transmit sound; and d) uses and applications of sound waves.

~~Understanding the Standard~~ Overview

This standard introduces the concept of what sound is and how sound is transmitted. The students are introduced to scientific vocabulary and the phenomena of compression waves, frequency, waves, wavelength, and vibration in this standard. Students should make predictions about and experiment with the transmission of sound. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (5.1) in the context of the key concepts presented in this standard.

5.2 The student will investigate and understand how sound is created and transmitted, and how it is used. Key concepts include
a) compression waves;
b) vibration, compression, wavelength, frequency, amplitude;
c) the ability of different media (solids, liquids, and gases) to transmit sound; and
d) uses and applications of sound waves.

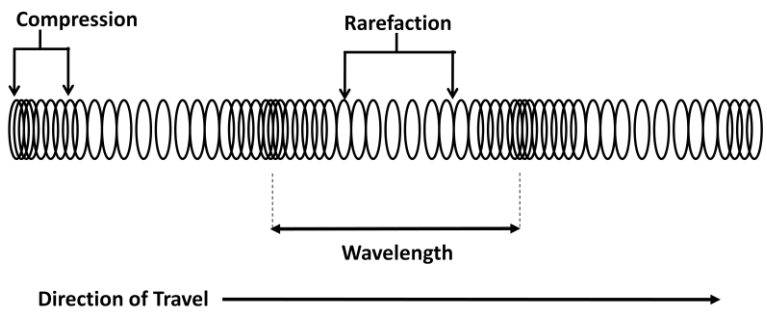
~~Overview~~ Understanding the Standard

(Background Information for Instructor Use Only)

~~The concepts developed in this standard include the following:~~

- Sound is a form of energy produced and transmitted by vibrating matter.
- Sound waves are compression (longitudinal) waves.
- When compression (longitudinal) waves move through matter (solid, liquid, or a gas), the molecules of the matter move backward and forward in the direction in which the wave is traveling. As sound waves travel, molecules are pressed together in some parts (compression) and in some parts are spread out (rarefaction). A child's toy in the form of a coil is a good tool to demonstrate a compression (longitudinal) wave.

Compression (Longitudinal) Wave



- ~~Sound travels in waves and can be described by the wavelength and frequency of the waves. A wave is a disturbance moving through a medium (solid, liquid, or gas).~~

Essential Knowledge, Skills, and Processes

In order to meet this standard, it is expected that students ~~should be able to~~ will

- use the basic terminology of sound to describe what sound is, how it is formed, how it affects matter, and how it travels.
- create and interpret a model or diagram of a compression wave.
- explain why sound waves travel only where there is matter to transmit them.
- explain the relationship between frequency and pitch.
- design an investigation to determine what factors affect the pitch of a vibrating object. This includes vibrating strings, rubber bands, beakers/bottles of air and water, tubes (as in wind chimes), and other common materials.
- compare and contrast sound traveling through a solid with sound traveling through the air. Explain how different media (solid, liquid, and gas) will affect the transmission of sound.
- compare and contrast the sound~~s~~ (voice) that humans make and hear to ~~that~~ those of other animals. This includes bats, dogs, and whales.
- compare and contrast how different kinds of musical instruments make sound. This includes string instruments, woodwinds, percussion instruments, and brass instruments.

5.2 The student will investigate and understand how sound is created and transmitted, and how it is used. Key concepts include

a) compression waves;
b) vibration, compression, wavelength, frequency, amplitude;
c) the ability of different media (solids, liquids, and gases) to transmit sound; and
d) uses and applications of sound waves.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• The frequency of sound is the number of ~~vibrations~~ wavelengths in a given unit of time. • When we talk, sound waves travel in air. Sound also travels in liquids and solids. Sound waves must have a medium ~~in~~ through which to travel. In a vacuum sound cannot travel because there is no matter for it to move through. • ~~Sound is a compression wave moving outward from its source.~~ The wavelength of sound is the distance between two compressions or between two rarefactions. The wavelength can be measured from any point on a wave as long as it is measured to the same point on the next wave. • Pitch is determined by the frequency of a vibrating object. Objects vibrating faster have a higher pitch than objects vibrating slower. A change in frequency of sound waves causes an audible sensation—a difference in pitch. • Amplitude is the amount of energy in a compression (longitudinal) wave and is related to intensity and volume. For example, when a loud sound is heard, it is because many molecules have been vibrated with much force. A soft sound is made with fewer molecules being vibrated with less force. • Sound travels more quickly through solids than through liquids and gases because the molecules of a solid are closer together. Sound travels ~~most slowly~~ the slowest through gases because the molecules of a gas are farthest apart. • Some animals make and hear ranges of sound vibrations different from those that humans can make and hear.	

5.2 The student will investigate and understand how sound is created and transmitted, and how it is used. Key concepts include a) compression waves; b) vibration, compression, wavelength, frequency, amplitude; c) the ability of different media (solids, liquids, and gases) to transmit sound; and d) uses and applications of sound waves.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
• Musical instruments vibrate to produce sound. There are many different types of musical instruments and each instrument causes the vibrations in different ways. The most widely accepted way to classify musical instruments is to classify them by the way in which the sound is produced by the instrument. The four basic classifications are percussion instruments (e.g., drums, cymbals), stringed instruments (e.g., violin, piano, guitar), wind instruments (e.g., flute, clarinet, trumpet, trombone), and electronic instruments (e.g., electronic organ, electric guitar).	

5.3	The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include a) transverse waves; b) the visible spectrum; c) opaque, transparent, and translucent; d) reflection of light from reflective surfaces; and e) refraction of light through water and prisms.

~~Understanding the Standard~~ Overview

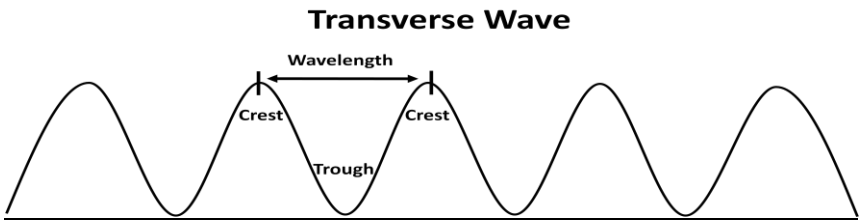
Concepts related to light are introduced at the fifth-grade level. Standard 5.3 focuses on the characteristics of visible light~~,~~ and the tools that aid in the production and use of light~~, and the historical contributions of inventors and scientists~~. Instruction should center on the basic science concerning light energy and how we use light in our daily lives. A related science standard is 4.2, which focuses on forms of energy and provides a foundation for understanding that light is energy. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (5.1) in the context of the key concepts presented in this standard.

5.3 The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include
a) transverse waves;
b) the visible spectrum;
c) opaque, transparent, and translucent;
d) reflection of light from reflective surfaces; and
e) refraction of light through water and prisms.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Light has properties of both a wave and a particle. Recent theory identifies light as a small particle, called a photon. A photon moves in a straight line. In both the light wave and photon descriptions, light is energy. • Because light has both electric and magnetic fields, it is referred to as electromagnetic radiation. Light waves ~~are~~ move as transverse waves and travel through a vacuum at a speed of approximately 186,000 miles per second (2.99 x 10^8 meters per second). Compared to sound, light travels extremely fast. It takes light from the sun less than 8½ minutes to travel 93 million miles (150 million kilometers) to reach ~~the~~ Earth. • Unlike sound, light waves travel in straight paths called rays and do not need a medium through which to move. A ray is the straight line that represents the path of light. A beam is a group of parallel rays. • Light waves are characterized by their wavelengths and the frequency of their wavelengths. ~~In the visible spectrum, red has the longest wavelength, and violet has the shortest. Wavelengths get progressively shorter from red to violet.~~ • The size of a wave is measured as its wavelength, which is the distance between any two corresponding points on successive waves, usually crest-to-crest or trough-to-trough. The wavelength can be measured from any point on a wave as long as it is measured to the same point on the next wave.	In order to meet this standard, it is expected that students ~~should be able to~~ will • diagram and label a representation of a light wave, including wavelength, ~~peak,~~ crest, and trough. • explain the relationships between wavelength and the color of light. Name the colors of the visible spectrum. • explain the terms transparent, translucent, and opaque, and give an example of each. • compare and contrast reflection and refraction, using water, prisms, and mirrors. • analyze the effects of a prism on white light and describe why this occurs. Explain ~~why a rainbow occurs~~ the relationship between the refraction of light and the formation of a rainbow.

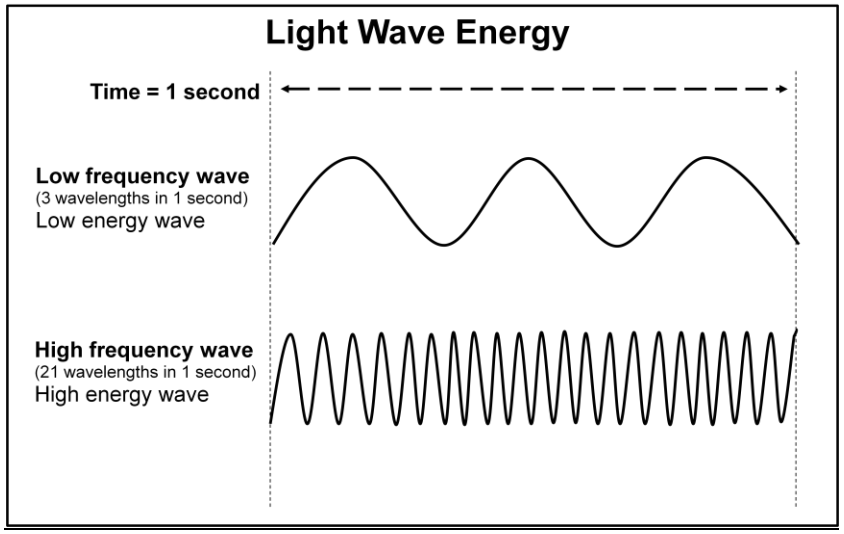
5.3 The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include

a) transverse waves;
b) the visible spectrum;
c) opaque, transparent, and translucent;
d) reflection of light from reflective surfaces; and
e) refraction of light through water and prisms.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
 • Frequency is the number of waves passing a given point every second. The greater the frequency, the greater the amount of energy. • Light waves are waves of energy. The amount of energy in a light wave is proportionally related to its frequency: high frequency light has high energy; low frequency light has low energy. The more wavelengths in a light wave in a given period of time, the higher the energy level. Thus gamma rays have the most energy, and radio waves have the least. Of visible light, violet has the most energy and red the least.	

5.3 The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include

a) transverse waves;
b) the visible spectrum;
c) opaque, transparent, and translucent;
d) reflection of light from reflective surfaces; and
e) refraction of light through water and prisms.

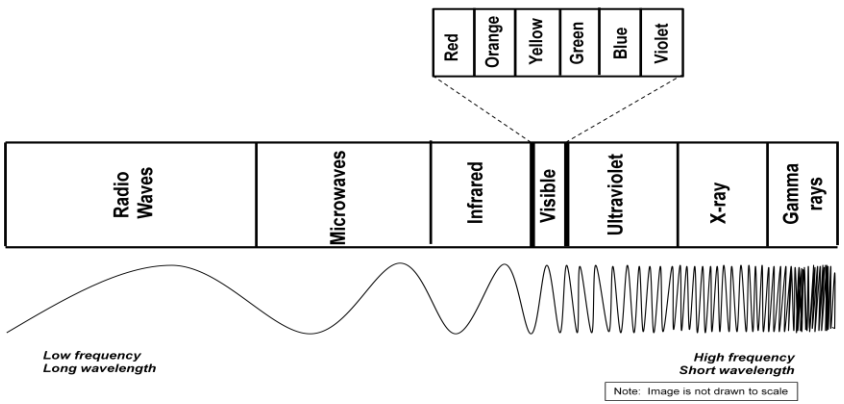
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
 • The entire range of electromagnetic radiation (light) is called the electromagnetic spectrum.	

5.3 The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include

a) transverse waves;
b) the visible spectrum;
c) opaque, transparent, and translucent;
d) reflection of light from reflective surfaces; and
e) refraction of light through water and prisms.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes

Electromagnetic Spectrum



- The only difference between the various types of electromagnetic radiation is the amount of energy. Sunlight consists of the entire electromagnetic spectrum.
- The wavelengths detectible by the human eye represent only a very small part of the total electromagnetic spectrum. ~~The part of the electromagnetic spectrum that is visible light is a very narrow part.~~
- We see visible light ~~waves~~ as the colors of the rainbow. Each color has a different wavelength. Red has the longest wavelength and violet has the shortest wavelength. The colors of the visible spectrum from the longest wavelength to the shortest wavelength are: red, orange, yellow, green, blue, and violet (ROYGBV). Most scientists no longer include the color

5.3 The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include
a) transverse waves;
b) the visible spectrum;
c) opaque, transparent, and translucent;
d) reflection of light from reflective surfaces; and
e) refraction of light through water and prisms.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
indigo, which used to be included between blue and violet. • Black and white are not spectral colors. Black is when a material absorbs all the visible light and no light is reflected back. Black is a total absence of reflected light. White is a reflection of all visible light together. • Light travels in straight paths until it hits an object, where it bounces off (is reflected), is bent (is refracted), passes through the object (is transmitted), or is absorbed as heat. • The term reflected light refers to light waves that are neither transmitted nor absorbed, but are thrown back from the surface of the medium they encounter. If the surface of the medium contacted by the wave is smooth and polished (e.g., a mirror), each reflected wave will be reflected back at the same angle as the incident wave. The wave that strikes the surface of the medium (e.g., a mirror) is called the incident wave, and the one that bounces back is called the reflected wave. • ~~Visible light is a combination of several different wavelengths of light traveling together. These wavelengths are represented by the colors red, orange, yellow, green, blue, indigo, and violet (ROYGBIV).~~ • Refraction means the bending of a wave resulting from a change in its velocity (speed) as it moves from one medium to another (e.g., light moving from the air into water). The frequency of the wave does not change. • The amount of bending of the light wave (refraction) depends on: 1. The density of the material it is entering; 2. The wavelength of the light wave; and 3. The angle at which the original light wave enters the new medium.	

5.3 The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include
a) transverse waves;
b) the visible spectrum;
c) opaque, transparent, and translucent;
d) reflection of light from reflective surfaces; and
e) refraction of light through water and prisms.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• Some examples of refraction are when: 1. Refraction causes a setting sun to look flat. 2. A spoon appears to bend when it is immersed in a cup of water. The bending seems to take place at the surface of the water, or exactly at the point where there is a change of density. 3. Shadows on the bottom of a pool are caused because air and water have different densities. 4. A glass prism disperses white light into its individual colors. As visible light exits the prism, it is refracted and separated into a display of colors. • A rainbow is an example of both refraction and reflection. Sunlight is first refracted when it enters the surface of a spherical raindrop, it is then reflected off the back of the raindrop, and once again refracted as it leaves the raindrop. • A prism can be used to refract and disperse visible light. When the different wavelengths of light in visible light pass through a prism, they are bent at different angles (refracted). Dispersion occurs when we see the light separated into a display of colors: ROYGBV. ~~The colors of light we see are red, orange, yellow, green, blue, indigo, and violet.~~ • Dispersion is the separation of light. Dispersion occurs with transparent surfaces that are not parallel to each other, such as a prism or gemstone facets. • Light passes through some materials easily (transparent materials), through some materials partially (translucent materials), and through some not at all (opaque materials). The relative terms transparent, translucent,	

5.3 The student will investigate and understand basic characteristics of visible light and how it behaves. Key concepts include a) transverse waves; b) the visible spectrum; c) opaque, transparent, and translucent; d) reflection of light from reflective surfaces; and e) refraction of light through water and prisms.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
and opaque indicate the amount of light that passes through an object. 1. Examples of transparent materials include clear glass, clear plastic food wrap, clean water, and air. 2. Examples of translucent materials include wax paper, frosted glass, thin fabrics, some plastics, and thin paper. 3. Examples of opaque materials include metal, wood, bricks, aluminum foil, and thick paper.	

Grade Five
Science Strand

Matter

This strand focuses on the description, physical properties, and basic structure of matter. The major topics developed in this strand include concepts related to the basic description of objects, ~~states~~ phases of matter (solids, liquids, and gases – especially water), phase changes, mass and volume, and the structure ~~of~~ and classification of matter. This strand includes science standards K.4, K.5, 1.3, 2.3, 3.3, 5.4, 6.4, 6.5, and 6.6.

5.4	The student will investigate and understand that matter is anything that has mass and takes up space; and occurs as a solid, liquid, or gas. Key concepts include a) distinguishing properties of each phase of matter; b) the effect of temperature on the phases of matter; c) atoms and elements; d) molecules and compounds; and e) mixtures including solutions.

~~Understanding the Standard~~ Overview

This standard incorporates various characteristics of matter such as mass, volume, and the effect of ~~heat~~ temperature changes on the three ~~states~~ phases of matter. Instruction should center on the basic structure of matter and how it behaves. This standard builds on standard 3.3, which provides a basis for understanding the structure of matter. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (5.1) in the context of the key concepts presented in this standard.

5.4 The student will investigate and understand that matter is anything that has mass and takes up space; and occurs as a solid, liquid, or gas. Key concepts include

a) distinguishing properties of each phase of matter;
b) the effect of temperature on the phases of matter;
c) atoms and elements;
d) molecules and compounds; and
e) mixtures including solutions.

~~Overview~~ Understanding the Standard

(Background Information for Instructor Use Only)

~~The concepts developed in this standard include the following:~~

- Matter is anything that has mass and volume.
- Mass is the amount of matter in an object. The mass of an object does not change. (Weight of an object changes based on the gravitational pull on it. A person will have the same mass on Earth, Mars, and our moon. However, his or her weight on our moon will be 1/6 of what it is on Earth and will be 1/3 as much on Mars.)
- Matter can exist in several distinct forms which are called phases. The three basic phases of matter generally found on Earth are gas, liquid, and solid. (Though other phases of matter have been identified, these are the phases of matter that fifth-grade students are expected to know.)

Characteristics of Gases, Liquids, and Solids

gas	liquid	solid
Assumes the shape of its container	Assumes the shape of its container	Retains a fixed shape
Assumes the volume of its container – no definite volume	Has a definite volume	Has a definite volume
Compressible (lots of free space between particles)	Not easily compressible (little free space between particles)	Not easily compressible (little free space between particles)
Flows easily (particles can move past one another)	Flows easily (particles can move/slide past one another)	Does not flow easily (rigid-particles cannot move/slide past one another)

Essential Knowledge, Skills, and Processes

In order to meet this standard, it is expected that students ~~should be able to~~ will

- construct and interpret a sequence of models (diagrams) showing the activity of molecules in all three ~~states~~ phases of matter.
- construct and interpret models of atoms~~, elements,~~ and molecules~~, and compounds~~.
- identify substances as being an element or a compound.
- design an investigation to determine how ~~heat~~ a change in temperature affects the ~~states~~ phases of matter (e.g., water). Include in the design ways information will be recorded, what measures will be made, what instruments will be used, and ways the data will be graphed.
- compare and contrast mixtures and solutions~~, elements and compounds, and atoms and molecules~~.

5.4	The student will investigate and understand that matter is anything that has mass and takes up space; and occurs as a solid, liquid, or gas. Key concepts include a) distinguishing properties of each phase of matter; b) the effect of temperature on the phases of matter; c) atoms and elements; d) molecules and compounds; and e) mixtures including solutions.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• As its temperature increases, many kinds of matter change from a solid to a liquid to a gas. As its temperature decreases, that matter changes from a gas to a liquid to a solid. • All matter, regardless of its size, shape, or color, is made of particles (atoms and molecules) that are too small to be seen by the unaided eye. • There are more than 100 known elements that make up all matter. A few of the more familiar elements include: hydrogen (H), oxygen (O), helium (He), carbon (C), sodium (Na), and potassium (K). The smallest part of an element is an atom. • A mixture is a combination of two or more substances that do not lose their identifying characteristics when combined. A solution is a mixture in which one substance dissolves in another. • When two or more elements combine to form a new substance, it is called a compound. There are many different types of compounds because atoms of elements combine in many different ways (and in different whole number ratios) to form different compounds. Examples include water (H_2O) and table salt (NaCl). The smallest part of a compound is a molecule. • Nanotechnology is the study of materials at the molecular (atomic) scale. Items at this scale are so small they are no longer visible with the naked eye. Nanotechnology has shown that the behavior and properties of some substances at the nanoscale (a nanometer is one-billionth of a meter) contradict how they behave and what their properties are at the visible scale. Many products on the market today are already benefiting from nanotechnology such as sunscreens, scratch-resistant coatings, and	

5.4 The student will investigate and understand that matter is anything that has mass and takes up space; and occurs as a solid, liquid, or gas. Key concepts include a) distinguishing properties of each phase of matter; b) the effect of temperature on the phases of matter; c) atoms and elements; d) molecules and compounds; and e) mixtures including solutions.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
medical procedures.	

Grade Five
Science Strand

Living Systems

This strand begins in second-grade and builds from basic to more complex understandings of a system, both at the ecosystem level and at the level of the cell. The concept of ~~kingdoms~~ characteristics common to various groups of living ~~things~~ organisms and ~~a~~ general and specific ~~classifying~~ classification of organisms based on the characteristics are also presented. The other major topics developed in the strand include the types of relationships among organisms in a food chain, different types of environments and the organisms they support, and the relationship between organisms and their nonliving environment. This strand includes science standards 2.5, 3.5, 3.6, 4.5, 5.5, and 6.7.

5.5	The student will investigate and understand that organisms are made of one or more cells and have distinguishing characteristics that play a vital role in the organism's ability to survive and thrive in its environment. Key concepts include a) basic cell structures and functions; b) classification of organisms using physical characteristics, body structures, and behavior of the organism; and c) traits of organisms that allow them to survive in their environment.

~~Understanding the Standard~~ Overview

This standard emphasizes the major categories of living ~~things~~ organisms and builds on science standards 2.4 and 4.4. The use of a microscope may be applied to the study of plants, animals, and cells. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (5.1) in the context of the key concepts presented in this standard.

5.5 The student will investigate and understand that organisms are made of one or more cells and have distinguishing characteristics that play a vital role in the organism's ability to survive and thrive in its environment. Key concepts include

a) basic cell structures and functions;
b) classification of organisms using physical characteristics, body structures, and behavior of the organism; and
c) traits of organisms that allow them to survive in their environment.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Living things are made of cells. Cells carry out all life processes. New cells come from existing cells. Cells are too small to be seen with the eye alone. By using a microscope, many parts of a cell can be seen. • Though plant and animal cells are similar, they are also different in shape and in some of their parts. Plant cells tend to be rectangular, while animal cells tend to be spherical or at times irregular. • Organisms that share similar characteristics can be organized into groups in order to help understand similarities and differences. • ~~Living things can be categorized into kingdoms: monerans protists, fungi, plants, and animals.~~ • Plants can be categorized as vascular (having special tissues to transport food and water — for example, trees and flowering plants) and nonvascular (not having tissues to transport food and water — for example, moss, liverworts, and hornworts). Most plants are vascular. • Animals can be categorized as vertebrates (having backbones) or invertebrates (not having backbones).	In order to meet this standard, it is expected that students ~~should be able to~~ will • draw, label, and describe the essential structures and functions of plant and animal cells. For plants, include the nucleus, cell wall, cell membrane, vacuole, chloroplasts, and cytoplasm. For animals, include the nucleus, cell membrane, vacuole, and cytoplasm. • design an investigation to make observations of cells. • compare and contrast plant and animal cells and identify their major parts and functions. • group organisms into categories, using their characteristics: living things (kingdoms), plants (vascular and nonvascular), and animals (vertebrates or invertebrates). Name and describe two common examples of each group. • compare and contrast the distinguishing characteristics of ~~the kingdoms of~~ groups of organisms. • identify and explain traits of organisms that allow them to survive in their environment.

Grade Five
Science Strand

Interrelationships in Earth/Space Systems

This strand focuses on student understanding of how Earth systems are connected and how ~~the~~ Earth interacts with other members of the solar system. The topics developed include shadows; relationships between the sun and ~~the~~ Earth; weather types, patterns, and instruments; properties of soil; characteristics of the ocean environment; and organization of the solar system. This strand includes science standards ~~K.7~~ K.8, 1.6, 2.6, 3.7, 4.6, 5.6, and 6.8.

5.6	The student will investigate and understand characteristics of the ocean environment. Key concepts include a) geological characteristics; b) physical characteristics; and c) ecological characteristics.

~~Understanding the Standard~~ Overview

This standard extends the study of ecosystems to the ocean environment. It focuses on the major descriptive characteristics of oceans. Among the concepts are the geological characteristics of the ocean floor, the physical characteristics of ocean water, and the ecological characteristics of communities of marine organisms. Connections can be made to standards 5.2, 5.3, 5.4, 5.5, and 5.7. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (5.1) in the context of the key concepts presented in this standard.

5.6 The student will investigate and understand characteristics of the ocean environment. Key concepts include
a) geological characteristics;
b) physical characteristics; and
c) ecological characteristics.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Oceans cover about 70 percent of the surface of ~~the~~ Earth. • Important features of the ocean floor near the continents are the continental shelf, the continental slope, and the continental rise. These areas are covered with thick layers of sediments (sand, mud, rocks). • The depth of the ocean varies. Ocean trenches are very deep, and the continental shelf is relatively shallow. • Ocean water is a complex mixture of gases (air) and dissolved solids (salts, especially sodium chloride). Marine organisms are dependent on dissolved gases for survival. The salinity of ocean water varies in some places depending on rates of evaporation and amount of runoff from nearby land. • The basic motions of ocean water are the waves, currents, and tides. • Ocean currents, including the Gulf Stream, are caused by wind patterns and the differences in water densities (due to salinity and temperature differences). Ocean currents affect the mixing of ocean waters. This can affect plant and animal populations. Currents also affect navigation routes. • As the depth of ocean water increases, the temperature decreases, the pressure increases, and the amount of light decreases. These factors influence the type of life forms that are present at a given depth. • Plankton are tiny free-floating organisms that live in water. Plankton may be animal-like or plant-like. Animal-like plankton are called zooplankton. Plant-like plankton (phytoplankton) carry out most of the photosynthesis on Earth. Therefore, they provide much of Earth's oxygen. Phytoplankton form the base of the ocean food web. Plankton	In order to meet this standard, it is expected that students ~~should be able to~~ will • ~~explain key terminology related to the ocean environment.~~ • create and interpret a model of the ocean floor and label and describe each of the major features. • research and describe the variation in depths associated with ocean features, including the continental shelf, slope, rise, the abyssal plain, and ocean trenches. • design an investigation (including models and simulations) related to physical characteristics of the ocean environment (depth, salinity, formation of waves, causes of tides, and currents, such as the Gulf Stream). • interpret graphical data related to physical characteristics of the ocean. • explain the formation of ocean currents and describe and locate the Gulf Stream. • design an investigation (including models and simulations) related to ~~biologic characteristics~~ ecological relationships of the ocean environment ~~(ecological relationships)~~. • interpret graphical data related to the ~~biological~~ ecological characteristics of the ocean, such as the number of organisms vs. the depth of the water. • analyze how the physical characteristics (depth, salinity, and temperature) of the ocean affect where marine organism can live.

5.6 The student will investigate and understand characteristics of the ocean environment. Key concepts include a) geological characteristics; b) physical characteristics; and c) ecological characteristics.	
~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	**Essential Knowledge, Skills, and Processes**
flourish in areas where nutrient-rich water upwells from the deep. ~~Plant-like plankton (phytoplankton) produce much of the Earth's oxygen and serve as the base of the ocean ecosystem. Plankton flourish in areas where nutrient-rich water upwells from the deep. Phytoplankton are eaten by animal-like plankton, swimming organisms, and those things organisms that live on the ocean bottom.~~	• create and interpret a model of a basic marine food web, including floating organisms (plankton), swimming organisms, and organisms living on the ocean ~~bottom~~ floor.

Grade Five
Science Strand

Earth Patterns, Cycles, and Change

This strand focuses on student understanding of patterns in nature, natural cycles, and changes that occur both quickly and slowly over time. An important idea represented in this strand is the relationship among Earth patterns, cycles, and change and their effects on living things. The topics developed include noting and measuring changes, weather and seasonal changes, the water cycle, cycles in the Earth-moon-sun system, our solar system, and change in ~~the~~ Earth's surface over time. This strand includes science standards ~~K.8,~~ K.9, K.10, 1.7, 2.7, 3.8, 3.9, 4.7, 4.8, and 5.7.

5.7	The student will investigate and understand how Earth's surface is constantly changing. Key concepts include a) identification of rock types; b) the rock cycle and how transformations between rocks occur; c) Earth history and fossil evidence; d) the basic structure of Earth's interior; e) changes in Earth's crust due to plate tectonics; f) weathering, erosion, and deposition; and g) human impact.

~~Understanding the Standard~~ Overview

This standard focuses on the constantly changing nature of ~~the~~ Earth's surface and builds on concepts learned in standards 4.6 and 4.8. Among the important ideas presented in this standard are the rock cycle, fossil evidence of change over time, energy from within ~~the~~ Earth that drives tectonic plate movement, shifting tectonic plates that cause earthquakes and volcanoes, weathering and erosion, and human interaction with ~~the~~ Earth's surface. This standard can be related to several ideas found in science standard 5.6. It is intended that students will actively develop and utilize scientific investigation, reasoning, and logic skills (5.1) in the context of the key concepts presented in this standard.

5.7 The student will investigate and understand how Earth's surface is constantly changing. Key concepts include

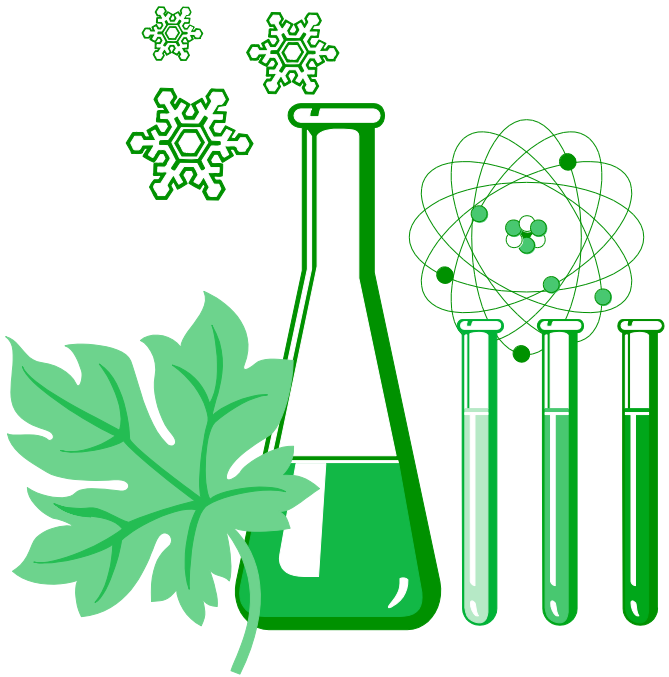
a) identification of rock types;
b) the rock cycle and how transformations between rocks occur;
c) Earth history and fossil evidence;
d) the basic structure of Earth's interior;
e) changes in Earth's crust due to plate tectonics;
f) weathering, erosion, and deposition; and
g) human impact.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
~~The concepts developed in this standard include the following:~~ • Rocks have properties that can be observed, tested, and described. Composition, grain size and textural features, color, and the presence of fossils help with identification. Classification keys (5.1) can aid this process. • Rocks move and change over time due to heat and pressure within ~~the~~ Earth and due to weathering, ~~and~~ erosion, and deposition at the surface. These and other processes constantly change rock from one type to another. • Depending on how rocks are formed, they are classified as sedimentary (layers of sediment cemented together), igneous (melted and cooled, e.g., lava and magma), and metamorphic (changed by heat and pressure). • Scientific evidence indicates ~~the~~ Earth is ~~very~~ ancient — approximately 4.6 billion years old. The age of many rocks can be determined very reliably. Fossils provide information about life and conditions of the past. • Scientific evidence indicates that ~~the~~ Earth is composed of four concentric layers — crust, mantle, ~~inner~~ outer core, and ~~outer~~ inner core — each with its own distinct characteristics. The outer two layers are composed primarily of rocky material. The innermost layers are composed mostly of iron and nickel. Pressure and temperature increase with depth beneath the surface.	In order to meet this standard, it is expected that students ~~should be able to~~ will • apply basic terminology ~~(italic print in overview)~~ to explain how ~~the~~ Earth's surface is constantly changing. • draw and label the rock cycle and describe the major processes and rock types involved. • compare and contrast the origin of igneous, sedimentary, and metamorphic rocks. • identify rock samples (granite, gneiss, slate, limestone, shale, sandstone, and coal), using a rock classification key. • make plausible inferences about changes in ~~the~~ Earth over time based on fossil evidence. This includes the presence of fossils of organisms in sedimentary rocks of Virginia found in the Appalachian~~s~~ Mountains, Piedmont, and Coastal Plain/Tidewater. • describe the structure of Earth in terms of its major layers — crust, mantle, and ~~inner~~ outer and ~~outer~~ inner cores — and how ~~the~~ Earth's interior affects the surface. • differentiate among the three types of plate tectonic boundaries (divergent, convergent, and ~~sliding~~ transform) and how these relate to the changing surface of ~~the~~ Earth and the ocean floor (5.6). • compare and contrast the origin of earthquakes and volcanoes and

5.7 The student will investigate and understand how Earth's surface is constantly changing. Key concepts include

a) identification of rock types;
b) the rock cycle and how transformations between rocks occur;
c) Earth history and fossil evidence;
d) the basic structure of Earth's interior;
e) changes in Earth's crust due to plate tectonics;
f) weathering, erosion, and deposition; and
g) human impact.

~~Overview~~ Understanding the Standard (Background Information for Instructor Use Only)	Essential Knowledge, Skills, and Processes
• ~~The~~ Earth's ~~heat~~ thermal energy causes movement of material within ~~the~~ Earth. Large continent-size blocks (plates) move slowly about ~~the~~ Earth's surface, driven by that ~~heat~~ thermal energy. • Most earthquakes and volcanoes are located at the boundar~~y~~ies of the plates (faults). Plates can move together (convergent boundaries), apart (divergent boundaries), or slip past each other horizontally (~~sliding~~ transform boundaries, also called strike-slip or ~~transform~~ sliding boundaries). • Geological features in the oceans (including trenches and mid-ocean ridges) and on the continents (mountain ranges, including the Appalachian Mountains) are caused by current and past plate movements. • Rocks and other materials on ~~the~~ Earth's surface are constantly being broken down both chemically and physically. The products of weathering include clay, sand, rock fragments, and soluble substances. • ~~Weathered rock m~~Material can be moved by water and wind (eroded) and deposited in new locations as sediment (deposition). • Humans have varying degrees of impact on ~~the~~ Earth's surface through their everyday activities. With careful planning, the impact on the land can be controlled.	how they affect ~~the~~ Earth's surface. • differentiate between weathering, ~~and~~ erosion, and deposition. • design an investigation to locate, chart, and report weathering, ~~and~~ erosion, and deposition at home and on the school grounds. Create a plan to solve erosion and/or deposition problems that may be found. • ~~design an investigation to determine the amount and kinds of weathered rock material found in soil.~~ • describe how people change ~~the~~ Earth's surface and how negative changes can be controlled.



Science Standards of Learning Curriculum Framework

Grade Six

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Grade Six
Science Strand

Scientific Investigation, Reasoning, and Logic

This strand represents a set of inquiry skills that defines what a student ~~should~~will be able to do when conducting activities and investigations. The various skill categories are described in the "Investigate and Understand" section of the Introduction to the *Science Standards of Learning*, and the skills in science standards 6.1 represent more specifically what a student should be able to do as a result of science experiences in sixth grade. Across the grade levels, the skills in the "Scientific Investigation, Reasoning, and Logic" strand form a nearly continuous sequence of investigative skills. ~~(Please note Appendix, "Science Skills, Scope, & Sequence.")~~ It is important that the classroom teacher understand~~s~~ how the skills in standard 6.1 are a key part of this sequence (i.e., K.1, K.2, 1.1, 2.1, 3.1, 4.1, and 5.1). The sixth-grade curriculum should ensure that skills from preceding grades are continuously reinforced and developed.

6.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) observations are made involving fine discrimination between similar objects and organisms; b) precise and approximate measurements are recorded; c) scale models are used to estimate distance, volume, and quantity; d) hypotheses are stated in ways that identify the independent and dependent variables; e) a method is devised to test the validity of predictions and inferences; f) one variable is manipulated over time, using many repeated trials; g) data are collected, recorded, analyzed, and reported using metric measurements and tools; h) data are analyzed and communicated through graphical representation; i) models and simulations are designed and used to illustrate and explain phenomena and systems; and j) current applications are used to reinforce science concepts.
	~~Understanding the Standard~~ Overview The skills described in standard 6.1 are intended to define the "investigate" component of all of the other sixth-grade standards (6.2–6.9). The intent of standard 6.1 is that students will continue to develop a range of inquiry skills and achieve proficiency with those skills in the context of the concepts developed at the sixth grade. Standard 6.1 does not require a discrete unit on scientific investigation because the inquiry skills that make up the standard should be incorporated in all the other sixth-grade standards. It is also intended that by developing these skills, students will achieve greater understanding of scientific inquiry and the nature of science, as well as more fully grasp the content-related concepts in the standards. It is also intended that models, simulations and current applications are used throughout the course in order to learn and reinforce science concepts.

6.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made involving fine discrimination between similar objects and organisms;
b) precise and approximate measurements are recorded;
c) scale models are used to estimate distance, volume, and quantity;
d) hypotheses are stated in ways that identify the independent and dependent variables;
e) a method is devised to test the validity of predictions and inferences;
f) one variable is manipulated over time, using many repeated trials;
g) data are collected, recorded, analyzed, and reported using metric measurements and tools;
h) data are analyzed and communicated through graphical representation;
i) models and simulations are designed and used to illustrate and explain phenomena and systems; and
j) current applications are used to reinforce science concepts.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts a) the natural world is understandable; b) science is based on evidence, both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. • To communicate an observation accurately, one must provide critical details of exactly what is being observed. Using that information, students will be able to differentiate definitively between or among similar objects and/or organisms. • ~~In an effective classification system, accurate comparisons and contrasts are made.~~	In order to meet this standard, it is expected that students ~~should be able to~~ will • make connections between the components of the nature of science and their investigations and the greater body of scientific knowledge and research. • make observations that can be used to discriminate similar objects and organisms, paying attention to fine detail. • ~~develop a classification key that uses numerous characteristics.~~ • make precise and consistent measurements and estimations. • create approximate scale models to demonstrate an understanding of distance, volume, and quantity. • differentiate between independent ~~(manipulated)~~ and dependent ~~(responding)~~ variables in a hypothesis. • propose hypotheses or predictions from observed patterns. • compare and contrast predictions and inferences. Analyze and judge the evidence, observations, scientific principles, and data used in making predictions and inferences. • design an experiment in which one variable is manipulated over many

6.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made involving fine discrimination between similar objects and organisms;
b) precise and approximate measurements are recorded;
c) scale models are used to estimate distance, volume, and quantity;
d) hypotheses are stated in ways that identify the independent and dependent variables;
e) a method is devised to test the validity of predictions and inferences;
f) one variable is manipulated over time, using many repeated trials;
g) data are collected, recorded, analyzed, and reported using metric measurements and tools;
h) data are analyzed and communicated through graphical representation;
i) models and simulations are designed and used to illustrate and explain phenomena and systems; and
j) current applications are used to reinforce science concepts.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• Systematic investigations require accurate measurements; however, in the absence of precision tools, observers must record careful estimations. • Scale models must maintain relative values of size and/or quantity in order to maintain the integrity of the object or topic being modeled. • An experiment is a structured test of a hypothesis. A hypothesis is stated in terms of a testable relationship. • A scientific prediction is a forecast about what may happen in some future situation. It is based on the application of scientific principle and factual information. • ~~An inference is a conclusion based on evidence about events that have already occurred.~~ An inference is an explanation based on observations and background knowledge. A conclusion is formulated from collected data. For example, one might observe darkly colored pond water and make the inference that it is polluted. However, only after data are collected can a conclusion be formulated. • Patterns discerned from direct observations can be the basis for predictions or hypotheses that attempt to explain the mechanism responsible for the pattern. • Accurate observations and evidence are necessary to draw realistic and plausible conclusions.	trials. • collect, record, analyze, and report data, using metric terminology and tools. • ~~Organize~~ analyze and communicate data, using graphs (bar, line, and circle), charts, and diagrams. • design a model that explains a sequence, for example, ~~the sequence of events involved in the process of photosynthesis.~~ the sequence of events involved in the formation of a cloud.

6.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations are made involving fine discrimination between similar objects and organisms;
b) precise and approximate measurements are recorded;
c) scale models are used to estimate distance, volume, and quantity;
d) hypotheses are stated in ways that identify the independent and dependent variables;
e) a method is devised to test the validity of predictions and inferences;
f) one variable is manipulated over time, using many repeated trials;
g) data are collected, recorded, analyzed, and reported using metric measurements and tools;
h) data are analyzed and communicated through graphical representation;
i) models and simulations are designed and used to illustrate and explain phenomena and systems; and
j) current applications are used to reinforce science concepts.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• In order to conduct an experiment, one must recognize all of the potential variables that can affect an outcome. • In a scientific investigation, data should be collected, recorded, analyzed, and reported using appropriate metric measurement and tools. • In a scientific investigation, data should be organized and communicated through appropriate graphical representation (graph, chart, table, and diagram). • Models provide a way of visually representing abstract concepts. The use of models permits students to order events or processes. • Science concepts are applied through observations and connections with everyday life and technology.	

Grade Six
Science Strand

Force, Motion, and Energy

The strand focuses on student understanding of what force, motion, and energy are and how the concepts are connected. The major topics developed in this strand include magnetism; types of motion; simple machines; and energy forms and transformations, especially electricity, sound, and light. This strand includes science standards K.3, 1.2, 2.2, 3.2, 4.2, 4.3, 5.2, 5.3, 6.2, and 6.3.

6.2	The student will investigate and understand basic sources of energy, their origins, transformations, and uses. Key concepts include a) potential and kinetic energy; b) the role of the sun in the formation of most energy sources on Earth; c) nonrenewable energy sources; d) renewable energy sources; and e) energy transformations.
	~~Understanding the Standard~~ Overview ~~Most~~ Many sources of energy on ~~the~~ Earth are the result of solar radiation~~,~~. ~~either~~ This can be energy the Earth is currently receiving or energy that has been stored as fossil fuels. ~~Heat energy also comes from the Earth's interior.~~ All energy exists in two basic forms, — kinetic and potential. Understanding the forms of energy and their transformations will provide the foundation for students to investigate the transfer of energy within living and Earth systems as well as to understand chemical reactions, force, and motion. This standard builds upon concepts of energy sources introduced in science standard 3.11. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and an understanding of the nature of science (6.1) in the context of the key concepts presented in this standard.

6.2 The student will investigate and understand basic sources of energy, their origins, transformations, and uses. Key concepts include
a) potential and kinetic energy;
b) the role of the sun in the formation of most energy sources on Earth;
c) nonrenewable energy sources;
d) renewable energy sources; and
e) energy transformations.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Potential energy is energy that is not "in use" and available to do work. Kinetic energy is energy that is "in use" — the energy a moving object has due to its motion. For example, moving water and wind have kinetic energy. The chemical energy in fossil fuels is potential energy until it is released. • ~~Some important sources of energy include fossil fuels, wood, wind, water (hydropower), the sun (solar energy), and the Earth's interior.~~ • Solar energy from the ancient past is stored in fossil fuels, such as coal ~~and~~, petroleum, and natural gas. Fossil fuels are rich in the elements carbon and hydrogen. These sources of energy take very long periods of time to form and once depleted, are essentially nonrenewable. Nuclear power is also a source of nonrenewable energy. • Many of ~~the~~ Earth's energy resources are available on a perpetual basis. These include solar, wind, water (hydropower, tidal and waves), biofuels and geothermal energy. Some energy sources can be replenished over relatively short periods of time. These include wood and other biomass. All are considered renewable. • Secondary sources of energy, such as electricity, are used to store, move, and deliver energy easily in usable form. Hydrogen is also a secondary source of energy, also called an energy carrier. • ~~Heat and light~~ Thermal and radiant energy can be converted into mechanical energy, chemical energy, and electrical energy and back again.	In order to meet this standard, it is expected that students ~~should be able~~ will • compare and contrast potential and kinetic energy through common examples found in the natural environment. • analyze and describe the transformations of energy involved with the formation and burning of coal and other fossil fuels. • compare and contrast renewable (solar, wind, water [hydropower, tidal and waves], biofuels, geothermal, and biomass) and nonrenewable energy sources (coal, petroleum, natural gas, nuclear power). • explain that hydrogen is not an energy source, but a means of storing and transporting energy. • design an application of the use of solar and wind energy. • chart and analyze the energy a person uses during a 24-hour period and determine the sources. • compare and contrast energy sources in terms of their origins, how they are utilized, and their availability. • analyze the advantages and disadvantages of using various energy sources and their impact on climate and the environment. • analyze and describe how the United States' energy use has changed over time. • analyze and describe sources of energy used in Virginia related to energy use nationally and globally.

6.2	The student will investigate and understand basic sources of energy, their origins, transformations, and uses. Key concepts include a) potential and kinetic energy; b) the role of the sun in the formation of most energy sources on Earth; c) nonrenewable energy sources; d) renewable energy sources; and e) energy transformations.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
	• predict the impact of unanticipated energy shortages. • comprehend and apply basic terminology related to energy sources and transformations. • create and interpret a model or diagram of an energy transformation. • design an investigation that demonstrates how light energy (radiant energy) can be ~~being~~ transformed into other forms of energy (mechanical, chemical and electrical).

6.3	The student will investigate and understand the role of solar energy in driving most natural processes within the atmosphere, the hydrosphere, and on Earth's surface. Key concepts include a) Earth's energy budget; b) the role of radiation and convection in the distribution of energy; c) the motion of the atmosphere and the oceans; d) cloud formation; and e) the role of thermal energy in weather-related phenomena including thunderstorms and hurricanes.
	~~Understanding the Standard~~ Overview The key concepts defined in this standard are intended to expand student understanding of the effects of solar radiation entering ~~the~~ Earth's atmosphere on weather and ocean current patterns. The distribution of energy through convection and radiation are explored as students study cloud formation and movement patterns of the atmosphere and the world's oceans. This standard is closely related to standards 6.2 and 6.6 and builds on the weather concepts developed in standard 4.6 and concepts of visible light in standard 5.3. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and an understanding of the nature of science (6.1) in the context of the key concepts presented in this standard.

6.3 The student will investigate and understand the role of solar energy in driving most natural processes within the atmosphere, the hydrosphere, and on Earth's surface. Key concepts include

a) Earth's energy budget;
b) the role of radiation and convection in the distribution of energy;
c) the motion of the atmosphere and the oceans;
d) cloud formation; and
e) the role of thermal energy in weather-related phenomena including thunderstorms and hurricanes.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • ~~The~~ Earth receives only a very small portion of the sun's energy, yet this energy is responsible for powering the motion of the atmosphere, the oceans, and many processes at ~~the~~ Earth's surface. • Solar radiation is made up of different types of radiation (including infrared, visible light, and ultraviolet). • Incoming solar radiation is in close balance with the energy that leaves the atmosphere; otherwise t~~he~~ Earth would heat up or cool down. Excess carbon dioxide and other gases may disrupt this balance, creating a ~~Greenhouse Effect~~ greenhouse effect. • About one-third of the sun's incoming energy is reflected back out to space. About one-half of the energy striking the Earth is absorbed by ~~the~~ Earth's surface. • ~~The~~ Earth's surface is heated unequally. • When air or water is heated, the molecules move faster and farther apart, reducing their density and causing them to rise. Cooler air or water molecules move more slowly and are denser than warm air or water. Warm air or water rising coupled with cooler air or water descending forms a cyclic rising/falling pattern called *convection*. • Radiation and convection from ~~the~~ Earth's surface transfer ~~heat~~ thermal energy. This energy powers the global circulation of the atmosphere and the oceans on our planet. • As bodies of water (oceans, lakes, rivers, etc.) absorb ~~heat~~ thermal energy, the water evaporates ~~forming clouds~~ causing the air to be warm	In order to meet this standard, it is expected that students ~~should be able to~~ will • comprehend and apply basic terminology related to solar energy, including wavelength; ultraviolet, visible, and infrared radiation; and reflection and absorption. • analyze and interpret a chart or diagram showing ~~the~~ Earth's energy budget. • analyze, model, and explain the ~~G~~greenhouse ~~E~~effect in terms of the energy entering and leaving the atmosphere. • design an investigation to determine the effect of sunlight on the heating of a surface. • analyze and explain how convection currents occur and how they distribute ~~heat~~ thermal energy in the atmosphere and oceans. • analyze the role of heating and cooling in the formation of clouds. • order the sequence of events that takes place in the formation of a cloud. • describe the relationship between thermal energy and the formation of hurricanes and thunderstorms.

6.3	The student will investigate and understand the role of solar energy in driving most natural processes within the atmosphere, the hydrosphere, and on Earth's surface. Key concepts include a) Earth's energy budget; b) the role of radiation and convection in the distribution of energy; c) the motion of the atmosphere and the oceans; d) cloud formation; and e) the role of thermal energy in weather-related phenomena including thunderstorms and hurricanes.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
and moist. Warm, moist air is less dense than cold, dry air, so it rises relative to colder, drier air. As warm, moist air rises, it ~~actually~~ gives off some ~~heat~~ thermal energy as the moisture condenses, forming clouds. Clouds are not gaseous water vapor; rather they are minute, condensed water particles. • Some thunderstorms are formed where the land is strongly heated. Hurricanes form over warm, tropical water and are fed by the energy of that water.	

Matter

This strand focuses on the description, physical properties, and basic structure of matter. The major topics developed in this strand include concepts related to the basic description of objects, states of matter (solids, liquids, and gases – especially water), phase changes, mass and volume, and the structure of classification of matter. This strand includes science standards K.4, K.5, 1.3, 2.3, 3.3, 5.4, 6.4, 6.5, and 6.6.

6.4	The student will investigate and understand that all matter is made up of atoms. Key concepts include a) atoms consist of particles, including electrons, protons, and neutrons; b) atoms of a particular element are alike but are different from atoms of other elements; c) elements may be represented by chemical symbols; d) two or more atoms interact to form new substances, which are held together by electrical forces (bonds); e) compounds may be represented by chemical formulas; f) chemical equations can be used to model chemical changes; and g) a limited number of elements comprise the largest portion of the solid Earth, living matter, the oceans, and the atmosphere.
	~~Understanding the Standard~~ Overview Standard 6.4 focuses on an understanding of the basic structure of the atom, including electrons, protons, and neutrons. The concepts defined in standard 6.4 build on students' basic understanding of the ~~structure~~ concept of matter as introduced in science standards 3.3 and 5.4. Knowledge of basic chemistry concepts is fundamental to understanding the physical sciences, life processes, and Earth and environmental science ideas. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (6.1) in the context of the key concepts presented in this standard.

6.4 The student will investigate and understand that all matter is made up of atoms. Key concepts include
a) atoms consist of particles, including electrons, protons, and neutrons;
b) atoms of a particular element are alike but are different from atoms of other elements;
c) elements may be represented by chemical symbols;
d) two or more atoms interact to form new substances, which are held together by electrical forces (bonds);
e) compounds may be represented by chemical formulas;
f) chemical equations can be used to model chemical changes; and
g) a limited number of elements comprise the largest portion of the solid Earth, living matter, the oceans, and the atmosphere.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • The basic structural components of ~~the~~ a typical atom are electrons, protons, and neutrons. Protons and neutrons comprise the nucleus of an atom. • An element is a form of matter made up of one type of atom. The atoms of an element are basically alike, though the number of neutrons may vary. • The atoms of one element differ from those of another element in the number of protons. • Elements can be represented by chemical symbols. • Two or more atoms of different elements may combine to form a compound. • Compounds can be represented by chemical formulas. Each different element in the compound is represented by its unique symbol. The number of each type of element in the compound (other than 1) is represented by a small number (the subscript) to the right of the element symbol. • Chemical equations can be used to model chemical changes, illustrating how elements become rearranged in a chemical reaction. • A limited number of elements, including silicon, aluminum, iron, sodium, calcium, potassium, magnesium, hydrogen, oxygen, nitrogen, and carbon, form the largest portion of the Earth's crust, living matter, the oceans, and the atmosphere.	In order to meet this standard, it is expected that students ~~should be able to~~ will • create and interpret a simplified modern model of the structure of an atom. • compare and contrast the atomic structure of two different elements. • explain that elements are represented by symbols. • identify the name and number of each element present in a simple molecule or compound, such as O_2, H_2O, CO_2, or $CaCO_3$. • model a simple chemical change with an equation and account for all atoms. Distinguish the types of elements and number of each element in the chemical equation. (Balancing equations will be further developed in Physical Science.~~)~~. • name some of the predominant elements found in the atmosphere, the oceans, living matter, and ~~the~~ Earth's crust.

6.5	The student will investigate and understand the unique properties and characteristics of water and its roles in the natural and human-made environment. Key concepts include a) water as the universal solvent; b) the properties of water in all three phases; c) the action of water in physical and chemical weathering; d) the ability of large bodies of water to store thermal energy and moderate climate; e) the importance of water for agriculture, power generation, and public health; and f) the importance of protecting and maintaining water resources.

~~Understanding the Standard~~ Overview

Standard 6.5 is intended to develop student understanding of the unique properties of water and the importance of protecting and managing water resources. Understanding the structure, properties, and behavior of the water molecule is fundamental to understanding more complex environmental systems. Concepts like solubility, surface tension, cohesion, adhesion, density, condensation, and evaporation can be investigated to appreciate why the properties of water are critical to life processes and living things. This standard also introduces the concept of the ability of large bodies of water to moderate the climate on land. The connections between water resources and agriculture, power generation, and public health are also investigated. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and an understanding of the nature of science (6.1) in the context of the key concepts presented in this standard.

6.5 The student will investigate and understand the unique properties and characteristics of water and its roles in the natural and human-made environment. Key concepts include

a) water as the universal solvent;
b) the properties of water in all three phases;
c) the action of water in physical and chemical weathering;
d) the ability of large bodies of water to store thermal energy and moderate climate;
e) the importance of water for agriculture, power generation, and public health; and
f) the importance of protecting and maintaining water resources.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Among water's unique properties is that one side of each water molecule is slightly negative and the other is slightly positive. Individual water molecules, therefore, attract other water molecules like little magnets as the slightly positive portion of a water molecule is attracted to the slightly negative portion of an adjacent water molecule. In this way, water molecules "stick together." • Due to water's polar nature, ~~A~~ a large number of substances will "dissolve" in water. For this reason, water is often called the universal solvent. • Water is the only compound that commonly exists in all three states (solid, liquid, gas) on Earth. The unique properties of water are a major factor in the ability of our planet to sustain life. • Additional properties of water are its high surface tension and the large range of temperature (0–100 degrees Celsius) in which it can be found in the liquid state, as well as the fact that, unlike other substances, ~~it expands when it freezes. Ice~~ solid water is less dense than liquid water. • Water is able to absorb ~~heat~~ thermal energy without showing relatively large changes in temperature. Large bodies of water act to moderate the climate of surrounding areas by absorbing ~~heat~~ thermal energy in summer and slowly releasing that ~~heat~~ energy in the winter. For this reason, the climate near large bodies of water is slightly milder than areas without large bodies of water. • Water (rain, ice, snow) has shaped our environment by physically and	In order to meet this standard, it is expected that students ~~should be able to~~ will • comprehend and apply key terminology related to water and its properties and uses. • model and explain the shape and composition of a water molecule. • design an investigation to demonstrate the ability of water to dissolve materials. • ~~design an investigation to determine the relative density of liquid and solid water at various temperatures.~~ • ~~compare the relative densities of liquid and solid water.~~ • comprehend the adhesive and cohesive properties of water. • ~~design an investigation to determine~~ compare the effects of ~~heat on~~ adding thermal energy to the states of water. • ~~model and~~ explain why ice is less dense than liquid water. • relate the three states of water to the water cycle. • design an investigation to model the action of freezing water on rock material. • design an investigation to determine the presence of water in plant material (e.g., a fruit). • infer how the unique properties of water are key to the life processes

6.5 The student will investigate and understand the unique properties and characteristics of water and its roles in the natural and human-made environment. Key concepts include

a) water as the universal solvent;
b) the properties of water in all three phases;
c) the action of water in physical and chemical weathering;
d) the ability of large bodies of water to store thermal energy and moderate climate;
e) the importance of water for agriculture, power generation, and public health; and
f) the importance of protecting and maintaining water resources.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
chemically weathering rock and soil and transporting sediments. Freezing water can break rock without any change in the minerals that form the rock (physical weathering). This usually produces small particles and sand. Water with dissolved gases and other chemicals causes the minerals in rocks to be changed, leading to the deterioration of the rock (chemical weathering). • ~~Scientific evidence indicates that the Earth formed about four-and-a-half billion years ago from the dust and debris orbiting the sun. Due to gravity, this debris became compacted and grew quite hot, creating hot gases, including water vapor and carbon dioxide. Over millions of years, the Earth and its gases cooled, and seas are believed to have formed when the Earth cooled enough for water vapor in the atmosphere to condense.~~ • Most of Earth's water is salt water in the oceans (97 percent). ~~Available n~~Nonfrozen, fresh water makes up less than 1 percent of the water on Earth. • ~~Water occurs on Earth in oceans, lakes, rivers, streams, and in rock layers underground called aquifers. A large amount of water is also found in the bodies of living things.~~ • ~~The first human settlements were established near springs, rivers, and lakes. Reliable fresh water sources and irrigation systems allowed civilizations to grow and flourish. As cities grew, different strategies (tunnels, aqueducts, wells, cisterns, pumps, reservoirs) were employed to collect water.~~ • Water is essential for agriculture. Crops watered by reliable irrigation systems are more productive~~,~~ and harvests more dependable.	of organisms. • design an investigation to model the action of acidified water on building materials such as concrete, limestone, or marble. • chart, record, and describe evidence of chemical weathering in the local environment. • analyze and explain the difference in average winter temperatures among areas in central and western Virginia and cities and counties along the Chesapeake Bay and Atlantic coast. • explain the role of water in power generation. • describe the importance of careful management of water resources.

6.5	The student will investigate and understand the unique properties and characteristics of water and its roles in the natural and human-made environment. Key concepts include a) water as the universal solvent; b) the properties of water in all three phases; c) the action of water in physical and chemical weathering; d) the ability of large bodies of water to store thermal energy and moderate climate; e) the importance of water for agriculture, power generation, and public health; and f) the importance of protecting and maintaining water resources.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• Water is an important resource used in power generation. Hydroelectric power plants make use of the kinetic energy of water as it flows through turbines. Water is also heated in power plants and turned to steam. The steam is used to turn turbines, which generate electricity. • In the past, streams and rivers were often used to dispose of human waste, and open sewers were common. During the mid-1800s, public health officials recognized the connection between disease outbreaks and contamination of public wells and drinking water. Advances in water treatment and sanitary sewers have helped eliminate diseases associated with human waste. • Due to water's importance in power generation, agriculture, and human health, it is important to conserve water resources.	

6.6	The student will investigate and understand the properties of air and the structure and dynamics of Earth's atmosphere. Key concepts include a) air as a mixture of gaseous elements and compounds; b) pressure, temperature, and humidity; c) atmospheric changes with altitude; d) natural and human-caused changes to the atmosphere and the importance of protecting and maintaining air quality; e) the relationship of atmospheric measures and weather conditions; and f) basic information from weather maps, including fronts, systems, and basic measurements.
	Understanding the Standard Standard 6.6 is intended to provide students with a basic understanding of the properties of air, the structure of the atmosphere, weather, and air quality. Students need to understand there are both natural and human-caused changes to the atmosphere and that the results of these changes are not yet fully known. A basic understanding of weather and weather prediction builds on the key concepts in standard 4.6. Standard 6.6 also focuses on student understanding of air quality as an important parameter of human and environmental health. It is important to make the obvious connections between this standard and the other sixth-grade standards. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and an understanding of the nature of science (6.1) in the context of the key concepts presented in this standard.

6.6 The student will investigate and understand the properties of air and the structure and dynamics of Earth's atmosphere. Key concepts include

a) air as a mixture of gaseous elements and compounds;
b) pressure, temperature, and humidity;
c) atmospheric changes with altitude;
d) natural and human-caused changes to the atmosphere and the importance of protecting and maintaining air quality;
e) the relationship of atmospheric measures and weather conditions; and
f) basic information from weather maps, including fronts, systems, and basic measurements.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Air is a mixture of gaseous elements and compounds. These include nitrogen, oxygen, water, argon and carbon dioxide. Nitrogen makes up the largest proportion of air. • Air exerts pressure. Air pressure decreases as altitude increases. • Moisture in the air is called humidity. • The atmosphere is made up of layers (troposphere, stratosphere, mesosphere, and thermosphere) that have distinct characteristics. • Temperature decreases as altitude increases in the lowest layer of the atmosphere. • Most of the air that makes up the atmosphere is found in the troposphere (the lowest layer). Virtually all weather takes place there. • Forest fires and volcanic eruptions are two natural processes that affect ~~the~~ Earth's atmosphere. Many gaseous compounds and particles are released into the atmosphere by human activity. All of the effects of these materials are not yet fully understood. • The amounts of ~~heat~~ thermal energy and water vapor in the air and the pressure of the air largely determine what the weather conditions are. • Clouds are important indicators of atmospheric conditions. Clouds are found at various levels within the troposphere. Three major types of clouds are cumulus, stratus, and cirrus. • Ozone, a form of oxygen, can form near the surface when exhaust	In order to meet this standard, it is expected that students ~~should be able to~~ will • comprehend and apply basic terminology related to air and the atmosphere. • identify the composition and physical characteristics of the atmosphere. • analyze and interpret charts and graphs of the atmosphere in terms of temperature and pressure. • measure and record air temperature, air pressure, and humidity, using appropriate units of measurement and tools. • analyze and explain some of the effects that natural events and human activities may have on weather, atmosphere, and climate. • evaluate their own roles in protecting air quality. • design an investigation to relate temperature, barometric pressure, and humidity to changing weather conditions. • compare and contrast cloud types and relate cloud types to weather conditions. • compare and contrast types of precipitation. • compare and contrast weather-related phenomena, including thunderstorms, tornadoes, hurricanes, and drought. • interpret basic weather maps and make forecasts based on the information presented.

6.6	The student will investigate and understand the properties of air and the structure and dynamics of Earth's atmosphere. Key concepts include a) air as a mixture of gaseous elements and compounds; b) pressure, temperature, and humidity; c) atmospheric changes with altitude; d) natural and human-caused changes to the atmosphere and the importance of protecting and maintaining air quality; e) the relationship of atmospheric measures and weather conditions; and f) basic information from weather maps, including fronts, systems, and basic measurements.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
pollutants react with sunlight. This pollutant can cause health problems. Naturally occurring ozone is also found in the upper atmosphere and helps to shield ~~the~~ Earth from ultraviolet radiation. • Maintaining good air quality is a crucial goal for modern society, and it is everyone's responsibility to work toward it. • Weather maps show much useful information about descriptive air measurements, observations, and boundaries between air masses (fronts). The curved lines showing areas of equal air pressure and temperature are key features of weather maps. Weather maps are important for understanding and predicting the weather.	• map the movement of cold and warm fronts and interpret their effects on observable weather conditions.

Grade Six
Science Strand

Living Systems

The strand begins in second grade and builds from basic to more complex understandings of a system, both at the ecosystem level and at the level of the cell. The concept of kingdoms of organisms and a general classification of organisms are also presented. The other major topics developed in the strand include the types of relationships among organisms in a food chain, different types of environments and the organisms they support, and the relationship between organisms and their nonliving environment. This strand includes science standards 2.5, 3.5, 3.6, 4.5, 5.5, and 6.7.

6.7	The student will investigate and understand the natural processes and human interactions that affect watershed systems. Key concepts include a) the health of ecosystems and the abiotic factors of a watershed; b) the location and structure of Virginia's regional watershed systems; c) divides, tributaries, river systems, and river and stream processes; d) wetlands; e) estuaries; f) major conservation, health, and safety issues associated with watersheds; and g) water monitoring and analysis using field equipment including hand-held technology.
	~~Understanding the Standard~~ Overview Standard 6.7 is intended to provide students with a basic understanding of how natural processes and human interactions impact watershed systems. This includes an understanding of the physical geography of Virginia's portions of the three major watershed systems (the Chesapeake Bay, the North Carolina sounds, and the Gulf of Mexico) and the various features associated with moving water (surface and groundwater). Wetlands have become an important focus of scientists as we learn their role in flood and erosion control as well as their importance as habitat for many species of living things. Students are introduced to major safety and conservation issues associated with watersheds and become familiar with the testing parameters and tools used in the field. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and an understanding of the nature of science (6.1) in the context of the key concepts presented in this standard.

6.7 The student will investigate and understand the natural processes and human interactions that affect watershed systems. Key concepts include

a) the health of ecosystems and the abiotic factors of a watershed;
b) the location and structure of Virginia's regional watershed systems;
c) divides, tributaries, river systems, and river and stream processes;
d) wetlands;
e) estuaries;
f) major conservation, health, and safety issues associated with watersheds; and
g) water monitoring and analysis using field equipment including hand-held technology.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • An ecosystem is made up of the biotic (living) community and the abiotic (nonliving) factors that affect it. The health of an ecosystem is directly related to water quality. • Abiotic factors determine ecosystem type and its distribution of plants and animals as well as the usage of land by people. Abiotic factors include water supply, topography, landforms, geology, soils, sunlight, and air quality/O_2 availability. • Human activities can alter abiotic components and thus accelerate or decelerate natural processes. For example, people can affect the rate of natural erosion. Plowing cropland can cause greater erosion, while planting trees can prevent it. Flood protection/wetland loss is another example. • A watershed is the land that water flows across or through on its way to a stream, lake, wetland, or other body of water. Areas of higher elevations, such as ridgelines and divides, separate watersheds. • The three major regional watershed~~s~~ systems in Virginia lead to the Chesapeake Bay, the North Carolina sounds, or the Gulf of Mexico. • River systems are made up of tributaries of smaller streams that join along their courses. Rivers and streams generally have wide, flat, border areas, called flood plains, onto which water spills out at times of high flow. • Rivers and streams carry and deposit sediment. As water flow decreases	In order to meet this standard, it is expected that students ~~should be able to~~ will • comprehend and apply basic terminology related to watersheds. • use topographic maps to determine the location and size of Virginia's regional watershed systems. • locate their own local watershed and the rivers and streams associated with it. • design an investigation to model the effects of stream flow on various slopes. • analyze and explain the functioning of wetlands and appraise the value of wetlands to humans. • ~~describe an example of a wetland.~~ • explain what an estuary is and why it is important to people. • propose ways to maintain water quality within a watershed. • explain the factors that affect water quality in a watershed and how those factors can affect an ecosystem. • forecast potential water-related issues that may become important in the future. • locate and critique a media article or editorial (print or electronic) concerning water use or water quality. Analyze and evaluate the

6.7 The student will investigate and understand the natural processes and human interactions that affect watershed systems. Key concepts include

a) the health of ecosystems and the abiotic factors of a watershed;
b) the location and structure of Virginia's regional watershed systems;
c) divides, tributaries, river systems, and river and stream processes;
d) wetlands;
e) estuaries;
f) major conservation, health, and safety issues associated with watersheds; and
g) water monitoring and analysis using field equipment including hand-held technology.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
in speed, the size of the sediment it carries decreases. • Wetlands form the transition zone between dry land and bodies of water such as rivers, lakes, or bays. Both tidal and nontidal wetlands perform important water quality functions, including regulating runoff by storing flood waters; reducing erosion by slowing down run-off; maintaining water quality by filtering sediments, trapping nutrients, and breaking down pollutants; and recharging groundwater. They also provide food and shelter for wildlife and fish and nesting and resting areas for migratory birds. • Estuaries perform important functions, such as providing habitat for many organisms and serving as nurseries for their young. • The Chesapeake Bay is an estuary where fresh and salt water meet and are mixed by tides. It is the largest estuary in the contiguous United States and one of the most productive. • Water quality monitoring is the collection of water samples to analyze chemical and/or biological parameters. Simple parameters include pH, temperature, salinity, dissolved oxygen, turbidity, and the presence of macroinvertebrate organisms.	science concepts involved. • argue for and against commercially developing a parcel of land containing a large wetland area. Design and defend a land-use model that minimizes negative impact. • measure, record, and analyze a variety of water quality indicators and describe what they mean to the health of an ecosystem.

Grade Six
Science Strand

Interrelationships in Earth/Space Systems

The strand focuses on student understanding of how Earth systems are connected and how ~~the~~ Earth interacts with other members of the solar system. The topics developed include shadows; relationships between the sun and ~~the~~ Earth; weather types, patterns, and instruments; properties of soil; characteristics of the ocean environment; and organization of the solar system. This strand includes science standards K.7, 1.6, 2.6, 3.7, 4.6, 4.7, 4.8, 5.6, and 6.8.

6.8	The student will investigate and understand the organization of the solar system and the interactions among the various bodies that comprise it. Key concepts include a) the sun, moon, Earth, other planets and their moons, dwarf planets, meteors, asteroids, and comets; b) relative size of and distance between planets; c) the role of gravity; d) revolution and rotation; e) the mechanics of day and night and the phases of the moon; f) the unique properties of Earth as a planet; g) the relationship of Earth's tilt and the seasons; h) the cause of tides; and i) the history and technology of space exploration.
	~~Understanding the Standard~~ Overview Standard 6.8 is intended to provide students with a basic understanding of the solar system~~, how it is organized,~~ and the relationships among bodies within the solar system. This standard develops an understanding of ~~the~~ Earth as part of the solar system and builds significantly on standards 3.8 ~~and,~~ 4.7, and 4.8. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and an understanding of the nature of science (6.1) in the context of the key concepts presented in this standard.

6.8 The student will investigate and understand the organization of the solar system and the interactions among the various bodies that comprise it. Key concepts include

a) the sun, moon, Earth, other planets and their moons, dwarf planets, meteors, asteroids, and comets;
b) relative size of and distance between planets;
c) the role of gravity;
d) revolution and rotation;
e) the mechanics of day and night and the phases of the moon;
f) the unique properties of Earth as a planet;
g) the relationship of Earth's tilt and the seasons;
h) the cause of tides; and
i) the history and technology of space exploration.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • The solar system consists of the sun, moon, Earth, other planets and their moons, meteors, asteroids, and comets. Each body has its own characteristics and features. • The distance between planets and sizes of the planets var~~ies~~y greatly. The outer, "gas" planets are very large, and the four inner planets are comparatively small and rocky. • Gravity is a force that keeps the planets in motion around the sun. Gravity acts everywhere in the universe. • Planets revolve around the sun, and moons revolve around planets. A planet rotates upon an axis. • A dwarf planet revolves around the sun, and can maintain a nearly round shape as planets do, but it cannot move other objects away from its orbital neighborhood. • As ~~the~~ Earth rotates, different sides of ~~the~~ Earth face toward or away from the sun, thus causing day and night, respectively. • The phases of the moon are caused by its position relative to ~~the~~ Earth and sun. • ~~The~~ Earth is a rocky planet, extensively covered with large oceans of liquid water and having frozen ice caps in its polar regions. ~~The~~ Earth	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe the ~~nine~~ planets and their relative positions from the sun. • compare the characteristics of Pluto to the planets and explain its designation as a dwarf planet. • design and interpret a scale model of the solar system. (A scale model may be a physical representation of an object or concept. It can also be a mathematical representation that uses factors such as ratios, proportions, and percentages.) • explain the role of gravity in the solar system. • compare and contrast revolution and rotation and apply these terms to the relative movements of planets and ~~moons~~ their moons. • model and describe how day and night and the phases of the moon occur. • model and describe how ~~the~~ Earth's axial tilt and its annual orbit around the sun cause the seasons. • describe the unique characteristics of planet Earth. • discuss the relationship between the gravitational pull of the moon and the cycle of tides.

6.8	The student will investigate and understand the organization of the solar system and the interactions among the various bodies that comprise it. Key concepts include a) the sun, moon, Earth, other planets and their moons, dwarf planets, meteors, asteroids, and comets; b) relative size of and distance between planets; c) the role of gravity; d) revolution and rotation; e) the mechanics of day and night and the phases of the moon; f) the unique properties of Earth as a planet; g) the relationship of Earth's tilt and the seasons; h) the cause of tides; and i) the history and technology of space exploration.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
has a protective atmosphere consisting predominantly of nitrogen and oxygen and has a magnetic field. The atmosphere and the magnetic field help shield ~~the~~ Earth's surface from harmful solar radiation. Scientific evidence indicates that ~~the~~ Earth is about 4.5 billion years old. • Seasons are caused by a combination of the tilt of ~~the~~ Earth on its axis, the curvature of Earth's surface and, thus, the angle at which sunlight strikes the surface of ~~the~~ Earth during its annual revolution around the sun. • Tides are the result of the gravitational pull of the moon and sun on the surface waters of ~~the~~ Earth. • The ideas of Ptolemy, Aristotle, Copernicus, and Galileo contributed to the development of our understanding of the solar system. • With the development of new technology over the last half-century, our knowledge of the solar system has increased substantially.	• compare and contrast the ideas of Ptolemy, Aristotle, Copernicus, and Galileo related to the solar system. • create and interpret a timeline highlighting the advancements in solar system exploration over the past half century. This should include information on the first modern rockets, artificial satellites, orbital missions, missions to the moon, Mars robotic explorers, and exploration of the outer planets.

Earth Resources

The strand focuses on student understanding of the role of resources in the natural world and how people can utilize those resources in a sustainable way. An important idea represented in this strand is the ~~concept of management of resource use~~ importance of managing resources. This begins with basic ideas of conservation and proceeds to more abstract consideration of costs and benefits. The topics developed include conservation of materials, soil and plants as resources, energy use, water, Virginia's resources, and how public policy impacts the environment. This strand includes science standards ~~K.10~~ K.11, 1.8, 2.8, 3.10, 3.11, ~~4.8~~ 4.9, and 6.9.

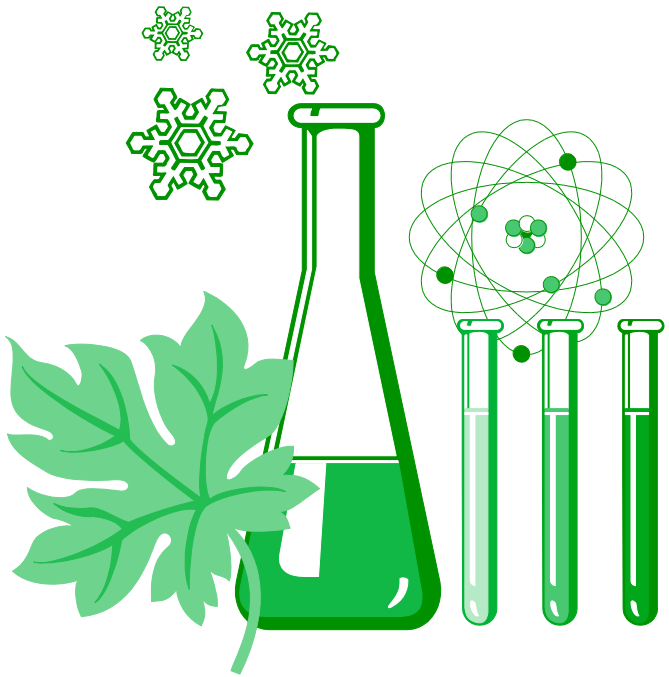
6.9	The student will investigate and understand public policy decisions relating to the environment. Key concepts include a) management of renewable resources; b) management of nonrenewable resources; c) the mitigation of land-use and environmental hazards through preventive measures; and d) cost/benefit tradeoffs in conservation policies.
	~~Understanding the Standard~~ Overview Standard 6.9 is intended to develop student understanding of the importance of ~~the~~ Earth's natural resources, the need to manage them, how they are managed, and the analysis of costs and benefits in making decisions about those resources. It applies and builds on the concepts described in several lower grades, especially science standard 4.~~8~~9. Knowledge gained from this standard will be important to understanding numerous concepts in Life Science and Earth Science. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (6.1) in the context of the key concepts presented in this standard.

6.9 The student will investigate and understand public policy decisions relating to the environment. Key concepts include
a) management of renewable resources;
b) management of nonrenewable resources;
c) the mitigation of land-use and environmental hazards through preventive measures; and
d) cost/benefit tradeoffs in conservation policies.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • People, as well as other living organisms, are dependent upon the availability of clean water and air and a healthy environment. • Local, state, and federal governments have significant roles in managing and protecting air, water, plant, and wildlife resources. • ~~Modern society is dependent upon many finite resources, including coal, oil, natural gas, and nuclear power.~~ • Modern industrial society is dependent upon energy. Fossil fuels are the major sources of energy in developed and industrialized nations and should be managed to minimize adverse impacts. • Many renewable and nonrenewable resources are managed by the private sector (private individuals and corporations). • Renewable resources should be managed so that they produce continuously. Sustainable development makes decisions about long-term use of the land and natural resources for maximum community benefit for the longest time and with the least environmental damage. • Regulations, incentives, and voluntary efforts help conserve resources and protect environmental quality. • Conservation of resources and environmental protection begin with ~~the~~ individual acts of stewardship. • Use of renewable (water, air, soil, plant life, animal life) and nonrenewable resources (coal, oil, natural gas, nuclear power, and mineral resources) must be considered in terms of their cost/benefit tradeoffs.	In order to meet this standard, it is expected that students ~~should be able to~~ will • differentiate between renewable and nonrenewable resources. • describe the role of local and state conservation professionals in managing natural resources. These include wildlife protection; forestry and waste management; and air, water, and soil conservation. • analyze resource-use options in everyday activities and determine how personal choices have costs and benefits related to the generation of waste. • analyze how renewable and nonrenewable resources are used and managed within the home, school, and community. • analyze reports, media articles, and other narrative materials related to waste management and resource use to determine various perspectives concerning the costs/benefits in real-life situations. • evaluate the impact of resource use, waste management, and pollution prevention in the school and home environment.

6.9	The student will investigate and understand public policy decisions relating to the environment. Key concepts include a) management of renewable resources; b) management of nonrenewable resources; c) the mitigation of land-use and environmental hazards through preventive measures; and d) cost/benefit tradeoffs in conservation policies.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• Preventive measures, such as pollution prevention or thoughtfully planned and enforced land-use restrictions, can reduce the impact of potential problems in the future. • Pollution prevention and waste management are less costly than cleanup.	



Science Standards of Learning Curriculum Framework

Life Science

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

School divisions should use the Science Curriculum Framework as a resource for developing sound curricular and instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Standard LS.1

LS.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) data are organized into tables showing repeated trials and means; b) a classification system is developed based on multiple attributes; c) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, and probeware are used to gather data; d) models and simulations are constructed and used to illustrate and explain phenomena; e) sources of experimental error are identified; f) dependent variables, independent variables, and constants are identified; g) variables are controlled to test hypotheses and trials are repeated; h) data are organized, communicated through graphical representation, interpreted, and used to make predictions; i) patterns are identified in data and are interpreted and evaluated; and j) current applications are used to reinforce life science concepts.
	~~**Understanding the Standard**~~ **Overview** The skills described in standard LS.1 are intended to define the "investigate" component of all of the other Life Science standards (LS.2–LS.14). The intent of standard LS.1 is that students will continue to develop a range of inquiry skills and achieve proficiency with those skills in the context of the concepts developed in the Life Science course. This does not preclude explicit instruction on a particular inquiry skill or skills, but standard LS.1 does not require a discrete unit on scientific investigation. It is also intended that by developing these skills, students will achieve greater understanding of scientific inquiry and the nature of science, as well as more fully grasp the content-related concepts. Models, simulations and current applications should be used throughout the course in order to learn and reinforce science concepts. Across the grade levels, kindergarten through high school, the skills in the first standards form a nearly continuous sequence. ~~(Please note Appendix, "Science Skills Scope & Sequence.")~~ It is very important that the Life Science teacher be familiar with the skills in the sequence leading up to standard LS.1 (6.1, 5.1, 4.1).

Standard LS.1

LS.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) data are organized into tables showing repeated trials and means; b) a classification system is developed based on multiple attributes; c) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, and probeware are used to gather data; d) models and simulations are constructed and used to illustrate and explain phenomena; e) sources of experimental error are identified; f) dependent variables, independent variables, and constants are identified; g) variables are controlled to test hypotheses and trials are repeated; h) data are organized, communicated through graphical representation, interpreted, and used to make predictions; i) patterns are identified in data and are interpreted and evaluated; and j) current applications are used to reinforce life science concepts.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts a) the natural world is understandable; b) science is based on evidence - both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. • Expected results are reflected in the organization of ~~the~~ a data table, which includes areas to record the number of repeated trials, levels of the independent variable, measured results for the dependent variable, and analysis of the results by calculation of ~~the~~ mathematical means. • Scientists create and apply classification systems to organize information and discern patterns.	In order to meet this standard, it is expected that students ~~should be able to~~ will • make connections between the components of the nature of science and their investigations and the greater body of scientific knowledge and research. • design a data table ~~that includes space~~ to organize all components of an investigation in a meaningful way ~~including levels of the independent variable, measured responses of the dependent variable, number of trials, and mathematical means~~. • develop and use a classification system that uses numerous attributes to organize information and discern patterns. • select and use appropriate tools and techniques for collecting qualitative and quantitative data ~~and record measurements (volume, mass, and distance) in metric units~~ in classroom and field investigations. • create and use mental and physical ~~and mental~~ models (including simulations) as ways to visualize explanations of ideas and phenomena. • identify potential sources of error in the design of an experiment. • evaluate the design of an experiment and the events that occur during an investigation to determine which factors may affect the results of the experiment. This requires students to examine the experimental procedure

Standard LS.1

LS.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) data are organized into tables showing repeated trials and means; b) a classification system is developed based on multiple attributes; c) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, and probeware are used to gather data; d) models and simulations are constructed and used to illustrate and explain phenomena; e) sources of experimental error are identified; f) dependent variables, independent variables, and constants are identified; g) variables are controlled to test hypotheses and trials are repeated; h) data are organized, communicated through graphical representation, interpreted, and used to make predictions; i) patterns are identified in data and are interpreted and evaluated; and j) current applications are used to reinforce life science concepts.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• Appropriate tools and techniques are used to gather data during scientific investigations. Measurements are collected using the ~~Investigations will use~~ International System of Units (metric units) of measurement. • Mental and physical models, including computer and other simulations, can be helpful in explaining events or sequences of events that occur. They can be used as part of scientific explanations to support data or represent phenomena, especially those that are not easily seen directly or must be inferred from data. • Potential sources of error in the experimental design must be identified. • To communicate the plan of an experiment accurately, the independent variable, dependent variable, and constants must be explicitly defined. • ~~Systematic investigations require a hypothesis stated in such a way that it identifies the independent variable (parameter that is deliberately changed), the dependent variable (the response that can be measured or observed because of changes in the independent variable), and the relationship between them.~~ • To establish that the events of an experiment are the result of manipulating the independent variable, the experiment must be	and decide where or if they have made mistakes. • identify what is deliberately changed in the experiment and what is to be measured as the dependent ~~(responding)~~ variable. • analyze the variables in an experiment and decide which ones must be held constant (not allowed to change) in order for the investigation to represent a fair test. This requires students to comprehend what "variables" are and to apply that idea in new situations related to the Life Science SOL concepts. • determine the specific component of an experiment to be changed as an independent variable and control the experiment by conducting trials for the experiment in which the independent variable is *not* applied. This requires the student to set up a standard to which the experimental results can be compared. The student must use the results of the controlled trials to determine whether the hypothesized results were indeed due to the independent variable. • construct appropriate graphs, using data sets from ~~experiments~~ investigations. This requires the student to recognize that a line graph is most appropriate for reporting continuous or real-time data. This also requires a student to comprehend that points along the line that are not actual data points can be used to make predictions. Students should be able to interpret and analyze these graphs. • distinguish between observational and experimental investigations.

Standard LS.1

LS.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) data are organized into tables showing repeated trials and means; b) a classification system is developed based on multiple attributes; c) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, and probeware are used to gather data; d) models and simulations are constructed and used to illustrate and explain phenomena; e) sources of experimental error are identified; f) dependent variables, independent variables, and constants are identified; g) variables are controlled to test hypotheses and trials are repeated; h) data are organized, communicated through graphical representation, interpreted, and used to make predictions; i) patterns are identified in data and are interpreted and evaluated; and j) current applications are used to reinforce life science concepts.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
controlled by observing the effects without the application of the independent variable. The results can be compared with this standard or control. Not all experiments have a control. • Multiple trials of an experiment must be conducted to verify the results. • Analysis of observed results of systematic investigations includes construction and interpretation of graphs. Such interpretation can be used to make predictions about the behavior of the dependent variable in other situations and to explore potential sources of error in the experiment. This analysis can be used to support conclusions about the results of the investigation. • Investigations can be classified as *observational* (descriptive) *studies* (intended to generate hypotheses), or *experimental studies* (intended to test hypotheses). • ~~Experimental studies sometimes follow a sequence of steps known as the Scientific Method: stating the problem, forming a hypothesis, testing the hypothesis, recording and analyzing data, stating a conclusion. However, there is no single scientific method. Science requires different abilities and procedures depending on such factors as the field of study and type of investigation.~~ • Science concepts are applied through observations and connections with everyday life and technology.	• develop conclusions based on a data set and verify whether the data set truly supports the conclusion. This requires students to cite references to the data that specifically support their conclusions. • ~~identify, describe, and apply the generalized steps of experimental (scientific) methodology.~~

Standard LS.2

LS.2	The student will investigate and understand that all living things are composed of cells. Key concepts include a) cell structure and organelles; b) similarities and differences between plant and animal cells; c) development of cell theory; and d) cell division.
	~~Understanding the Standard~~ Overview This standard builds on the general concept in science standard 5.5 that states that living things are made of cells ~~that have different parts~~. The emphasis here is on the concept that cells are the unit of structure and function of living things and on the concept of subcellular components, or organelles, each with a particular structure and function. The historical contributions of many scientists to the establishment of the cell theory are also important for students to understand. This standard also introduces students to the concept of cell division. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.2

LS.2	The student will investigate and understand that all living things are composed of cells. Key concepts include a) cell structure and organelles; b) similarities and differences between plant and animal cells; c) development of cell theory; and d) cell division.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • The structure of a cell organelle ~~reflects~~ is suited to the ~~job or~~ function carried out by that organelle. Division of labor within a cell is essential to the overall successful function of the cell. • Similarities and differences in plants and animals are evident at the cellular level. Plant and animal cells contain some of the same organelles and some that differ. • The original cell theory includes the following components: all living things are composed of cells~~,~~; cells are the smallest unit (structure) of living things that can perform the processes (functions) necessary for life~~,~~; and living cells come only from other living cells. (Although it is appropriate for students at this level to understand the three points of the original cell theory, an exploration of the revised cell theory should be reserved for high school Biology.) • The development of the original cell theory can be attributed to the major discoveries of many notable scientists. The development of the cell theory has been dependent upon improvements in the microscope and microscopic techniques throughout the last four centuries. • Continuing advances in microscopes and instrumentation have increased the understanding of cell organelles and their functions. Many of these organelles can now be observed with a ~~compound light~~ microscope (light, electron). • Cells go through a life cycle known as the cell cycle. The phases of the cell cycle are interphase, mitosis, and cytokinesis. (Although it is appropriate for students at this level to learn to recognize the stages of the cell cycle and mitosis, an exploration of the individual stages of meiosis may be reserved for high school Biology.)	In order to meet this standard, it is expected that students ~~should be able to~~ will • distinguish among the following: cell membrane, cytoplasm, nucleus, cell wall, vacuole, mitochondrion, endoplasmic reticulum, and chloroplast. • correlate the structures of cell organelles with their ~~jobs~~ functions ~~and analyze how organelles perform particular jobs~~. • compare and contrast examples of plant and animal cells, using the light microscope and images obtained from other microscopes. • describe and sequence the major points in the development of the cell theory. • identify the three components of the original cell theory. • sequence the steps in the cell cycle, including the phases of mitosis. • differentiate between the purpose of mitosis and meiosis. • design an investigation from a testable question related to animal and plant cells. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis. An example of such a question is: "Do onion cells vary in shape or structure depending on where they are found in the plant?" • ~~analyze and critique the experimental design of basic investigations related to animal and plant cells. This analysis and critique should focus on the skills developed in LS.1. Major emphases should include the following: the clarity of predictions and hypotheses, the organization of data tables, the use of metric measures, adequacy of~~

Standard LS.2

LS.2	The student will investigate and understand that all living things are composed of cells. Key concepts include a) cell structure and organelles; b) similarities and differences between plant and animal cells; c) development of cell theory; and d) cell division.
~~Overview~~ Essential Understandings	**Essential Knowledge, Skills, and Processes**
• The purpose of mitosis is to produce new cells for growth and repair that are identical to the parent cell. The purpose of meiosis is to produce reproductive (sex) cells that carry half the genetic material of the parent.	~~trials and samples, the identification and use of variables, the identification of constants, the use of controls, displays of graphical data, and the support for conclusions.~~

Standard LS.3

LS.3	The student will investigate and understand that living things show patterns of cellular organization. Key concepts include a) cells, tissues, organs, and systems; and b) patterns of cellular organization and their relationship to life processes in living things.

~~Understanding the Standard~~ Overview

This standard emphasizes the fact that among living organisms, there is a universality of the functions that maintain life. This standard continues to build upon students' knowledge of these functions and introduces students to the process of cellular transport. With the exception of the structures associated with plant reproduction, which are highlighted in 4.4, this is the students' introduction to the specific structures of plants and animals that enable them to perform life functions. Students are introduced to the concepts of unicellular and multicellular organisms and division of labor. This standard is not intended to require student understanding of the details of human body systems. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.3

LS.3	The student will investigate and understand that living things show patterns of cellular organization. Key concepts include a) cells, tissues, organs, and systems; and b) patterns of cellular organization and their relationship to life processes in living things.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Cells that have the same function group together to form tissues. Tissues that have the same function group together to form organs. Organs with similar functions group to work together in an organ system. • Unicellular organisms are made of only one cell. Multicellular organisms are made of many cells. • Multicellular organisms exhibit a hierarchy of cellular organization. They are complex in that there is a division of labor among the levels of this hierarchy for carrying out necessary life processes. • Cells perform numerous functions and processes including cellular respiration, waste breakdown and removal, growth and division, ~~irritability~~, and ~~reproduction~~ cellular transport. • Osmosis is the passive transport of water molecules across a cell membrane. Diffusion is the passive transport of substances other than water across a cell membrane. Cell membranes are selectively permeable to various substances. (A discussion of facilitated diffusion, tonicity, and active transport should be reserved for high school Biology.) • Living things carry out life processes including ingestion, digestion and removal of waste, stimulus response, growth and repair, gas exchange, and reproduction. • Numerous factors can strongly influence the life processes of organisms.	In order to meet this standard, it is expected that students ~~should be able to~~ will • ~~differentiate~~ explain the relationship among cells, tissue, organs, and organ~~s~~ systems. • differentiate between unicellular organisms and multicellular organisms and name common examples of each. • compare and contrast how unicellular and multicellular organisms perform various life functions. This includes the application of knowledge about systems in organisms. • ~~compare and contrast the various basic life functions of an organism, including ingestion and digestion, gas exchange respiration, waste removal, growth and repair, irritability, and reproduction~~ explain the role that each life function serves for an organism: ingestion, digestion and removal of waste, stimulus response, growth and repair, gas exchange, and reproduction. • explain that there is a specific range or continuum of conditions that will meet the needs of organisms. • model how materials move into and out of cells in the processes of osmosis, diffusion, and ~~active transport~~ selective permeability. This includes creating and interpreting three-dimensional models and/or illustrations demonstrating the processes involved. Students should be able to analyze the components of these models and diagrams and communicate their observations and conclusions. • create plausible hypotheses about the effects that changes in available materials might have on particular life processes in plants and in animals. • ~~analyze and critique the experimental design of~~ conduct basic investigations related to understanding cellular organization, with

Standard LS.3

LS.3	The student will investigate and understand that living things show patterns of cellular organization. Key concepts include a) cells, tissues, organs, and systems; and b) patterns of cellular organization and their relationship to life processes in living things.
~~Overview~~ Essential Understandings	**Essential Knowledge, Skills, and Processes**
	emphasis on observations of cells and tissue. This ~~analysis and critique~~ investigation should focus on the skills developed in LS.1. ~~Major emphases should include the following: the clarity of predictions and hypotheses, the organization of data tables, the use of metric measures, adequacy of trials and samples, the identification and use of variables, the identification of constants, the use of controls, displays of graphical data, and the support for conclusions.~~

Standard LS.4

LS.4	The student will investigate and understand how organisms can be classified. Key concepts include a) the distinguishing characteristics of domains of organisms; b) the distinguishing characteristics of kingdoms of organisms; c) the distinguishing characteristics of major animal phyla and plant divisions; and d) the characteristics that define a species.
	~~Understanding the Standard~~ Overview Classifying and grouping is a key inquiry skill, as described in the K–12 "Investigate and Understand" section of the Introduction to the *Science Standards of Learning.* Classifying is an important skill in the K–6 "Scientific Investigation, Reasoning and Logic" strand. The use of a classification key is introduced in 5.1. A key concept of 5.5 is the idea of using characteristics to group organisms into the currently recognized kingdoms. This standard focuses on students continuing to practice classification skills within a hierarchical biological classification system. This is accomplished by analyzing similarities and differences between the structures and functions of organisms. Students should understand that scientists use classification as a tool to organize information about organisms and to gain information about related organisms. This standard does not require a detailed survey of each domain, kingdom or phylum, but rather a general overview of how organisms are grouped and a focus on a few key groups. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.4

LS.4	The student will investigate and understand how organisms can be classified. Key concepts include a) the distinguishing characteristics of domains of organisms; b) the distinguishing characteristics of kingdoms of organisms; c) the distinguishing characteristics of major animal phyla and plant divisions; and d) the characteristics that define a species.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Information about physical features and activities is arranged in a hierarchy of increasing specificity. The levels in the accepted hierarchy include domain, kingdom, phylum, class, order, family, genus and species. • Current classification systems now generally recognize the categorization of organisms into three domains, Archaea, Bacteria and Eukarya. • As living things are constantly being investigated, new attributes (physical and chemical) are revealed that affect how organisms are placed in a standard classification system. This system is the basis for scientific binomial nomenclature. • Any grouping of organisms into domains or kingdoms is based on several factors, including the presence or absence of cellular structures, such as the nucleus, mitochondria, or a cell wall; whether the organisms exist as single cells or are multicellular; and how the organisms get their food. For example, simple, single-celled organisms that are able to survive in extreme environments ~~do not have a nucleus~~ are believed to be fundamentally different from other organisms and may be classified in ~~one or even two different kingdoms~~ their own domain (Archaea). ~~Six~~ Four different kingdoms of the Eukarya domain of organisms are generally recognized by scientists today (Protista, Fungi, Plants, and Animals). • Some important animal groups (phyla) are the cnidarians, mollusks, annelids, arthropods, echinoderms, and chordates. • Four important plant groups (divisions) are the mosses, ferns, conifers, and flowering plants.	In order to meet this standard, it is expected that students ~~should be able to~~ will • ~~compare and contrast key features and activities between organisms.~~ • classify organisms based on a comparison of key physical features and activities. • arrange organisms in a hierarchy according to similarities and differences in features. • categorize examples of organisms as representative of the kingdoms and recognize that the number of kingdoms is subject to change as new data are collected. • categorize examples of organisms as representative of the three domains (Archaea, Bacteria and Eukarya) and recognize that the number of domains is subject to change as new data are collected. • ~~recognize that the number of kingdoms is subject to change.~~ • recognize examples of major animal phyla. • recognize examples of major plant ~~phyla~~ ~~(~~divisions~~)~~. • recognize scientific names as part of a binomial nomenclature.

Standard LS.4

LS.4	The student will investigate and understand how organisms can be classified. Key concepts include a) the distinguishing characteristics of domains of organisms; b) the distinguishing characteristics of kingdoms of organisms; c) the distinguishing characteristics of major animal phyla and plant divisions; and d) the characteristics that define a species.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• A group of similar-looking organisms that can interbreed under natural conditions and produce offspring that are capable of reproduction defines a species.	

Standard LS.5

LS.5	The student will investigate and understand the basic physical and chemical processes of photosynthesis and its importance to plant and animal life. Key concepts include a) energy transfer between sunlight and chlorophyll; b) transformation of water and carbon dioxide into sugar and oxygen; and c) photosynthesis as the foundation of virtually all food webs.
	~~Understanding the Standard~~ Overview Students learn in 4.4 that photosynthesis is a basic life process of plants requiring chlorophyll and carbon dioxide. This standard pulls these ideas together to demonstrate the complexity and importance of photosynthesis. Energy enters food webs through photosynthesis and is then transferred throughout the food web. It is crucial that students understand the importance of plants (and other photosynthesizing organisms) in this role of providing energy to all other living things. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.5

LS.5	The student will investigate and understand the basic physical and chemical processes of photosynthesis and its importance to plant and animal life. Key concepts include a) energy transfer between sunlight and chlorophyll; b) transformation of water and carbon dioxide into sugar and oxygen; and c) photosynthesis as the foundation of virtually all food webs.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Chlorophyll is a chemical in chloroplasts that can absorb or trap light energy. • Photosynthesis is the necessary life process that transforms light energy into chemical energy. It involves a series of chemical reactions in which the light energy is used to change raw materials (carbon dioxide and water) into products (sugar and oxygen). The energy is stored in the chemical bonds of the glucose (sugar) molecules. • Plants perform cellular respiration as well as photosynthesis. • Plants convert the sugars they produce into other raw materials that are used by plants and animals for growth, repair, and energy needs. • Energy is a basic need of all living things. Photosynthesizing organisms obtain their energy from the sun~~. Plants and other photosynthesizing organisms~~ and are often called producers because of their ability to produce glucose (sugar). • Photosynthesizing organisms are ~~at the base of the energy pyramid~~ the foundation of virtually all food webs.	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe the process of photosynthesis in terms of raw materials and products generated. • identify and describe the cellular organelles involved in the process of photosynthesis. • explain how organisms utilize the energy stored from the products of photosynthesis. • compare and contrast the processes of photosynthesis and cellular respiration. • relate the importance of photosynthesis to the role of producers as the foundation of food webs. • design an investigation from a testable question related to photosynthesis. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis. • ~~analyze and critique the experimental design of basic investigations related to photosynthesis. This analysis and critique should focus on the skills developed in LS.1. Major emphases should include the following: the clarity of predictions and hypotheses, the organization of data tables, the use of metric measures, adequacy of trials and samples, the identification and use of variables, the identification of constants, the use of controls, displays of graphical data, and the support for conclusions.~~

Standard LS.6

LS.6	The student will investigate and understand that organisms within an ecosystem are dependent on one another and on nonliving components of the environment. Key concepts include a) the carbon, water, and nitrogen cycles; b) interactions resulting in a flow of energy and matter throughout the system; c) complex relationships within terrestrial, freshwater, and marine ecosystems; and d) energy flow in food webs and energy pyramids.
	~~Understanding the Standard~~ Overview This standard explores the *application* of the concept of interdependence between organisms and their physical environment. This concept is covered thoroughly in the K–6 standards of the Living Systems strand. The K–6 standards include the concept of interdependence (2.5)~~,~~; relationships in aquatic and terrestrial food chains, trophic levels ~~(3.5 and 6.9),~~ food webs, food pyramids and cycles (~~6.9~~ 3.5 and 4.5)~~,~~; and interactions between the living and nonliving components of an ecosystem (4.5). Terminology used in previous standards includes producer, consumer, decomposer ~~(3.5 and 6.9)~~, herbivore, omnivore, carnivore (3.5), and niche (4.5). It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.6

LS.6	The student will investigate and understand that organisms within an ecosystem are dependent on one another and on nonliving components of the environment. Key concepts include a) the carbon, water, and nitrogen cycles; b) interactions resulting in a flow of energy and matter throughout the system; c) complex relationships within terrestrial, freshwater, and marine ecosystems; and d) energy flow in food webs and energy pyramids.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Many important elements and compounds cycle through the living and nonliving components of the environment as a chain of events that continuously repeats. • Materials are recycled and made available through the action of decomposers. • In order to understand how an ecosystem functions, one must understand the concept of a system and be able to envision models of systems. • To analyze the interactions resulting in a flow of energy and matter throughout the ecosystem, one must identify the elements of the system and interpret how energy and matter are used by each organism. • Energy enters an ecosystem through the process of photosynthesis and is passed through the system as one organism eats and is, in turn, eaten. This energy flow can be modeled through relationships expressed in food webs. • The amount of energy available to each successive trophic level (producer, first-order consumer, second-order consumer, third-order consumer) decreases. This can be modeled through an energy pyramid, in which the producers provide the broad base that supports the other interactions in the system.	In order to meet this standard, it is expected that students ~~should be able to~~ will • differentiate among key processes in the water, carbon, and nitrogen cycles and ~~analyze~~ relate how organisms, from bacteria and fungi to third-order consumers, function in these cycles. • observe and identify common organisms in ecosystems and collect, record, and chart data concerning the interactions of these organisms (from observations and print and electronic resources). • classify organisms found in local ecosystems as producers or first-, second-, or third-order consumers. Design and construct models of food webs with these organisms. • observe local ecosystems and identify, measure, and classify the living and nonliving components. • identify examples of interdependence in terrestrial, freshwater, and marine ecosystems. • determine the relationship between a population's position in a food web and its size. • apply the concepts of food chains, food webs, and energy pyramids to analyze how energy and matter flow through an ecosystem. • design an investigation from a testable question related to food webs. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis. • analyze and critique the experimental design of basic investigations

Standard LS.6

LS.6	The student will investigate and understand that organisms within an ecosystem are dependent on one another and on nonliving components of the environment. Key concepts include a) the carbon, water, and nitrogen cycles; b) interactions resulting in a flow of energy and matter throughout the system; c) complex relationships within terrestrial, freshwater, and marine ecosystems; and d) energy flow in food webs and energy pyramids.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
	related to food webs.

Standard LS.7

LS.7	The student will investigate and understand that interactions exist among members of a population. Key concepts include a) competition, cooperation, social hierarchy, territorial imperative; and b) influence of behavior on a population.

~~Understanding the Standard~~ Overview

This standard applies the concept that each organism exists as a member of a population and interacts with other members of that population in a variety of ways. The term population is introduced in standard 3.6 ("Living Systems" strand). Individuals of a population demonstrate various behavioral adaptations (competition, cooperation, establishment of a social hierarchy, territorial imperative), which allow the population to survive. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.7

LS.7	The student will investigate and understand that interactions exist among members of a population. Key concepts include a) competition, cooperation, social hierarchy, territorial imperative; and b) influence of behavior on a population.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Individual members of a population interact with each other. These interactions include competing with each other for basic resources, mates, ~~and~~ territory, and cooperating with each other to meet basic needs. • The establishment of a social order in a population may ~~insure~~ ensure that labor and resources are adequately shared. • The establishment of a territory ensures that members of a population have adequate habitat to provide for basic resources. • Individual behaviors and group behaviors can influence a population. • Animals exhibit needs for food, water, gases, shelter and space for which they compete. These needs may often be met in a range of conditions. Too much may be as harmful as too little (e.g., too much food or too little water).	In order to meet this standard, it is expected that students ~~should be able to~~ will • differentiate between the needs of the individual and the needs of a population. • interpret, analyze, and evaluate data from systematic studies and experiments concerning the interactions among members of a population. • determine the relationship between a population's position in a food web and the types of interactions seen among the individuals of the population. • observe and identify populations in ecosystems and collect, record, chart, and interpret data concerning the interactions of these organisms (from observations and print and electronic resources). • categorize behaviors as examples of competition, cooperation, social hierarchy, or territorial imperative. • ~~analyze and critique the experimental design of basic investigations related to interactions within a population. This analysis and critique should focus on the skills developed in LS.1. Major emphases should include the following: the clarity of predictions and hypotheses, the organization of data tables, the use of metric measures, adequacy of trials and samples, the identification and use of variables, the identification of constants, the use of controls, displays of graphical data, and the support for conclusions.~~

Standard LS.8

LS.8	The student will investigate and understand interactions among populations in a biological community. Key concepts include a) the relationships among producers, consumers, and decomposers in food webs; b) the relationship between predators and prey; c) competition and cooperation; d) symbiotic relationships; and e) niches.
	~~Understanding the Standard~~ Overview Life Science standard LS.~~9~~8 applies the concept of interactions between populations of different species. This standard extends the concepts of prior K–6 standards, including those concerning producers, consumers, and decomposers (3.5); predator and prey (3.6); and niches (4.5). This standard introduces the concept of symbiosis and focuses on the symbiotic relationship between parasite and host. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.8

LS.8	The student will investigate and understand interactions among populations in a biological community. Key concepts include a) the relationships among producers, consumers, and decomposers in food webs; b) the relationship between predators and prey; c) competition and cooperation; d) symbiotic relationships; and e) niches.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Organisms or populations that rely on each other for basic needs form interdependent communities. • Energy resources of a community are shared through the interactions of producers, consumers, and decomposers. • The interaction between a consumer that hunts for another consumer for food is the predator-prey relationship. • In a community, populations interact with other populations by exhibiting a variety of behaviors that aid in the survival of the population. • Organisms may exist as members of a population; populations interact with other populations in a community~~; and communities together with the physical environment form ecosystems~~. • Populations of one species may compete with populations of other species for resources. Populations of one species may also cooperate with populations of other species for resources. • A symbiotic relationship may exist between two or more organisms of different species when they live and work together. • Symbiotic relationships include mutualism (in which both organisms benefit), commensalism (in which one organism benefits and the other is unaffected), and parasitism (in which one organism benefits and the other is harmed). • Each organism fills a specific role or niche in its community.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify the populations of producers, consumers, and decomposers and describe the roles they play in their communities. • interpret, analyze, and evaluate data from systematic studies and experiments concerning the interactions of populations in an ecosystem. • predict the effect of population changes on the food web of a community. • generate predictions based on graphically represented data of predator-prey populations. • generate predictions based on graphically represented data of competition and cooperation between populations. • differentiate between the types of symbiosis and explain examples of each. • infer the niche of organisms from their physical characteristics. • design an investigation from a testable question related to interactions among populations. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis.

Standard LS.9

LS.9	The student will investigate and understand how organisms adapt to biotic and abiotic factors in an ecosystem. Key concepts include a) differences between ecosystems and biomes; b) characteristics of land, marine, and freshwater ecosystems; and c) adaptations that enable organisms to survive within a specific ecosystem.
	~~Understanding the Standard~~ Overview In standard LS.~~10~~9, students explore the scheme of the Earth as a group of living systems. Students are asked to distinguish between ecosystems and biomes. The teacher should be aware that in previous standards, students have explored environments as discrete units or have examined individual components. In standard 3.6 students are introduced to the concept of water environments (pond, marshland, swamp, stream, river, and ocean) and land environments (desert, grassland, rainforest, and forest). It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.9

LS.9	The student will investigate and understand how organisms adapt to biotic and abiotic factors in an ecosystem. Key concepts include a) differences between ecosystems and biomes; b) characteristics of land, marine, and freshwater ecosystems; and c) adaptations that enable organisms to survive within a specific ecosystem.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • The living organisms within a specific area and their physical environment define an ecosystem. • Characteristics of land, marine, and freshwater ecosystems vary with respect to biotic and abiotic factors. • The major terrestrial ecosystems are classified into units called biomes — large regions characterized by certain conditions, including a range of climate and ecological communities adapted to those conditions. • Organisms have specific structures, functions, and behaviors that enable them to survive the biotic and abiotic conditions of the particular ecosystem in which they live. • Organisms ~~adapt~~ possess adaptations to both biotic and abiotic factors in their ecosystem that increase their chance of survival.	In order to meet this standard, it is expected that students ~~should be able to~~ will • differentiate between ecosystems and biomes. • recognize and give examples of major biomes: desert, forest, grassland, and tundra. • compare and contrast the biotic and abiotic characteristics of land, marine, and freshwater ecosystems. • ~~observe and describe examples of specific adaptations that organisms have which enable them to survive in a particular ecosystem.~~ • analyze and describe how specific adaptations enable ~~of~~ organisms to ~~determine how they help the species~~ survive in ~~it's~~ a particular ecosystem. • design an investigation from a testable question related to how specific adaptations of organisms allow them to survive in the presence of the ~~adapt to~~ biotic and abiotic factors in an ecosystem~~s~~. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis. • ~~analyze and critique the experimental design of basic investigations related to how organisms adapt to biotic and abiotic factors in ecosystems.~~

Standard LS.10

LS.10	The student will investigate and understand that ecosystems, communities, populations, and organisms are dynamic, change over time, and respond to daily, seasonal, and long-term changes in their environment. Key concepts include a) phototropism, hibernation, and dormancy; b) factors that increase or decrease population size; and c) eutrophication, climate changes, and catastrophic disturbances.
	~~Understanding the Standard~~ Overview In standard LS.~~11~~10, students apply the concept of change over time to several specific situations. As conditions change, organisms, populations, communities, and ecosystems respond to those changes in order to survive. The key concepts are given in a sequence from responses of individual organisms (phototropism, hibernation, and dormancy) to responses of populations (factors that increase or decrease population size) to responses of communities or ecosystems (eutrophication, climate change, and catastrophic disturbances). The concepts of standard LS.~~11~~10 focus on the theme of change. Living units respond in various ways to change. A key concept is the understanding of the dynamic nature of living systems as they constantly respond to change. Change is referenced several times in the K–6 standards. In the "Earth Patterns, Cycles, and Change" strand, the following concepts are introduced: natural and human-made things may change over time (K.~~9~~10); temperature, light, and precipitation bring about changes (1.7); and weather and seasonal changes affect plants, animals, and their surroundings (2.7). ~~In t~~The "Life Processes" strand, ~~the following concepts are introduced: animals respond to life needs through hibernation, migration, camouflage, etc. (3.4); and basic plant processes include the responses of reproduction, photosynthesis, dormancy~~ introduces the concept that plants (3.4) and animals (4.4) satisfy life needs and respond to the environment. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.10

LS.10	The student will investigate and understand that ecosystems, communities, populations, and organisms are dynamic, change over time, and respond to daily, seasonal, and long-term changes in their environment. Key concepts include a) phototropism, hibernation, and dormancy; b) factors that increase or decrease population size; and c) eutrophication, climate changes, and catastrophic disturbances.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Organisms may exist as members of a population; populations interact with other populations in a community; and communities together with the physical environment form ecosystems. • Changes that affect organisms over time may be daily, seasonal, or long-term. • Plants may respond to light by growing toward it or away from it, a behavior known as phototropism. • Animals may respond to cold conditions with a period of lowered metabolism, a behavior known as hibernation. • Organisms may respond to adverse conditions with a period of lowered or suspended metabolism, a behavior known as dormancy. • A variety of environmental factors may cause the size of a population to increase or decrease. (This requires students to brainstorm examples of factors and predict the possible effects.) • ~~Large-scale~~ Long-term changes may affect entire communities and ecosystems. Such large-scale changes include the addition of excess nutrients to the system (eutrophication), which alters environmental balance; dramatic changes in climate; and catastrophic events, such as fire, drought, flood, and earthquakes.	In order to meet this standard, it is expected that students ~~should be able to~~ will • relate the responses of organisms to daily, seasonal, or long-term events. • differentiate between ecosystems, communities, populations, and organisms. • predict the effect of climate change on ecosystems, communities, populations, and organisms. • predict the effect of ~~large scale changes~~ eutrophication on ecosystems, communities, populations, and organisms. • compare and contrast the factors that increase or decrease population size. • classify the various types of changes that occur over time in ecosystems, communities, populations, and organisms, as long term, short term, or seasonal. • design an investigation from a testable question related to change over time in ecosystems, communities, populations, or organisms. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis. • analyze and critique the experimental design of basic investigations related to change over time in ecosystems, communities, populations, and organisms.

Standard LS.11

LS.11	The student will investigate and understand the relationships between ecosystem dynamics and human activity. Key concepts include a) food production and harvest; b) change in habitat size, quality, or structure; c) change in species competition; d) population disturbances and factors that threaten or enhance species survival; and e) environmental issues.
	~~Understanding the Standard~~ Overview In this standard, students are called upon to apply their knowledge of human interactions to interpret how these interactions affect ecosystem dynamics. In prior standards in the "Resources" strand of the K–6 standards, students explore a variety of ways in which humans interact with the environment. These include the concepts of waste management (K.~~10~~11, 1.8)~~,~~; limitations of natural resources and factors that affect environmental quality (1.8, 3.10)~~,~~; Virginia's natural resources (4.8)~~,~~; and public policy decisions relating to the environment (6.9). In this Life Science standard, the student must interpret how human populations can change the balance of nature in ecosystems. They must use their prior knowledge of resources as well as the concepts and skills learned in Life Science standards ~~LS.7 – LS.11~~ LS.6 – LS.10. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.11

LS.11	The student will investigate and understand the relationships between ecosystem dynamics and human activity. Key concepts include a) food production and harvest; b) change in habitat size, quality, or structure; c) change in species competition; d) population disturbances and factors that threaten or enhance species survival; and e) environmental issues.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • Ecosystems are dynamic systems. Humans are a natural part of the ecosystem. Humans use the ecosystem to meet their basic needs, such as to obtain food. • Human interaction can directly alter habitat size, the quality of available resources in a habitat, and the structure of habitat components. Such interactions can be positive and/or negative. • Human input can disturb the balance of populations that occur in a stable ecosystem. These disturbances may lead to a decrease or increase in a population. Since populations in an ecosystem are interdependent, these disturbances have a ripple effect throughout the ecosystem. • The interaction of humans with the dynamic ecosystem may lead to issues of concern for continued ecosystem health in areas such as water supply, air quality, energy production, and waste management.	In order to meet this standard, it is expected that students ~~should be able to~~ will • identify examples of ecosystem dynamics. • describe the relationship between human food harvest and the ecosystem. • debate the pros and cons of human land use versus ecosystem stability. • compare and contrast population disturbances that threaten and those that enhance species survival. • describe ways that human interaction has altered habitats positively and negatively. • observe the effect of human interaction in local ecosystems and collect, record, chart, and interpret data concerning the effect of interaction (from observations and print and electronic resources). • design an investigation from a testable question related to the relationships between ecosystem dynamics and human activity. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis. • analyze and critique the experimental design of basic investigations related to the relationships between ecosystem dynamics and human activity.

Standard LS.12

LS.12	The student will investigate and understand that organisms reproduce and transmit genetic information to new generations. Key concepts include a) the structure and role of DNA; b) the function of genes and chromosomes; c) genotypes and phenotypes; d) characteristics that can and cannot be inherited; e) genetic engineering and its applications; and f) historical contributions and significance of discoveries related to genetics.
	~~Understanding the Standard~~ Overview In science standard 2.7, students are introduced to the general notion that plants and animals resemble their parents. This Life Science standard is the students' introduction to genetics. It is important for the teacher to understand that the intent of this standard is to provide students with a general overview of the nature of DNA, genes, and chromosomes and the important role they play in the transmission of traits from one generation to another. Students are not expected to understand the specific chemical composition of DNA or the mechanics of transcription and translation. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.12

LS.12	The student will investigate and understand that organisms reproduce and transmit genetic information to new generations. Key concepts include a) the structure and role of DNA; b) the function of genes and chromosomes; c) genotypes and phenotypes; d) characteristics that can and cannot be inherited; e) genetic engineering and its applications; and f) historical contributions and significance of discoveries related to genetics.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • DNA is a double helix molecule. • DNA is a molecule that includes different components — sugars, nitrogenous bases, and phosphates. The arrangement of the nitrogenous bases within the double helix forms a chemical code. • Chromosomes are strands of tightly wound DNA. Genes are sections of a chromosome that carry the code for a particular trait. An allele is an alternate form of a gene. • The basic laws of Mendelian genetics explain the transmission of most traits that can be inherited from generation to generation. • A Punnett square is a model used to predict the possible combinations of inherited factors resulting from single trait crosses. (An investigation of dihybrid crosses, multiple alleles, and incomplete dominance should be reserved for high school Biology.) • Dominant traits mask the expression (phenotype) of recessive traits. Genotype is the specific combination of dominant and recessive gene forms. • Traits that are expressed through genes can be inherited. Characteristics that are acquired through environmental influences, such as injuries or practiced skills, cannot be inherited. • In genetic engineering, the genetic code is manipulated to obtain a desired product. • Genetic engineering has numerous practical applications in medicine,	In order to meet this standard, it is expected that students ~~should be able to~~ will • recognize the appearance of DNA as double helix in shape. • explain that DNA contains coded instructions that store and pass on genetic information from one generation to the next. • explain the necessity of DNA replication for the continuity of life. • explain the relationship ~~between~~ among genes, chromosomes, and alleles. • demonstrate variation within a single genetic trait. • distinguish between dominant and recessive traits. • distinguish between genotype and phenotype. • use Punnett squares to predict the possible combinations of inherited factors resulting from single trait crosses. • differentiate between characteristics that can be inherited and those that cannot be inherited. • identify aspects of genetic engineering and supply examples of applications. Evaluate the examples for possible controversial aspects. • describe the contributions of Mendel, Franklin, ~~and~~ Watson, and Crick to our basic understanding of genetics.

Standard LS.12

LS.12	The student will investigate and understand that organisms reproduce and transmit genetic information to new generations. Key concepts include a) the structure and role of DNA; b) the function of genes and chromosomes; c) genotypes and phenotypes; d) characteristics that can and cannot be inherited; e) genetic engineering and its applications; and f) historical contributions and significance of discoveries related to genetics.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
agriculture, and biology. • A series of contributions and discoveries led to the current level of genetic science.	

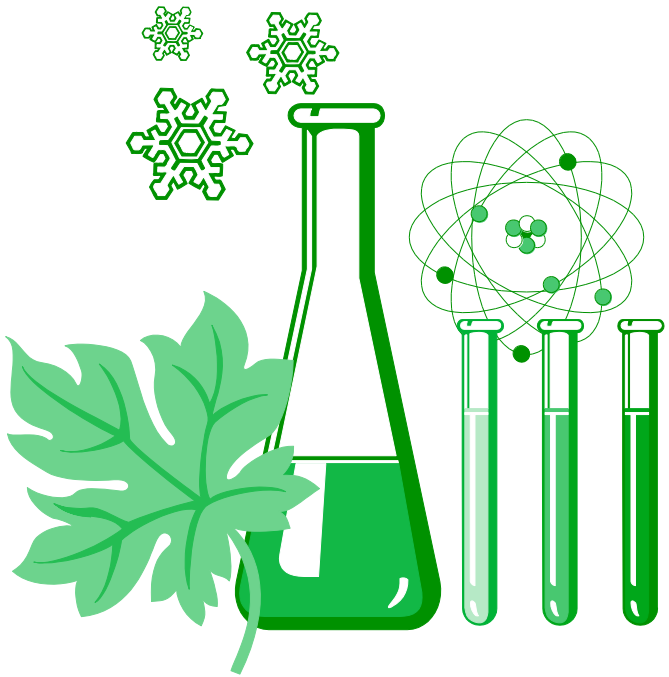
Standard LS.13

LS.13	The student will investigate and understand that populations of organisms change over time. Key concepts include a) the relationships of mutation, adaptation, natural selection, and extinction; b) evidence of evolution of different species in the fossil record; and c) how environmental influences, as well as genetic variation, can lead to diversity of organisms.
	~~Understanding the Standard~~ Overview Standard LS.~~14~~13 explores the concept of evolution through natural selection. Species respond to changes in their environments through adaptations~~. This~~ and is a gradual process that occurs over long periods of time. The progression of these long-term changes is well documented in the fossil record. Evolution, as a big organizing principle of the life sciences, establishes order among the great variety of living things. There are many misconceptions about evolution; therefore, teachers must be careful to be accurate in their presentation of this scientific theory. One common misconception among students is that they believe that environmental influences on an organism produce changes in that organism that can be passed on to offspring. However, natural selection can only work through the genetic variation that is already present in the population. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (LS.1) in the context of the key concepts presented in this standard.

Standard LS.13

LS.13	The student will investigate and understand that populations of organisms change over time. Key concepts include a) the relationships of mutation, adaptation, natural selection, and extinction; b) evidence of evolution of different species in the fossil record; and c) how environmental influences, as well as genetic variation, can lead to diversity of organisms.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The concepts developed in this standard include the following: • The mechanisms through which evolution takes place are a related set of processes that include mutation, adaptation, natural selection, and extinction. This results in changes in populations of organisms over time. • Mutations are inheritable changes because a mutation is a change in the DNA code. • Adaptations are structures, functions, or behaviors that enable a species to survive. • Natural selection is the survival and reproduction of the individuals in a population that exhibit the traits that best enable them to survive in their environment. • A mutation may result in a favorable change or adaptation in genetic information that improves a species' ability to exist in its environment, or a mutation may result in an unfavorable change that does not improve or impedes a species' ability to exist in its environment. • The evidence for evolution is drawn from a variety of sources of data, including the fossil record, radiometric dating, genetic information, the distribution of organisms, and anatomical and developmental similarities across species. • Individuals of a population each exhibit a range of variations in a trait as a result of the variations in their genetic codes. These variations may or may not help them survive and reproduce in their environment. • If a species does not include traits that enable it to survive in its environment or to survive changes in the environment, then the species may become extinct.	In order to meet this standard, it is expected that students ~~should be able to~~ will • interpret data from simulations that demonstrate selection for a trait belonging to species in various environments. • describe how changes in the environment can bring about changes in a species (adaptation, extinction) through natural selection~~, adaptation, and extinction~~. • describe and explain how fossils are records of organisms and events in ~~the~~ Earth's history. • explain the evidence for evolution from a variety of sources of scientific data. • explain how genetic variations in offspring, which lead to variations in successive generations, can result from the same two parents. • analyze and evaluate data from investigations on variations within a local population. • explain how environmental influences, as well as genetic variation, can lead to diversity of organisms.



Science Standards of Learning Curriculum Framework

Physical Science

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Standard PS.1

PS.1	The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which a) chemicals and equipment are used safely; b) length, mass, volume, density, temperature, weight, and force are accurately measured; c) conversions are made among metric units, applying appropriate prefixes; d) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, probeware, and spring scales are used to gather data; e) numbers are expressed in scientific notation where appropriate; f) independent and dependent variables, constants, controls, and repeated trials are identified; g) data tables showing the independent and dependent variables, derived quantities, and the number of trials are constructed and interpreted; h) data tables for descriptive statistics showing specific measures of central tendency, the range of the data set, and the number of repeated trials are constructed and interpreted; i) frequency distributions, scatterplots, line plots, and histograms are constructed and interpreted; j) valid conclusions are made after analyzing data; k) research methods are used to investigate practical problems and questions; l) experimental results are presented in appropriate written form; m) models and simulations are constructed and used to illustrate and explain phenomena; and n) current applications of physical science concepts are used.
	~~Understanding the Standard~~ Overview The skills described in standard PS.1 are intended to define the "investigate" component of all of the other Physical Science standards (PS.2 – PS.11). The intent of standard PS.1 is that students will continue to develop a range of inquiry skills and achieve proficiency with those skills in the context of the concepts developed in the Physical Science curriculum. Standard PS.1 does not require a discrete unit on scientific investigation because the inquiry skills that make up the standard should be incorporated in all the other Physical Science standards. It is also intended that by developing these skills, students will achieve greater understanding of scientific inquiry and the nature of science, as well as more fully grasp the content-related SOL concepts. Models, simulations, and current applications are used throughout the course in order to learn and reinforce science concepts. Across the grade levels, kindergarten through high school, the skills in the first standards form a nearly continuous sequence. ~~(Please note Appendix, "Science Skills Scope & Sequence.")~~ It is very important that the Physical Science teacher be familiar with the skills in the sequence leading up to standard PS.1 (LS.1, 6.1, 5.1, 4.1).

Standard PS.1

PS.1	The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which a) chemicals and equipment are used safely; b) length, mass, volume, density, temperature, weight, and force are accurately measured; c) conversions are made among metric units, applying appropriate prefixes; d) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, probeware, and spring scales are used to gather data; e) numbers are expressed in scientific notation where appropriate; f) independent and dependent variables, constants, controls, and repeated trials are identified; g) data tables showing the independent and dependent variables, derived quantities, and the number of trials are constructed and interpreted; h) data tables for descriptive statistics showing specific measures of central tendency, the range of the data set, and the number of repeated trials are constructed and interpreted; i) frequency distributions, scatterplots, line plots, and histograms are constructed and interpreted; j) valid conclusions are made after analyzing data; k) research methods are used to investigate practical problems and questions; l) experimental results are presented in appropriate written form; m) models and simulations are constructed and used to illustrate and explain phenomena; and n) current applications of physical science concepts are used.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts of a) the natural world is understandable; b) science is based on evidence - both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. • Systematic investigations require standard measures and consistent and reliable tools. International System of Units (SI or metric) measures,	In order to meet this standard, it is expected that students ~~should be able to~~ will • make connections between the components of the nature of science and their investigations and the greater body of scientific knowledge and research. • select appropriate equipment (probeware, triple beam balances, thermometers, metric rulers, graduated cylinders, electronic balances, or spring scales) and utilize correct techniques to measure length, mass, density, weight, volume, temperature, and force. • design a data table that includes space to organize all components of an investigation in a meaningful way, including levels of the independent variable, measured responses of the dependent variable, number of trials, and mathematical means. • record measurements, using the following metric (SI) units: liter, milliliter (cubic centimeters), meter, centimeter, millimeter, grams, degrees Celsius, and newtons.

Standard PS.1

PS.1 The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which

a) chemicals and equipment are used safely;
b) length, mass, volume, density, temperature, weight, and force are accurately measured;
c) conversions are made among metric units, applying appropriate prefixes;
d) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, probeware, and spring scales are used to gather data;
e) numbers are expressed in scientific notation where appropriate;
f) independent and dependent variables, constants, controls, and repeated trials are identified;
g) data tables showing the independent and dependent variables, derived quantities, and the number of trials are constructed and interpreted;
h) data tables for descriptive statistics showing specific measures of central tendency, the range of the data set, and the number of repeated trials are constructed and interpreted;
i) frequency distributions, scatterplots, line plots, and histograms are constructed and interpreted;
j) valid conclusions are made after analyzing data;
k) research methods are used to investigate practical problems and questions;
l) experimental results are presented in appropriate written form;
m) models and simulations are constructed and used to illustrate and explain phenomena; and
n) current applications of physical science concepts are used.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
recognized around the world, are a standard way to make measurements. • Systematic investigations require organized reporting of data. The way the data are displayed can make it easier to see important patterns, trends, and relationships. Frequency distributions, ~~scattergrams~~, scatterplots, line plots, and histograms are powerful tools for displaying and interpreting data. • Investigation not only involves the careful application of systematic (scientific) methodology, but also includes the review and analysis of prior research related to the topic. Numerous sources of information are available from print and electronic sources, and the researcher needs to judge the authority and credibility of the sources. • To communicate the plan of an experiment accurately, the independent variable, dependent variable, and constants must be explicitly defined. • The number of repeated trials needs to be considered in the context of the investigation. Often "controls" are used to establish a standard for comparing the results of manipulating the independent variable. Controls receive no experimental treatment. Not all experiments have a control,	• recognize metric prefix units and make common metric conversions between the same base metric unit (for example, nanogram to milligram ~~to gram~~ or kilometer to meter). • use a variety of graphical methods to display data; create an appropriate graph for a given set of data; and select the proper type of graph for a given set of data, identify and label the axes, and plot the data points. ~~*(Note: Frequency distributions, scattergrams, line plots, and histograms are described in the Mathematics Curriculum Framework, standard 7.17, pp. 27–29.)*~~ • gather, evaluate, and summarize information, using multiple and variable resources, and detect bias from a given source. • identify the key components of controlled experiments: hypotheses, independent and dependent variables, constants, controls, and repeated trials. • formulate conclusions that are supported by the gathered data. • apply the methodology of scientific inquiry: begin with a question,

Standard PS.1

PS.1 The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which

a) chemicals and equipment are used safely;
b) length, mass, volume, density, temperature, weight, and force are accurately measured;
c) conversions are made among metric units, applying appropriate prefixes;
d) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, probeware, and spring scales are used to gather data;
e) numbers are expressed in scientific notation where appropriate;
f) independent and dependent variables, constants, controls, and repeated trials are identified;
g) data tables showing the independent and dependent variables, derived quantities, and the number of trials are constructed and interpreted;
h) data tables for descriptive statistics showing specific measures of central tendency, the range of the data set, and the number of repeated trials are constructed and interpreted;
i) frequency distributions, scatterplots, line plots, and histograms are constructed and interpreted;
j) valid conclusions are made after analyzing data;
k) research methods are used to investigate practical problems and questions;
l) experimental results are presented in appropriate written form;
m) models and simulations are constructed and used to illustrate and explain phenomena; and
n) current applications of physical science concepts are used.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
however. • The analysis of data from a systematic investigation may provide the researcher with a basis to reach a reasonable conclusion. Conclusions should not go beyond the evidence that supports them. Additional scientific research may yield new information that affects previous conclusions. • Different kinds of problems and questions require differing approaches and research. Scientific methodology almost always begins with a question, is based on observation and evidence, and requires logic and reasoning. Not all systematic investigations are experimental. • It is important to communicate systematically the design and results of an investigation so that questions, procedures, tools, results, and conclusions can be understood and replicated. • ~~Scientists rely on creativity and imagination during all stages of their investigations.~~ • Some useful applications of physical science concepts are in the area of materials science (e.g., metals, ceramics, semi-conductors).	design an investigation, gather evidence, formulate an answer to the original question, ~~and~~ communicate the investigative process and results~~.~~, and realize this methodology does not always follow a prescribed sequence. • communicate in written form the following information about investigations: the purpose/problem of the investigation, procedures, materials, data and/or observations, graphs, and an interpretation of the results. • describe how creativity comes into play during various stages of scientific investigations. • use current technologies to model and simulate experimental conditions. • recognize examples of the use of nanotechnology and its applications.

Standard PS.1

PS.1	The student will demonstrate an understanding of scientific reasoning, logic and the nature of science by planning and conducting investigations in which a) chemicals and equipment are used safely; b) length, mass, volume, density, temperature, weight, and force are accurately measured; c) conversions are made among metric units, applying appropriate prefixes; d) triple beam and electronic balances, thermometers, metric rulers, graduated cylinders, probeware, and spring scales are used to gather data; e) numbers are expressed in scientific notation where appropriate; f) independent and dependent variables, constants, controls, and repeated trials are identified; g) data tables showing the independent and dependent variables, derived quantities, and the number of trials are constructed and interpreted; h) data tables for descriptive statistics showing specific measures of central tendency, the range of the data set, and the number of repeated trials are constructed and interpreted; i) frequency distributions, scatterplots, line plots, and histograms are constructed and interpreted; j) valid conclusions are made after analyzing data; k) research methods are used to investigate practical problems and questions; l) experimental results are presented in appropriate written form; m) models and simulations are constructed and used to illustrate and explain phenomena; and n) current applications of physical science concepts are used.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• Nanotechnology is the study of materials at the molecular (atomic) scale. Items at this scale are so small they are no longer visible with the naked eye. Nanotechnology has shown that the behavior and properties of some substances at the nanoscale (a nanometer is one-billionth of a meter) contradict how they behave and what their properties are at the visible scale. • New discoveries based on nanoscience investigations have allowed the production of superior new materials with improved properties (e.g., computers, cell phones).	

Standard PS.2

PS.2	The student will investigate and understand the nature of matter. Key concepts include a) the particle theory of matter; b) elements, compounds, mixtures, acids, bases, and salts; c) solids, liquids, and gases; d) physical properties; e) chemical properties; and f) characteristics of types of matter based on physical and chemical properties.
	~~Understanding the Standard~~ Overview The concepts in PS.2 build upon several science standards from previous grades, including K.4, 1.3, 2.3, 3.3, 5.4, and 6.4. These standards introduce and develop basic ideas about the characteristics and structure of matter. In PS.2, the ideas and terminology continue to be expanded and treated in greater depth, including more mathematical application. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.2

PS.2 The student will investigate and understand the nature of matter. Key concepts include

a) the particle theory of matter;
b) elements, compounds, mixtures, acids, bases, and salts;
c) solids, liquids, and gases;
d) physical properties;
e) chemical properties; and
f) characteristics of types of matter based on physical and chemical properties.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Matter is anything that has mass and occupies space. All matter is made up of small particles called atoms. Matter can exist as a solid, a liquid, ~~or~~ a gas, or plasma. • Matter can be classified as elements, compounds, and mixtures. The atoms of any element are alike but are different from atoms of other elements. Compounds consist of two or more elements that are chemically combined in a fixed ratio. Mixtures also consist of two or more substances, but the substances are not chemically combined. • Compounds can be classified in several ways, including: - acids, bases, salts - inorganic and organic compounds. • Acids make up an important group of compounds that contain hydrogen ions. When acids dissolve in water, hydrogen ions (H^+) are released into the resulting solution. A base is a substance that releases hydroxide ions (OH^-) into solution. pH is a measure of the hydrogen ion concentration in a solution. The pH scale ranges from 0–14. Solutions with a pH lower than 7 are acidic; solutions with a pH greater than 7 are basic. A pH of 7 is neutral. When an acid reacts with a base, a salt is formed, along with water. • Matter can be described by its physical properties, which include shape, density, solubility, odor, melting point, boiling point, and color. Some physical properties, such as density, boiling point, and solubility, are characteristic of a specific substance and do not depend on the size of	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe the particle theory of matter. • describe how to determine whether a substance is an element, compound, or mixture. • define compounds as inorganic or organic. (All organic compounds contain carbon). • describe what a salt is and explain how salts form. • describe the properties of ~~the states of matter (~~solids, liquids, ~~and~~ gases, and plasma~~)~~. • distinguish between physical properties (i.e., shape, density, solubility, odor, melting point, boiling point, and color) and chemical properties (i.e., acidity, basicity, combustibility, and reactivity). • find the mass and volume of substances and calculate and compare their densities. • analyze the pH of a solution and classify it as acidic, basic, or neutral. • determine the identity of an unknown substance by comparing its properties to those of known substances. • design an investigation from a testable question related to physical and chemical properties of matter. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and

Standard PS.2

PS.2	The student will investigate and understand the nature of matter. Key concepts include a) the particle theory of matter; b) elements, compounds, mixtures, acids, bases, and salts; c) solids, liquids, and gases; d) physical properties; e) chemical properties; and f) characteristics of types of matter based on physical and chemical properties.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
the sample. Characteristic properties can be used to identify unknown substances. • Equal volumes of different substances usually have different masses. • Matter can also be described by its chemical properties, which include acidity, basicity, combustibility, and reactivity. A chemical property indicates whether a substance can undergo a chemical change.	analysis. (Students should be able to use the inquiry skills represented in PS.1 and LS.1 to compose a clear hypothesis, create an organized data table, identify variables and constants, record data correctly, construct appropriate graphs, analyze data, and draw reasonable conclusions.)

Standard PS.3

PS.3	The student will investigate and understand the modern and historical models of atomic structure. Key concepts include a) the contributions of Dalton, Thomson, Rutherford, and Bohr in understanding the atom; and b) the modern model of atomic structure.
	~~Understanding the Standard~~ Overview PS.3 builds upon science standards 3.3, 5.4, and 6.4, which introduce basic concepts and terminology related to the atom. PS.3 focuses more specifically on the basic structure of the atom and how models have been and are used to explain atomic structure. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.3

PS.3	The student will investigate and understand the modern and historical models of atomic structure. Key concepts include a) the contributions of Dalton, Thomson, Rutherford, and Bohr in understanding the atom; and b) the modern model of atomic structure.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Many scientists have contributed to our understanding of atomic structure. • The atom is the basic building block of matter and consists of subatomic particles (proton, neutron, ~~and~~ electron, and quark) that differ in their location, charge, and relative mass. Protons and neutrons are made up of smaller particles called quarks. • Size at the atomic level is measured on the nanoscale. • Scientists use models to help explain the structure of the atom. Their understanding of the structure of the atom continues to evolve. Two models commonly used are the Bohr and the "electron cloud" (Quantum Mechanics) models. The Bohr model does not depict the three-dimensional aspect of an atom, and it implies that electrons are in static orbits. The "electron cloud" model better represents our current understanding of the structure of the atom.	In order to meet this standard, it is expected that students ~~should be able to~~ will • describe the historical development of the concept of the atom and the contributions of Dalton, Thomson, Rutherford, ~~and~~ Bohr and other scientists (Schrödinger). • ~~use the Bohr model to~~ differentiate among the three basic particles in the atom (proton, neutron, and electron) and their charges, relative masses, and locations. • compare the Bohr atomic model to the electron cloud model with respect to ~~their~~ its ability to represent accurately the three-dimensional structure of the atom.

Standard PS.4

PS.4	The student will investigate and understand the organization and use of the periodic table of elements to obtain information. Key concepts include a) symbols, atomic number, atomic mass, chemical families (groups), and periods; b) classification of elements as metals, metalloids, and nonmetals; and c) formation of compounds through ionic and covalent bonding.
	~~Understanding the Standard~~ Overview PS.4 formally introduces the periodic table of elements. This standard builds upon concepts of the atom presented in science standard 6.4. Standard PS.4 focuses on a student's ability to look at the organization of the periodic table and obtain ~~learn what~~ information ~~can be obtained~~ from it. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.4

PS.4	The student will investigate and understand the organization and use of the periodic table of elements to obtain information. Key concepts include a) symbols, atomic number, atomic mass, chemical families (groups), and periods; b) classification of elements as metals, metalloids, and nonmetals; and c) formation of compounds through ionic and covalent bonding.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • There are more than 110 known elements. No element with an atomic number greater than 92 is found naturally in measurable quantities on Earth. The remaining elements are artificially produced in a laboratory setting. Elements combine in many ways to produce compounds that make up all other substances on Earth. • The periodic table of elements is a tool used to organize information about the elements. Each box in the periodic table contains information about the structure of an element. • An atom's identity is directly related to the number of protons in its nucleus. This is the basis for the arrangement of atoms on the periodic table of elements. • The vertical columns in the table are called groups or families. ~~Elements in each group have similar properties because they have the same number of electrons in the outermost energy level~~. The horizontal rows are called periods. • Elements in the same column (family) of the periodic table contain the same number of electrons in their outer energy levels. This gives rise to their similar properties and is the basis of periodicity — the repetitive pattern of properties such as boiling point across periods on the table. • The periodic table of elements is an arrangement of elements according to atomic number and properties. The information can be used to predict chemical reactivity. The boxes for all of the elements are arranged in increasing order of atomic number. The elements have	In order to meet this standard, it is expected that students ~~should be able to~~ will • use the periodic table to obtain the following information about the atom of an element: - symbol - atomic number - atomic mass - state of matter at room temperature - number of outer energy level (valence) electrons. • describe the organization of the periodic table in terms of - atomic number - metals, metalloids, and nonmetals - groups/families vs. periods. • recognize that an atom's identity is related to the number of protons in its nucleus. • categorize a given element as metal, nonmetal, or metalloid. • given a chemical formula of a compound, identify the elements and the number of atoms of each that comprise the compound. • recognize that the number of electrons in the outermost energy level determines an element's chemical properties or chemical reactivity. • describe the difference between ionic and covalent bonding. • predict what kind of bond (ionic or covalent) will likely form when metals and nonmetals are chemically combined ~~chemically~~.

Standard PS.4

PS.4	The student will investigate and understand the organization and use of the periodic table of elements to obtain information. Key concepts include a) symbols, atomic number, atomic mass, chemical families (groups), and periods; b) classification of elements as metals, metalloids, and nonmetals; and c) formation of compounds through ionic and covalent bonding.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
an increasing nonmetallic character as one reads from left to right across the table. Along the stair-step line are the metalloids, which have properties of both metals and nonmetals. • The nonmetals are located to the right of the stair-step line on the periodic table. • Metals tend to lose electrons in chemical reactions, forming positive ions. Nonmetals tend to gain electrons in chemical reactions, forming negative ions. • Gaining or losing electrons makes an atom an ion. • Gaining or losing neutrons makes an atom an isotope. However, gaining or losing a proton makes an atom into a completely different element. • Atoms react to form chemically stable substances that are held together by chemical bonds and are represented by chemical formulas. To become chemically stable, atoms gain, lose, or share electrons. • Compounds are formed when elements react chemically. When a metallic element reacts with a nonmetallic element, their atoms gain and lose electrons respectively, forming ionic bonds. Generally, when two nonmetals react, atoms share electrons, forming covalent (molecular) bonds.	

Standard PS.5

PS.5	The student will investigate and understand changes in matter and the relationship of these changes to the Law of Conservation of Matter and Energy. Key concepts include a) physical changes; b) chemical changes; and c) nuclear reactions.
	~~Understanding the Standard~~ Overview This standard focuses on the concept that matter and energy can be changed in different ways, but the total amount of mass and energy is conserved. Students have previously investigated physical and chemical changes. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.5

PS.5	The student will investigate and understand changes in matter and the relationship of these changes to the Law of Conservation of Matter and Energy. Key concepts include a) physical changes; b) chemical changes; and c) nuclear reactions.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Matter can undergo physical and chemical changes. In physical changes, the chemical composition of the substances does not change. In chemical changes, different substances are formed. Chemical changes are often affected by the surface area/volume ratio of the materials involved in the change. • The Law of Conservation of Matter (Mass) states that regardless of how substances within a closed system are changed, the total mass remains the same. The Law of Conservation of Energy states that energy cannot be created or destroyed but only changed from one form to another. • A chemical equation represents the changes that take place in a chemical reaction. The chemical formulas of the reactants are written on the left, an arrow indicates a change to new substances, and the chemical formulas of the products are written on the right. Chemical reactions are classified into two broad types: ones in which energy is released (exothermic) and ones in which energy is absorbed (endothermic). (The study of synthesis, decomposition, and replacement reactions can be reserved for high school ~~C~~chemistry.) • Another type of change occurs in nuclear reactions. Nuclear energy is the energy stored in the nucleus of an atom. This energy can be released by joining nuclei together (fusion) or by splitting nuclei (fission), resulting in the conversion of minute amounts of matter into energy. In nuclear reactions, a small amount of matter produces a large amount of energy. However, there are potential negative effects of using nuclear energy, including radioactive nuclear waste storage and disposal.	In order to meet this standard, it is expected that students ~~should be able to~~ will • compare and contrast physical, chemical, and nuclear changes. • identify the reactants and products in a given chemical equation formula. • design an investigation that illustrates physical and chemical changes. • given chemical formulas, write and balance simple chemical equations. • analyze experimental data to determine whether it supports the Law of Conservation of Mass. • recognize that some types of chemical reactions require continuous input of energy (endothermic) and others release energy (exothermic). • describe, in simple terms, the processes that release nuclear energy (i.e., nuclear fission and nuclear fusion). Create a simple diagram to summarize and compare and contrast these two types of nuclear energy. • evaluate the positive and negative effects of using nuclear energy.

Standard PS.6

PS.6	The student will investigate and understand forms of energy and how energy is transferred and transformed. Key concepts include a) potential and kinetic energy; and b) mechanical, chemical, electrical, thermal, radiant and nuclear energy.
	~~Understanding the Standard~~ Overview The concepts in PS.6 build upon several science standards from previous grades, including 4.2, 4.3, ~~5.3~~, 6.~~3~~2, and 6.4. These standards introduce and develop basic ideas about states and forms of energy. At the sixth-grade level, this sequence culminates with the idea about energy transformations. In PS.6, concepts about energy forms, energy transformations, and potential and kinetic energy continue to be expanded and treated in greater depth, including more mathematical application. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.6

PS.6	The student will investigate and understand forms of energy and how energy is transferred and transformed. Key concepts include a) potential and kinetic energy; and b) mechanical, chemical, electrical, thermal, radiant and nuclear energy.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Energy is the ability to do work. • Energy exists in two states. Potential energy is stored energy based on position or chemical composition. Kinetic energy is energy of motion. Students should know that the amount of potential energy associated with an object depends on its position. The amount of kinetic energy depends on the mass and velocity of the moving object. • Important forms of energy include ~~light~~ radiant, ~~heat~~ thermal, chemical, electrical, mechanical, and nuclear energy. Visible light is a form of radiant energy and ~~S~~sound is a form of mechanical energy. • Energy can be transformed from one type to another. In any energy conversion, some of the energy is lost to the environment as ~~heat~~ thermal energy.	In order to meet this standard, it is expected that students ~~should be able to~~ will • differentiate between potential and kinetic energy. • use diagrams or concrete examples to compare relative amounts of potential and kinetic energy. • identify and give examples of common forms of energy. • design an investigation or create a diagram to illustrate energy transformations.

Standard PS.7

PS.7	The student will investigate and understand temperature scales, heat, and thermal energy transfer. Key concepts include a) Celsius and Kelvin temperature scales and absolute zero; b) phase change, freezing point, melting point, boiling point, vaporization, and condensation; c) conduction, convection, and radiation; and d) applications of thermal energy transfer.
	~~Understanding the Standard~~ Overview This standard focuses on how ~~heat affects matter and how heat~~ thermal energy is transferred. Concepts introduced in previous grades and related to the states of matter are presented in standards 2.3 and 5.4. More complex concepts and terminology related to phase changes are introduced in PS.7, including the distinction between heat and temperature. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.7

PS.7 The student will investigate and understand temperature scales, heat, and thermal energy transfer. Key concepts include

a) Celsius and Kelvin temperature scales and absolute zero;
b) phase change, freezing point, melting point, boiling point, vaporization, and condensation;
c) conduction, convection, and radiation; and
d) applications of thermal energy transfer.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Heat and temperature are not the same thing. Heat is the transfer of thermal energy between substances of different temperature. As thermal energy is added, the temperature of a substance increases. • Temperature is a measure of the average kinetic energy of the molecules of a substance. Increased temperature means greater average kinetic energy of the molecules in the substance being measured, and most substances expand when heated. The temperature of absolute zero (–273°C/0°K) is the theoretical point at which molecular motion stops. • Atoms and molecules are perpetually in motion. • The transfer of ~~heat~~ thermal energy occurs in three ways: by conduction, by convection, and by radiation. • As ~~heat~~ thermal energy is added to or taken away from a system, the temperature does not always change. There is no change in temperature during a phase change (freezing, melting, condensing, evaporation, boiling, and vaporizing) as this energy is being used to make or break bonds between molecules.	In order to meet this standard, it is expected that students ~~should be able to~~ will • distinguish between heat and temperature. • compare and contrast Celsius and Kelvin temperature scales and describe absolute zero. • illustrate and explain the effect of the addition or subtraction of heat thermal energy on the motion of molecules. • analyze a time/temperature graph of a phase change experiment to determine the temperature at which the phase change occurs (freezing point, melting point, or boiling point). • compare and contrast methods of thermal energy transfer (conduction, convection, and radiation) and provide and explain common examples. • explain, in simple terms, how the principle of ~~heat~~ thermal energy transfer applies to heat engines, thermostats, ~~and~~ refrigerators, ~~and~~ heat pumps, and geothermal systems. • design an investigation from a testable question related to ~~heat~~ thermal energy transfer. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis.

Standard PS.8

PS.8	The student will investigate and understand the characteristics of sound waves. Key concepts include a) wavelength, frequency, speed, amplitude, rarefaction, and compression; b) resonance; c) the nature of compression waves; and d) technological applications of sound.
	~~Understanding the Standard~~ Overview The focus of this standard is the mechanical wave-like nature of sound and some examples of its application. Sound is introduced in science standard 5.2, and it is expected that standard PS.8 will build upon and expand the concepts of the earlier standard. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.8

PS.8	The student will investigate and understand the characteristics of sound waves. Key concepts include a) wavelength, frequency, speed, amplitude, rarefaction, and compression; b) resonance; c) the nature of compression waves; and d) technological applications of sound.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Sound is produced by vibrations and is a type of mechanical energy. Sound travels in compression waves and at a speed much slower than light. It needs a medium (solid, liquid, or gas) in which to travel. In a compression wave, matter vibrates in the same direction in which the wave travels. • All waves exhibit certain characteristics: wavelength, frequency, and amplitude. As wavelength increases, frequency decreases. • The speed of sound depends on two things: the medium through which the waves travel and the temperature of the medium. • Resonance is the tendency of a system to vibrate at maximum amplitude at certain frequencies. • A compression (longitudinal) wave consists of a repeating pattern of compressions and rarefactions. Wavelength is measured as the distance from one compression to the next compression or the distance from one rarefaction to the next rarefaction. • Reflection and interference patterns are used in ultrasonic technology, including sonar and medical diagnosis.	In order to meet this standard, it is expected that students ~~should be able to~~ will • determine the relationship between frequency and wavelength. • analyze factors that determine the speed of sound through various materials and interpret graphs and charts that display this information. • identify examples illustrating resonance (e.g., musical instruments, Tacoma Narrows Bridge, ~~wine glasses~~ crystal stemware). • model a compression (longitudinal) wave and diagram, label, and describe the basic components: wavelength, compression, rarefaction, and frequency. • describe technological applications of sound waves and generally how each application functions. • design an investigation from a testable question related to sound. The investigation may be a complete experimental design or may focus on systematic observation, description, measurement, and/or data collection and analysis. ~~(Students should be able to use the inquiry skills represented in PS.1 and LS.1 to compose a clear hypothesis, create an organized data table, identify variables and constants, record data correctly, construct appropriate graphs, analyze data, and draw reasonable conclusions.)~~

Standard PS.9

PS.9	The student will investigate and understand the characteristics of transverse waves. Key concepts include a) wavelength, frequency, speed, amplitude, crest, and trough; b) the wave behavior of light; c) images formed by lenses and mirrors; d) the electromagnetic spectrum; and e) technological applications of light.
	~~Understanding the Standard~~ Overview This standard focuses on the nature of light and its applications. It builds upon standard 5.3, in which students investigate the characteristics of visible light. Standard PS.9 introduces students to the wave behavior of light. The speed of light in a vacuum is a constant. Light can change speed and direction as a result of moving from one medium to another. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.9

PS.9 The student will investigate and understand the characteristics of transverse waves. Key concepts include

a) wavelength, frequency, speed, amplitude, crest, and trough;
b) the wave behavior of light;
c) images formed by lenses and mirrors;
d) the electromagnetic spectrum; and
e) technological applications of light.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Visible light is a form of radiant energy that moves in transverse waves. • All transverse waves exhibit certain characteristics: wavelength, crest, trough, frequency, and amplitude. As wavelength increases, frequency decreases. There is an inverse relationship between frequency and wavelength. • ~~Light~~ Radiant energy travels in straight lines until it strikes an object where it can be reflected, absorbed, or transmitted. As visible light ~~waves~~ travels through different media, ~~they~~ it undergoes a change in speed that may result in refraction. • Electromagnetic waves are arranged on the electromagnetic spectrum by wavelength. All types of electromagnetic radiation travel at the speed of light, but differ in wavelength. The electromagnetic spectrum includes gamma rays, X-rays, ultraviolet, visible light, infrared, and radio and microwaves. • Radio waves are the lowest energy waves and have the longest wavelength and the lowest frequency. Gamma rays are the highest energy waves and have the shortest wavelength and the highest frequency. Visible light lies in between and makes up only a small portion of the electromagnetic spectrum. • Plane, concave, and convex mirrors all reflect light. Convex mirrors diverge light and produce a smaller, upright image. Concave mirrors converge light and produce an upright, magnified image if close and an inverted, smaller image if far away.	In order to meet this standard, it is expected that students ~~should be able~~ will • model a transverse wave and draw and label the basic components. Explain wavelength, amplitude, ~~and~~ frequency, crest, and trough. • describe the wave ~~theories~~ behavior of visible light (refraction, reflection, diffraction, and interference). • design an investigation to illustrate the behavior of visible light – reflection and refraction. Describe how reflection and refraction occur. • identify the images formed by lenses and mirrors. • compare the various types of electromagnetic waves in terms of wavelength, frequency, and energy. • describe an everyday application of each of the major forms of electromagnetic energy.

Standard PS.9

PS.9	The student will investigate and understand the characteristics of transverse waves. Key concepts include a) wavelength, frequency, speed, amplitude, crest, and trough; b) the wave behavior of light; c) images formed by lenses and mirrors; d) the electromagnetic spectrum; and e) technological applications of light.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
• Concave and convex lenses refract light. Concave lenses converge light. Convex lenses diverge light. • Diffraction is when light waves strike an obstacle and new waves are produced. • Interference takes place when two or more waves overlap and combine as a result of diffraction.	

Standard PS.10

PS.10	The student will investigate and understand the scientific principles of work, force, and motion. Key concepts include a) speed, velocity, and acceleration; b) Newton's laws of motion; c) work, force, mechanical advantage, efficiency, and power; and d) technological applications of work, force, and motion.
	~~Understanding the Standard~~ Overview PS.10 builds upon the concepts of simple machines, force, and work introduced in science standards 3.2 and 4.2. Standard PS.10 reviews and expands these basic ideas and introduces students to more mathematical concepts of motion. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

Standard PS.10

PS.10 The student will investigate and understand the scientific principles of work, force, and motion. Key concepts include

a) speed, velocity, and acceleration;
b) Newton's laws of motion;
c) work, force, mechanical advantage, efficiency, and power; and
d) technological applications of work, force, and motion.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Acceleration is the change in velocity per unit of time. An object moving with constant velocity has no acceleration. A decrease in velocity is negative acceleration or deceleration. A distance-time graph for acceleration is always a curve. Objects moving with circular motion are constantly accelerating because direction (and hence velocity) is constantly changing. • Newton's three laws of motion describe the motion of all common objects. • Mass and weight are not equivalent. Mass is the amount of matter in a given substance. Weight is a measure of the force due to gravity acting on a mass. Weight is measured in newtons. • A force is a push or pull. Force is measured in newtons. Force can cause objects to move, stop moving, change speed, or change direction. Speed is the change in position of an object per unit of time. Velocity may have a positive or a negative value depending on the direction of the change in position, whereas speed always has a positive value and is nondirectional. • Work is done when an object is moved through a distance in the direction of the applied force. • A simple machine is a device that makes work easier. Simple machines have different purposes: to change the effort needed (mechanical advantage), to change the direction or distance through which the force is applied, to change the speed at which the resistance moves, or a combination of these. Due to friction, the work put into a machine is always greater than the work output. The ratio of work output to work	In order to meet this standard, it is expected that students ~~should be able to~~ will • make measurements to calculate the speed of a moving object. • apply the concepts of speed, velocity, and acceleration when describing motion. • differentiate between mass and weight. • identify situations that illustrate each Law of Motion. • explain how force, mass, and acceleration are related. • apply the concept of mechanical advantage to test and explain how a machine makes work easier. • make measurements to calculate the work done on an object. • make measurements to calculate the power of an object. • solve basic problems given the following formulas: Speed = distance/time ($s = d/t$) Force = mass × acceleration ($F = ma$) Work = force × distance ($W = Fd$) Power = work/time ($P = W/t$). • explain how the concepts of work, force, and motion apply to ~~car safety technology, machines, and rockets~~ everyday uses and current technologies.

Standard PS.10

PS.10	The student will investigate and understand the scientific principles of work, force, and motion. Key concepts include a) speed, velocity, and acceleration; b) Newton's laws of motion; c) work, force, mechanical advantage, efficiency, and power; and d) technological applications of work, force, and motion.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
input is called efficiency. • Mathematical formulas are used to calculate speed, force, work, and power.	

Standard PS.11

PS.11	The student will investigate and understand basic principles of electricity and magnetism. Key concepts include a) static electricity, current electricity, and circuits; b) relationship between a magnetic field and an electric current; c) electromagnets, motors, and generators and their uses; and d) conductors, semiconductors, and insulators.
	~~Understanding the Standard~~ Overview Science standards 4.3 provide students with a strong foundation in the characteristics of electricity and simple circuits. Students in fourth grade construct series and parallel circuits and make electromagnets. Standard PS.11 is intended to provide a more in-depth and mathematical focus on circuits, current, static electricity, and the relationship between electricity and magnetism. It is intended that students will actively develop scientific investigation, reasoning, and logic skills, and the nature of science (PS.1) in the context of the key concepts presented in this standard.

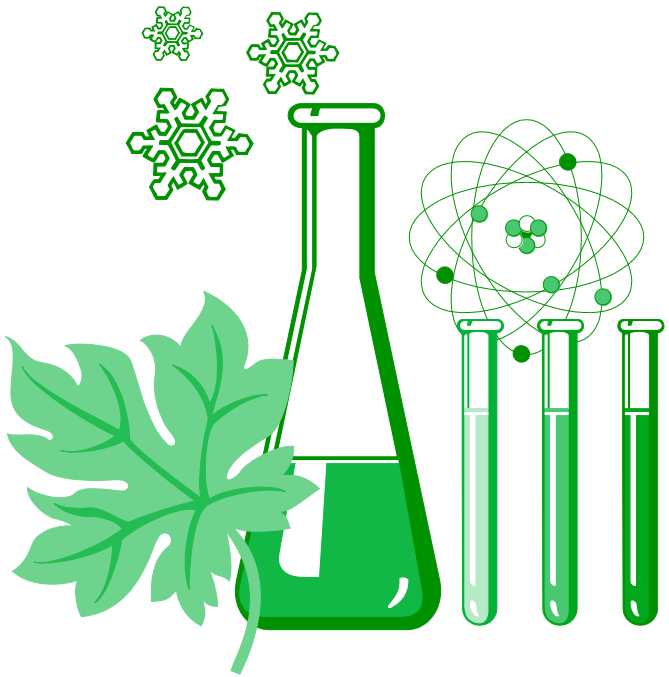
Standard PS.11

PS.11	The student will investigate and understand basic principles of electricity and magnetism. Key concepts include a) static electricity, current electricity, and circuits; b) relationship between a magnetic field and an electric current; c) electromagnets, motors, and generators and their uses.; and d) conductors, semiconductors, and insulators.

~~Overview~~ Essential Understandings	Essential Knowledge, Skills, and Processes
The critical scientific concepts developed in this standard include the following: • Several factors affect how much electricity can flow through a system. Resistance is a property of matter that affects the flow of electricity. Some substances have more resistance than others. • Friction can cause electrons to be transferred from one object to another. These static electrical charges can build up on an object and be discharged slowly or rapidly. This is often called static electricity. • Electricity is related to magnetism. Magnetic fields can produce electrical current in conductors. Electricity can produce a magnetic field and cause iron and steel objects to act like magnets. • Electromagnets are temporary magnets that lose their magnetism when the electric current is removed. Both a motor and a generator have magnets (or electromagnets) and a coil of wire that creates another magnetic field. • A generator is a device that converts mechanical energy into electrical energy. Most of the electrical energy we use comes from generators. Electric motors convert electrical energy into mechanical energy that is used to do work. Examples of motors include those in many household appliances, such as blenders and washing machines. • A conductor is a material that transfers an electric current well. An insulator is material that does not transfer an electric current. A semiconductor is in-between a conductor and an insulator. • The diode is a semiconductor device that acts like a one way valve to control the flow of electricity in electrical circuits. Solar cells are made of semiconductor diodes that produce direct current (DC) when visible	In order to meet this standard, it is expected that students ~~should be able to~~ will • design an investigation to illustrate the effects of static electricity. • construct and compare series and parallel circuits. • create an electromagnet and explain how it works. • explain the relationship between a magnetic field and an electric current. • construct simple circuits to determine the relationship between voltage, resistance, and current. • compare and contrast generators and motors and how they function. • identify situations in everyday life in which motors and generators are used. • provide examples of materials that are good conductors, semiconductors, and insulators. • ~~explain how diodes and transistors work.~~ • identify current applications of semiconductors and their uses (e.g., diodes and transistors).

Standard PS.11

PS.11	The student will investigate and understand basic principles of electricity and magnetism. Key concepts include a) static electricity, current electricity, and circuits; b) relationship between a magnetic field and an electric current; c) electromagnets, motors, and generators and their uses.; and d) conductors, semiconductors, and insulators.
~~Overview~~ Essential Understandings	**Essential Knowledge, Skills, and Processes**
light, infrared light (IR), or ultraviolet (UV) energy strikes them. Light emitting diodes (LED) emit visible light or infrared radiation when current passes through them. An example is the transmitter in an infrared TV remote or the lighting course behind the screen in an LED TV or notebook computer screen. • Transistors are semiconductor devices made from silicon, and other semiconductors. They are used to amplify electrical signals (in stereos, radios, etc.) or to act like a light switch turning the flow of electricity on and off.	



Science Standards of Learning Curriculum Framework

Earth Science

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

The Curriculum Framework serves as a guide for *Standards of Learning* assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from *Standards of Learning* presented in previous grades as they build scientific expertise.

Each topic in the Science Standards of Learning Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Standard ES.1

ES.1 The student will plan and conduct investigations in which

a) volume, area, mass, elapsed time, direction, temperature, pressure, distance, density, and changes in elevation/depth are calculated utilizing the most appropriate tools;
b) technologies, including computers, probeware, and geospatial technologies, are used to collect, analyze, and report data and to demonstrate concepts and simulate experimental conditions;
c) scales, diagrams, charts, graphs, tables, imagery, models, and profiles are constructed and interpreted;
d) maps and globes are read and interpreted, including location by latitude and longitude;
e) variables are manipulated with repeated trials; and
f) current applications are used to reinforce Earth science concepts.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Density expresses the relationship between mass and volume. • Information and data collected can be organized and expressed in the form of charts, graphs, and diagrams. • Scale relates to actual distance. • Topographic maps and satellite imagery are two-dimensional models that provide information defining three-dimensional landforms. They contain extensive information related to geographic as well as human structures and changes to the land surface, and are useful in understanding geologic processes. • Grid systems of latitude and longitude are used to define locations and directions on maps, globes, and charts.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • measure mass and volume of regular and irregular shaped objects and materials using common laboratory tools, including metric scales and graduated cylinders. • apply the concept of mass per unit volume and calculate density without being given a formula. • record data in systematic, properly-labeled, multicell tables, and using data, construct and interpret continuous line graphs, frequency distributions, bar graphs, and other explicating graphics that present a range of parameters, relationships, and pathways. • interpret data from a graph or table that shows changes in temperature or pressure with depth or altitude. • interpret landforms, water features, map scale, horizontal distance between points, elevation and elevation changes, latitude and longitude, human-made structures and other pertinent features on 7.5 minute quadrangles on topographic maps. • construct profiles from topographic contours. • ~~compare topographic maps of different scales.~~ • use latitude and longitude down to minutes, with correct north-south and east-west designations, to locate points on a map. • ~~construct a graph, table, chart, and/or diagram from data.~~

Standard ES.1

ES.1	The student will plan and conduct investigations in which a) volume, area, mass, elapsed time, direction, temperature, pressure, distance, density, and changes in elevation/depth are calculated utilizing the most appropriate tools; b) technologies, including computers, probeware, and geospatial technologies, are used to collect, analyze, and report data and to demonstrate concepts and simulate experimental conditions; c) scales, diagrams, charts, graphs, tables, imagery, models, and profiles are constructed and interpreted; d) maps and globes are read and interpreted, including location by latitude and longitude; e) variables are manipulated with repeated trials; and f) current applications are used to reinforce Earth science concepts.

Essential Understandings	Essential Knowledge and Skills
	• ~~interpret graphs and diagrams.~~ • ~~use scientific methodology to design and test a hypothesis.~~ • ~~locate points and directions on maps and globes, using latitude and longitude.~~ • ~~determine distance and elevation on a map.~~ • ~~identify a hilltop, stream, and valley on a topographic map.~~

Standard ES.2

ES.2 The student will demonstrate an understanding of the nature of science and scientific reasoning and logic. Key concepts include

a) science explains and predicts the interactions and dynamics of complex Earth systems;
b) evidence is required to evaluate hypotheses and explanations;
c) observation and logic are essential for reaching a conclusion; and
d) evidence is evaluated for scientific theories.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the concepts a) the natural world is understandable; b) science is based on evidence - both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. • Earth is a dynamic system, and all atmospheric, ~~geological~~ lithospheric, and ~~oceanographic~~ hydrospheric processes interrelate and influence one another. • A hypothesis is a tentative explanation that accounts for a set of facts and can be tested by further investigation. ~~Any valid hypothesis can be tested.~~ Only hypotheses that are testable are valid. A hypothesis can be supported, modified, or rejected based on collected data. Experiments are designed to test hypotheses. • Scientific theories are systematic sets of concepts that offer explanations for observed patterns in nature. Theories provide frameworks for relating data and guiding future research. Theories may change as new data become available. Any valid scientific theory has passed tests designed to invalidate it.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • analyze how natural processes explain multiple aspects of Earth systems and their interactions (e.g., storms, earthquakes, volcanic eruptions, floods, climate, mountain chains and landforms, geological formations and stratigraphy, fossils) can be used to make predictions of future interactions and allow scientific explanations for what has happened in the past. • make predictions, using scientific data and data analysis. • use data to support or reject a hypothesis. • differentiate between systematically-obtained, verifiable data and unfounded claims. • evaluate statements to determine if systematic science is used correctly, consistently, thoroughly, and in the proper context. • distinguish between examples of observations and inferences. • explain how ~~the scientific method~~ scientific methodology is used to ~~validate~~ support, refute, or improve scientific theories. • contrast the formal, scientific use of the term "theory" with the everyday nontechnical usage of "theory." • compare and contrast hypotheses, theories, and scientific laws. For example, students should be able to compare/contrast the Law of Superposition and the Theory of Plate Tectonics.

Standard ES.2

ES.2	The student will demonstrate an understanding of the nature of science and scientific reasoning and logic. Key concepts include a) science explains and predicts the interactions and dynamics of complex Earth systems; b) evidence is required to evaluate hypotheses and explanations; c) observation and logic are essential for reaching a conclusion; and d) evidence is evaluated for scientific theories.

Essential Understandings	Essential Knowledge and Skills
• There can be more than one scientific explanation for ~~any~~ phenomena. However, with competing explanations, generally one idea will eventually supersede the other as new tools, new observations, and verified data become available. • Changing relevant variables will generally change the outcome. • Scientific laws are generalizations of observational data that describe patterns and relationships. Laws may change as new data become available.	

Standard ES.3

ES.3 The student will investigate and understand the characteristics of Earth and the solar system. Key concepts include

a) position of Earth in the solar system;
b) sun-Earth-moon relationships (seasons, tides, and eclipses);
c) characteristics of the sun, planets and their moons, comets, meteors, and asteroids; and
d) the history and contributions of space exploration.

Essential Understandings

The concepts developed in this standard include the following:

- ~~Earth is one of nine planets in the solar system~~.
- The solar system consists of many types of celestial bodies. Earth is the third planet from the sun and is located between the sun and the asteroid belt. It has one natural satellite, the moon. Water occurs on Earth as a solid (ice), a liquid, or a gas (water vapor) due to Earth's position in the solar system.
- Earth revolves around the sun, tilted on its axis~~,~~. The axial tilt is responsible for the incidence and duration of sunlight striking a given hemisphere, that varies during the Earth's revolution around the Sun, thus causing seasons. ~~(e~~Equinoxes and solstices~~)~~ represent four distinct quarterly points signaling the cyclic change of seasons.
- The moon revolves around Earth creating the moon phases and eclipses. Solar eclipses occur when the moon blocks sunlight from Earth's surface, while lunar eclipses occur when Earth blocks sunlight from reaching the moon's surface.
- The tides are the ~~daily,~~ periodic rise and fall of water level caused by the gravitational pull of the sun and moon.
- The sun consists largely of hydrogen gas. Its energy comes from nuclear fusion of hydrogen to helium.
- There are essentially two types of planets in our solar system. The four inner (terrestrial) planets consist mostly of solid rock. Four of the outer planets are gas giants, consisting of thick outer layers of gaseous materials, perhaps with small rocky cores.
- The ~~fifth outer~~ dwarf planet, Pluto, has an unknown composition but

Essential Knowledge and Skills

~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will

- ~~Draw a diagram of the solar system, and label the planets~~
- analyze the role of 1) the position of Earth in the Solar System; 2) the size of Earth and sun; and 3) Earth's axial tilt in affecting the evolution of the planet and life on the planet.
- analyze historical explanations for the origin of the moon.
- create a model showing the position of Earth, the moon, and the resulting moon phases.
- explain why there is not a solar and lunar eclipse each month.
- create a model showing the position of Earth, moon, and sun during a solar and lunar eclipse.
- differentiate between the inner (terrestrial) planets and the outer (gaseous) planets and their corresponding atmospheric characteristics.
- compare and contrast the internal makeup of the four inner planets and explain why they vary so significantly.
- compare and contrast the atmospheres, planetary makeup, surface conditions, and rotation of the planets.
- compare the classification of the dwarf planet Pluto to the planets in relation to its orbit, and its similarity to other objects in the Kuiper Belt.
- compare and contrast the defining characteristics among moons, comets, meteoroids, and asteroids.

Standard ES.3

ES.3 The student will investigate and understand the characteristics of Earth and the solar system. Key concepts include

a) position of Earth in the solar system;
b) sun-Earth-moon relationships (seasons, tides, and eclipses);
c) characteristics of the sun, planets and their moons, comets, meteors, and asteroids; and
d) the history and contributions of space exploration.

Essential Understandings	Essential Knowledge and Skills
appears to be solid. It is part of the Kuiper Belt. • Moons are natural satellites of planets ~~that~~ and vary widely in composition. • Comets orbit the sun and consist mostly of frozen gases. • ~~Asteroids are rocky or metallic iron objects ranging in size from millimeters to kilometers. They are the source of most meteorites~~. • A meteoroid is debris located outside Earth's atmosphere; a meteor is debris located within Earth's atmosphere; and a meteorite is debris that has broken apart into smaller pieces before reaching Earth's surface. • Asteroids are usually leftover debris of the formation of the solar system, or creations of the collisions of other asteroids. • ~~Apollo 11 was the first manned landing on the moon.~~ • ~~The Hubble Space Telescope has greatly improved our understanding of the universe.~~ • The atmosphere of Venus is mostly carbon dioxide and very dense. The atmosphere of Mars is very thin and mostly carbon dioxide. • Much of our knowledge about the solar system is a result of space exploration efforts. These efforts continue to improve our understanding of the solar system.	• compare and contrast the characteristics of Venus, Earth, Mercury, and Mars, and interpret various reasons why each planet has such characteristics. • predict what conditions we would need to have in place for another celestial object to support life. • compare the various types of evidence obtained from the Apollo moon landings and other lunar exploration and how this is used to inform thinking about the moon. • ~~analyze the role of telescopes from Galileo's telescope to the Hubble telescope and evaluate these scientific tools as instruments of social and scientific change and enlightenment.~~ • analyze how the role of technology (Galileo's telescope, Hubble telescope, planetary orbiters, landers/rovers) has contributed to social and scientific change and enlightenment. • create a timeline of key events in space exploration.

Standard ES.4

ES.4	The student will investigate and understand how to identify major rock-forming and ore minerals based on physical and chemical properties. Key concepts include a) hardness, color and streak, luster, cleavage, fracture, and unique properties; and b) uses of minerals.

Essential Understandings	Essential Knowledge and Skills
• There is a difference between rocks and minerals. Most rocks are made of one or more minerals. • A mineral is a naturally occurring, inorganic, solid substance with a definite chemical composition and structure~~. Minerals~~ and can be identified based on specific chemical and physical properties. • The major elements found in Earth's crust are oxygen, silicon, aluminum, and iron. The most abundant group of minerals is the silicates, which contain silicon and oxygen. Some common silicates include feldspar and quartz. • The carbonate group of minerals is composed of the carbonate compound CO_3. Some common carbonates are calcite and dolomite. • The oxide group of minerals is composed of oxygen and a metal. Some common oxides include hematite and magnetite. • Minerals are important to human wealth and welfare.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • analyze why certain common metallic elements (iron, aluminum, silicon) are rarely, if ever, found in the native state. • analyze the distribution and persistence of minerals at or near Earth's surface in terms of Earth's general structure, plate tectonics, and chemical and physical weathering. • ~~recognize in hand sample common members of the silicate groups and carbonate rock forming minerals.~~ • analyze the relationship between the qualities of cleavage, fracture, and hardness and the molecular structure and chemistry of silicates, ~~and other common minerals~~ carbonates, and oxides. • ~~recognize accessory minerals often found in common rocks.~~ • identify minerals ~~may be identified~~ by their physical properties, such as hardness, color, luster, and streak. • recognize some major rock-forming minerals ~~are~~ such as quartz, feldspar, calcite, and mica. • recognize ore minerals includ~~e~~ing pyrite, magnetite, hematite, galena, graphite, and sulfur.

Standard ES.5

ES.5	The student will investigate and understand the rock cycle as it relates to the origin and transformation of rock types and how to identify common rock types based on mineral composition and textures. Key concepts include a) igneous rocks; b) sedimentary rocks; and c) metamorphic rocks.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Rocks can be identified on the basis of mineral content and texture. • The processes by which rocks are formed define the three major groups of rocks. • The rock cycle is the process by which all rocks are formed and how basic Earth materials are recycled through time. • Igneous rock forms from molten rock that cools and hardens either below or on Earth's surface. Extrusive igneous rocks have small or no crystals, resulting in fine-grained or glassy textures~~ Extrusive igneous rocks~~ and include pumice, obsidian, and basalt. Intrusive igneous rocks have larger crystals and a coarser texture ~~Intrusive igneous rocks~~ and include granite. • Sedimentary rocks may be formed either by rock fragments or organic matter being bound together or by chemical precipitation. ~~Sedimentary rocks are clastic or chemical.~~ Clastic sedimentary rocks are made up of fragments of other rocks and include sandstone, conglomerate, and shale. Non-clastic sedimentary rocks include limestone and rock salt. • Metamorphic rocks form when any rock is changed by the effects of heat, pressure, or chemical action.~~ Metamorphic rocks can be foliated or unfoliated (non-foliated).~~ Foliated metamorphic rocks have bands of different minerals and include ~~S~~slate, schist, and gneiss ~~are foliated metamorphic rocks~~. Unfoliated metamorphic rocks have little or no banding and are relatively homogenous throughout and include ~~M~~marble and quartzite ~~are unfoliated metamorphic rocks~~.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • comprehend and identify various igneous rock textural features and mineral components with a hand sample or by description, and analyze the significance of these features in terms of mode of origin and history. • analyze and identify various sedimentary rocks in terms of mode of origin and history, using sedimentary features (grain size, texture, and composition). • analyze the major groups of metamorphic rocks for mineral composition and textural features and determine the potential parent rock and in terms of the rock cycle. • analyze a sequence of rocks in terms of types, textures, composition, fossils, structural, and weathering features in order to infer the history of the sequence over time. • integrate the rock cycle with Plate Tectonics Theory and determine how this is reflected in the geology of Virginia's five physiographic provinces. • ~~interpret the rock cycle diagram.~~ • classify the following rock types as igneous, metamorphic, or sedimentary: pumice, obsidian, basalt, granite, sandstone, conglomerate, shale, limestone, slate, schist, gneiss, marble, and quartzite. • differentiate between clastic and non-clastic sedimentary rocks. • compare and contrast distinguishing characteristics of the crystal

Standard ES.5

ES.5	The student will investigate and understand the rock cycle as it relates to the origin and transformation of rock types and how to identify common rock types based on mineral composition and textures. Key concepts include a) igneous rocks; b) sedimentary rocks; and c) metamorphic rocks.

Essential Understandings	Essential Knowledge and Skills
	structure and textures of extrusive and intrusive igneous rocks. • describe the structure of foliated and unfoliated metamorphic rocks.

Standard ES.6

ES.6 The student will investigate and understand the differences between renewable and nonrenewable resources. Key concepts include

a) fossil fuels, minerals, rocks, water, and vegetation;
b) advantages and disadvantages of various energy sources;
c) resources found in Virginia; and
d) environmental costs and benefits.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Resources are limited and are either renewable or nonrenewable. • There are advantages and disadvantages to using any energy source. • Virginia has many natural resources. • Modern living standards are supported by extensive use of both renewable and nonrenewable resources. • Extraction and use of any resource carries an environmental cost that must be weighed against economic benefit. • Renewable resources can be replaced by nature at a rate close to the rate at which they are used. Renewable resources include vegetation, sunlight, and surface water. • Nonrenewable resources are ~~renewed~~ replenished very slowly or not at all. Nonrenewable resources include coal, oil, and minerals. • Fossil fuels are nonrenewable and may cause pollution, but they are relatively cheap and easy to use once they are extracted. • In Virginia, major rock and mineral resources include coal for energy, gravel and crushed stone for road construction, silica for electronics, zirconium and titanium for advanced metallurgy, and limestone for making concrete. • Clean water resources, while renewable, are directly impacted by human activity through extraction and pollution.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • analyze the formation of fossil fuels in terms of the rock cycle and Plate Tectonics Theory, and relate the formation of fossil fuels to ancient biologic and atmospheric conditions and changes and locations within Virginia. • analyze how Virginia's production and use of various natural resources has changed over time. Define and cite differences over time especially in the last 150 years. • evaluate Virginia's potential as a producer of renewable energy sources. • assess the role of fossil fuels and renewable energy sources in the future and compare and contrast the environmental benefits and costs among the various options. • analyze the advantages and disadvantages of various energy sources. • analyze a range of emerging energy and mineral resources in Virginia in terms of costs and benefits. • determine the sources of clean water in their community and analyze consumption and supply data.

Standard ES.7

ES.7 The student will investigate and understand geologic processes including plate tectonics. Key concepts include
a) geologic processes and their resulting features; and
b) tectonic processes.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Virginia has a billion-year-long tectonic and geologic history. • Virginia has five physiographic provinces produced by past episodes of tectonic activity and continuous geologic activity. • Each province has unique physical characteristics resulting from its geologic past. • Geologic processes produce characteristic structures and features. • The five physiographic provinces of Virginia are Coastal Plain, Piedmont, Blue Ridge, Valley and Ridge, and Appalachian Plateau. • The Coastal Plain is a flat area ~~underlain by~~ composed of young, unconsolidated sediments underlain by older crystalline basement rocks. These layers of sediment were produced by erosion of the Appalachian Mountains and Piedmont and then deposited on the Coastal Plain when sea levels were higher in the past. • The Piedmont is an area of rolling hills underlain by mostly ancient igneous and metamorphic rocks. The igneous rocks are the roots of volcanoes formed during an ancient episode of subduction that occurred before the formation of the Appalachian Mountains. • The Blue Ridge is a high ridge separating the Piedmont from the Valley and Ridge Province. The billion-year-old igneous and metamorphic rocks of the Blue Ridge are the oldest in the state. ~~Some metamorphism of these rocks occurred during the formation of the Appalachian Mountains.~~ • The Valley and Ridge province is an area with long parallel ridges and valleys underlain by ancient folded and faulted sedimentary rocks. The folding and faulting of the sedimentary rocks occurred during a collision between Africa and North America. The collision, which occurred in the	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • label on a map ~~and recognize the major features of~~ the physiographic provinces of Virginia. • comprehend the topographic, rock-type and geologic-structural characteristics of each physiographic province of Virginia. • analyze the geologic history of Virginia in terms of the structures, rock types, and topography represented in the five physiographic provinces. • integrate and interpret the rock cycle, plate tectonics, and Virginia's geology in an interacting diagram. • analyze how multiple continental collisions and rifting events over the last billion years have created the current physiography of Virginia. • comprehend and apply the details of Plate Tectonics Theory to the formation of continents, mountain chains, island arcs, deep open trenches, earthquake zones, and continental and mid-ocean volcanism. • analyze the composition and structure of the continental and oceanic lithosphere in terms of topographic features, density, thickness, and rates of motion. • compare and contrast various types of volcanism and geothermal activity (i.e., Hawaii, Iceland, Mount St. Helens, Catoctin Greenstone, Tambora, the Deccan Traps, and Yellowstone). • compare and contrast different types of current and ancient plate boundaries (i.e., Japan, California, New Madrid, Missouri, the Appalachian system, Iceland, and Tonga). • analyze how seismic waves provide evidence of the structure of the

Standard ES.7

ES.7 The student will investigate and understand geologic processes including plate tectonics. Key concepts include
a) geologic processes and their resulting features; and
b) tectonic processes.

Essential Understandings	Essential Knowledge and Skills
late Paleozoic era, produced the Appalachian Mountains. • The Appalachian Plateau has rugged, irregular topography and is underlain by ancient, flat-lying sedimentary rocks. The area is actually a series of plateaus separated by faults and erosional down-cut valleys. Most of Virginia's coal resources are found in the plateau province. • ~~The core, mantle, and crust of Earth are dynamic systems, constantly in motion.~~ • Earth consists of a solid, mostly iron inner core; a liquid, mostly iron outer core; a ~~rocky~~ crystalline but largely plastic mantle; and a rocky, brittle crust. • Earth's lithosphere is divided into plates that are in motion with respect to one another. The lithosphere is composed of the crust and upper portion of the mantle. There are two different types of ~~crust~~ lithospheres — oceanic and continental — that have very different physical and mineralogic characteristics. The ocean ~~crust~~ lithosphere is relatively thin, young, and dense. The continental ~~crust~~ lithosphere is relatively thick, old, and less dense. • Most large scale, high-energy events of geologic activity (e.g., earthquakes, volcanoes, and mountain building) occur~~s~~ as a result of relative motion along plate boundaries. • Plate motion occurs as a consequence of convection in Earth's mantle, including upwelling of material from the deep mantle in rift zones, the lateral movement of tectonic plates, and the sinking dense, old plates at subduction zones. ~~Plate tectonics is driven by convection in the mantle~~. • Weathering, erosion, and deposition are interrelated processes. Weathering is the process by which rocks are broken down chemically and physically by the action of water, air, and organisms. Erosion is the process by which Earth materials are ~~transported~~ physically incorporated by moving water, ice, or wind for transportation. Deposition is the process by which Earth materials carried by wind, water, or ice settle out	deep Earth including the inner and outer core in terms of composition, density, and viscosity. • analyze the body of evidence for Plate Tectonics Theory (i.e., seafloor age, magnetic information, seismic profiles, laser-measured motion studies, fossil evidence, rock types associated with particular tectonic environments). • analyze the various structures produced in convergent plate boundaries. • offer interpretations of the tectonic history of an area based on the range and type of rocks found in that area. • compare and contrast the tectonic activity of the east coast and the west coast of North America.

Standard ES.7

ES.7	The student will investigate and understand geologic processes including plate tectonics. Key concepts include a) geologic processes and their resulting features; and b) tectonic processes.
Essential Understandings	**Essential Knowledge and Skills**
and are ~~deposited~~ left in a location when energy levels decrease. The size of the material deposited is proportional to the available energy of the medium of transport. • Relative plate motions and plate boundaries are convergent (subduction and continental collision), divergent (seafloor spreading), or transform. Major features of convergent boundaries include collision zones (folded and thrust-faulted mountains) and subduction zones (volcanoes and trenches). Major features of divergent boundaries include mid-ocean ridges, rift valleys, ~~and~~ fissure volcanoes, and flood lavas. Major features of transform boundaries include strike-slip faults. • Earthquake activity of varying energy levels and depths is associated with all plate boundaries. • A volcano is an opening where magma erupts onto Earth's surface. Most volcanic activity is associated with subduction, rifting, or seafloor spreading. Hot spot volcanic activity, such as volcanic islands, is exceptional in that it is not related to plate boundaries but derived from a deep, localized heat source. • A fault is a break or crack in Earth's crust along which movement has occurred. • ~~Most active faults are located at or near plate boundaries. Earthquakes result when movement occurs along a fault.~~ • ~~When rocks are compressed horizontally, their layers may be deformed into wave-like forms called folds. This commonly occurs during continental collisions.~~ • Plate tectonic processes serve as the major driver of the rock cycle. Plate tectonics drive the evolution of Earth's surface features and materials by fractionating material by chemical, mineralogic, and physical properties. Continental drift is a consequence of plate tectonics.	

Standard ES.8

ES.8 The student will investigate and understand how freshwater resources are influenced by geologic processes and the activities of humans. Key concepts include

a) processes of soil development;
b) development of karst topography;
c) relationships between groundwater zones, including saturated and unsaturated zones, and the water table;
d) identification of sources of fresh water including rivers, springs, and aquifers, with reference to the hydrologic cycle;
e) dependence on freshwater resources and the effects of human usage on water quality; and
f) identification of the major watershed systems in Virginia, including the Chesapeake Bay and its tributaries.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Soil is formed from the weathering of rocks and organic activity~~. Soil~~ and is composed of loose rock fragments and clay derived from weathered rock mixed with organic material. • Karst topography is developed in areas underlain by carbonate rocks, including limestone and dolomite. Karst topography includes features like caves and sinkholes~~. Karst topography~~ and forms when limestone is slowly dissolved away by slightly acidic groundwater. Where limestone is abundant in the Valley and Ridge province of Virginia, karst topography is common. • Permeability is a measure of the ability of a rock or sediment to transmit water or other liquids. Water does not pass through impermeable materials. A substantial amount of water is stored in permeable soil and rock underground. • Earth's fresh water supply is finite. Geological processes, such as erosion, and human activities, such as waste disposal, can pollute water supplies. • Water is continuously being passed through the hydrologic cycle. Fresh water is necessary for survival and most human activities. • The three major regional watershed systems in Virginia lead to the Chesapeake Bay, the North Carolina sounds, and the Gulf of Mexico.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • interpret a simple groundwater diagram showing the zone of aeration, the zone of saturation, the water table, and an aquifer. • interpret a simple hydrologic cycle diagram, including evaporation, condensation, precipitation, and runoff. • locate the major Virginia watershed systems on a map (Chesapeake Bay, Gulf of Mexico, and North Carolina sounds). • analyze the formation of karst in terms of rock type, solubility and permeability, uplift, the water table, and chemical and physical weathering. • analyze the presence of groundwater in various types of rock terrains, including areas found in each of the physiographic provinces of Virginia. • analyze the relationship between salt-water intrusion in the ground water in certain areas of eastern Virginia and buried crater structures.

Standard ES.9

ES.9 The student will investigate and understand that many aspects of the history and evolution of Earth and life can be inferred by studying rocks and fossils. Key concepts include

a) traces and remains of ancient, often extinct, life are preserved by various means in many sedimentary rocks;
b) superposition, cross-cutting relationships, index fossils, and radioactive decay are methods of dating bodies of rock;
c) absolute and relative dating have different applications but can be used together to determine the age of rocks and structures; and
d) rocks and fossils from many different geologic periods and epochs are found in Virginia.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The history of Earth and the ages of rocks can be investigated and understood by studying rocks and fossils. • Evidence of ancient, often extinct life is preserved in many sedimentary rocks. A fossil is the remains, impression, or other evidence preserved in rock of the former existence of life. Fossil evidence indicates that life forms have changed and become more complex over geologic time. Some ways in which fossils can be preserved are molds, casts, and original bone or shell. • ~~Nearly all fossils are found in sedimentary rocks.~~ • Relative time places events in a sequence without assigning any numerical ages. Fossils, superposition, and cross-cutting relations are used to determine the relative ages of rocks. Absolute time places a numerical age on an event. Radioactive decay is used to determine the absolute age of rocks. • ~~Earth is very ancient – about 4.6 billion years old.~~ The age of Earth is about 4.6 billion years. • In Virginia, fossils are found mainly in the Coastal Plain, Valley and Ridge, and Appalachian Plateau provinces. Most Virginia fossils are of marine organisms. This indicates that large areas of the state have been periodically covered by seawater. • Paleozoic, Mesozoic, and Cenozoic fossils are found in Virginia.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • describe how life has changed and become more complex over geologic time. • interpret a simple geologic history diagram, using superposition and cross-cutting relations. • analyze how radioactive decay provides a reliable method to determine the age of many types of organic and inorganic materials. • analyze the impact and role of global catastrophies (including asteroid/comet impacts, volcanism, continental collisions, climate collapse) on extinctions and evolution. • analyze and interpret complex cross sections using both relative and absolute dating to unravel and define the geologic history of the section.

Standard ES.10

ES.10 The student will investigate and understand that oceans are complex, interactive physical, chemical, and biological systems and are subject to long- and short-term variations. Key concepts include

a) physical and chemical changes related to tides, waves, currents, sea level and ice cap variations, upwelling, and salinity variations;
b) importance of environmental and geologic implications;
c) systems interactions;
d) features of the seafloor as reflections of tectonic processes; and
e) economic and public policy issues concerning the oceans and the coastal zone including the Chesapeake Bay.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The ocean is a dynamic system in which many chemical, biological, and physical changes are taking place. The oceans are an important source of food and mineral resources as well as a venue for recreation and transportation. Sea level falls when glacial ice caps grow and rises when the ice caps melt. • Most waves on the ocean surface are generated by wind. • There are large current systems in the oceans that carry warm water towards the poles and cold water towards the equator. • Upwellings bring cold, nutrient-rich water from the deep ocean to the surface and are areas of rich biological activity. • The tides are the ~~daily,~~ periodic rise and fall of water level caused by the gravitational pull of the sun and moon. • The oceans' resources are finite and should be utilized with care. • Algae in the oceans are an important source of atmospheric oxygen. • The ocean is the single largest reservoir of heat at Earth's surface. The stored heat in the ocean drives much of Earth's weather~~. The stored heat in the ocean~~ and causes climate near the ocean to be milder than climate in the interior of continents. • Convection is the major mechanism of energy transfer in the oceans, atmosphere, and Earth's interior. • The topography of the seafloor is at least as variable as that on the continents. Features of the seafloor that are related to plate tectonic	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • identify the effects of human activities on the oceans. • analyze the potential impact of a major environmental disaster on the base of the food web and vertebrate organisms; economics; cultures; and future productivity. • analyze the relationship between moving continents, the presence of ice caps, and ocean circulation over long periods of time. • relate important ocean conditions, including El Niño, to weather on the continents. • evaluate the role of the marine environment in the extraction of carbon dioxide in carbonates and the production of oxygen. • analyze the role of ocean currents in the distribution of heat from the equatorial regions to the poles, and predict what changes may occur as continents move and atmospheric conditions and climate vary. • compare Atlantic Ocean and Gulf of Mexico water temperatures during the yearly cycle, and relate this to the formation of storms. • describe how different types of pollution can pollute the Chesapeake Bay even though the pollutant source may be hundreds of miles from the Bay.

Standard ES.10

ES.10	The student will investigate and understand that oceans are complex, interactive physical, chemical, and biological systems and are subject to long- and short-term variations. Key concepts include a) physical and chemical changes related to tides, waves, currents, sea level and ice cap variations, upwelling, and salinity variations; b) importance of environmental and geologic implications; c) systems interactions; d) features of the seafloor as reflections of tectonic processes; and e) economic and public policy issues concerning the oceans and the coastal zone including the Chesapeake Bay.

Essential Understandings	Essential Knowledge and Skills
processes include mid-ocean ridges and trenches (continental margins, trenches, and mid ocean ridges). Other major topographic features of the oceans are continental shelves, continental slopes, abyssal plains, and seamounts. • The oceans are environmentally and economically important. Human activities and public policy have important consequences for the oceans. The impact of human activities, such as waste disposal, construction, and agriculture, affect the water quality within watershed systems and ultimately the ocean. Pollution and overfishing can harm or deplete valuable resources. • Estuaries, like the Chesapeake Bay, are areas where fresh and salt water mix, producing variations in salinity and high biological activity. Chemical pollution and sedimentation are great threats to the ~~chemical and biological~~ well-being of estuaries and oceans.	

Standard ES.11

ES.11	The student will investigate and understand the origin and evolution of the atmosphere and the interrelationship of geologic processes, biologic processes, and human activities on its composition and dynamics. Key concepts include a) scientific evidence for atmospheric composition changes over geologic time; b) current theories related to the effects of early life on the chemical makeup of the atmosphere; c) atmospheric regulation mechanisms including the effects of density differences and energy transfer; and d) potential changes to the atmosphere and climate due to human, biologic, and geologic activity.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The composition of Earth's atmosphere has changed over geologic time. Earth's atmosphere is unique in the solar system in that it contains substantial oxygen. • ~~The early atmosphere contained little oxygen and more carbon dioxide than the modern atmosphere.~~ The most primitive atmosphere was comprised of mainly helium and hydrogen. After the moon was formed, the early atmosphere contained mostly CO_2, CO and water vapor. This atmosphere was then modified by early photosynthetic life. • Early photosynthetic life such as cyanobacteria (blue-green algae) consumed carbon dioxide and generated oxygen. It was only after early photosynthetic life generated oxygen that animal life became possible. • Earth's atmosphere is 21 percent oxygen, 78 percent nitrogen, and 1 percent trace gases. The composition of the atmosphere can change due to human, biologic, and geologic activity. Human activities have increased the carbon dioxide content of the atmosphere. Man-made chemicals have decreased the ozone concentration in the upper atmosphere. Volcanic activity and meteorite impacts can inject large quantities of dust and gases into the atmosphere. • The ability of Earth's atmosphere to absorb and retain heat is affected by the presence of gases like water vapor and carbon dioxide.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • analyze the array of climate feedback mechanisms that control the Earth's temperature over time, and compare and contrast these feedback mechanisms to those operating on inner planets and the gas giants. • analyze the evidence for atmospheric compositional change over geologic time including oxygen and carbon sinks and the role of photosynthetic organisms. • explain how volcanic activity or meteor impacts could affect the atmosphere and life on Earth. • explain how biologic activity, including human activities, may influence global temperature and climate.

Standard ES.12

ES.12	The student will investigate and understand that energy transfer between the sun and Earth and its atmosphere drives weather and climate on Earth. Key concepts include a) observation and collection of weather data; b) prediction of weather patterns; c) severe weather occurrences, such as tornadoes, hurricanes, and major storms; and d) weather phenomena and the factors that affect climate including radiation, conduction, and convection.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Energy transfer between Earth's surface and the atmosphere creates the weather. • Weather and climate are different. Both weather and climate are measurable and, to a certain extent, predictable. Weather describes day-to-day changes in atmospheric conditions. Climate describes the typical weather patterns for a given location over a period of many years. Instrumentation is used to collect weather and climate data. • The four major factors affecting climate are latitude, elevation, proximity to bodies of water, and position relative to mountains. Earth's major climatic zones are the polar, temperate, and tropical zones. Areas near the equator receive more of the sun's energy per unit area than areas nearer the poles. • Earth's surface is much more efficiently heated by the sun than is the atmosphere. The amount of energy reaching any given point on Earth's surface is controlled by the angle of sunlight striking the surface and varies with the seasons. • Winds are created by uneven heat distribution at Earth's surface and modified by the rotation of Earth. The Coriolis effect causes deflections of the atmosphere due to the rotation of Earth. Global wind patterns result from the uneven heating of Earth by the sun and are influenced by the Coriolis effect. • Convection in the atmosphere is a major cause of weather. Convection is the major mechanism of energy transfer in the oceans, atmosphere, and Earth's interior.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • ~~label a diagram of global wind patterns.~~identify and describe the direction of local winds (land, sea breezes and jet stream). • read and interpret data from a thermometer, a barometer, and a psychrometer. • predict weather based on cloud type, temperature, and barometric pressure. • read and interpret a weather map containing fronts, isobars, and isotherms. • read and interpret weather station models. • identify types and origins of air masses, fronts and the accompanying weather conditions. • read and interpret climate graphs. • label a diagram of global climate zones and the surface movement of ocean currents. • label a diagram that demonstrates the interaction of Earth's atmosphere and energy transfer (conduction, convection, and radiation). • analyze the impact of satellite technology on weather prediction and the tracking of severe storms, including hurricanes, and evaluate the cost and benefits of this technology in terms of lives and property saved. Predict the impact on storm preparedness if there were no

Standard ES.12

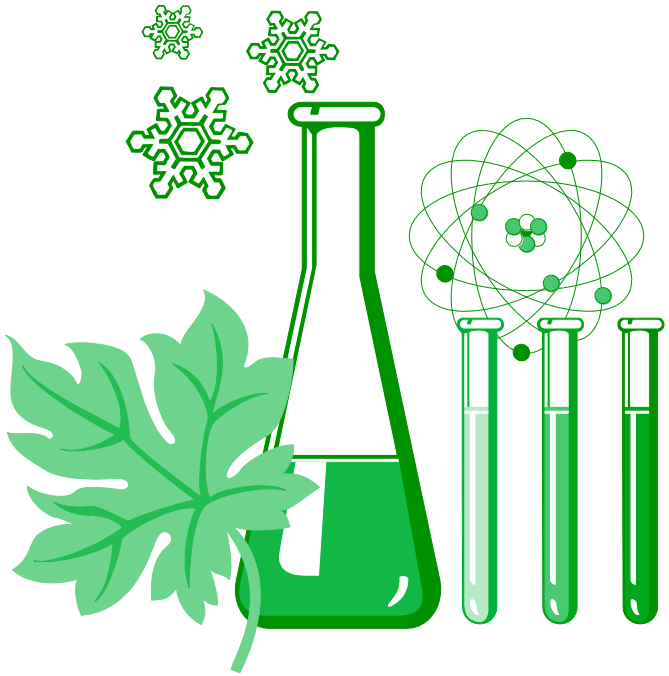
ES.12	The student will investigate and understand that energy transfer between the sun and Earth and its atmosphere drives weather and climate on Earth. Key concepts include a) observation and collection of weather data; b) prediction of weather patterns; c) severe weather occurrences, such as tornadoes, hurricanes, and major storms; and d) weather phenomena and the factors that affect climate including radiation, conduction, and convection.

Essential Understandings	Essential Knowledge and Skills
• The conditions necessary for cloud formation are air at or below dew point and presence of condensation nuclei. Cloud droplets can join together to form precipitation. • A tornado is a narrow, violent funnel-shaped column of spiral winds that extends downward from the cloud base toward Earth. A hurricane is a tropical cyclone (counterclockwise movement of air) characterized by sustained winds of 120 kilometers per hour (75 miles per hour) or greater.	weather satellites.

Standard ES.13

ES.13 The student will investigate and understand scientific concepts related to the origin and evolution of the universe. Key concepts include
a) cosmology including the Big Bang theory; and
b) the origin and evolution of stars, star systems, and galaxies.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The universe is vast in size and very old. • The ~~b~~Big ~~b~~Bang theory is our best current model for the origin of the universe. The ~~b~~Big ~~b~~Bang theory states that the universe began in a very hot, dense state that expanded and eventually condensed into galaxies. • The solar nebular theory is our best current idea for the origin of the solar system. The solar nebular theory explains that the planets formed through the condensing of the solar nebula. • Stars have a finite lifetime and evolve over time. The mass of a star controls its evolution, ~~length of its lifetime~~ lifespan, and ultimate fate. Stars form by condensation and gravitational compression of interstellar gas and dust. • The Hertzsprung-Russell diagram illustrates the relationship between the absolute magnitude and the surface temperature of stars. As stars evolve, their position on the Hertzsprung-Russell diagram moves. • Galaxies are collections of billions of stars. The basic types of galaxies are spiral, elliptical, and irregular. • The solar system is located in the Milky Way galaxy. • A light-year is the distance light travels in one year and is the most commonly used measurement for distance in astronomy. • Much of our information about our galaxy and the universe comes from ground-based observations across the electromagnetic spectrum. Much information about other planets comes from ground-based observations from Earth, but also from landers and orbiting spacecraft.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • contrast the life span and energy output of a blue giant star to that of the sun and relate this to the potential existence of life on planets in its orbit. • explain the potential origin and role of ultra massive black holes in the center of galaxies. • using the Hertzsprung-Russell diagram, classify stars as to their place on the main sequence or in beginning or end points in their life cycles. • evaluate the probability of travel to nearby solar systems using current spacecraft speeds. • analyze the various fusion product~~ion~~s of a blue giant star over its lifetime, and relate this to the presence and abundance of elements that make up our solar system and its contents, including living organisms.



Science Standards of Learning Curriculum Framework

Biology

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Standard BIO.1

BIO.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations of living organisms are recorded in the lab and in the field;
b) hypotheses are formulated based on direct observations and information from scientific literature;
c) variables are defined and investigations are designed to test hypotheses;
d) graphing and arithmetic calculations are used as tools in data analysis;
e) conclusions are formed based on recorded quantitative and qualitative data;
f) sources of error inherent in experimental design are identified and discussed;
g) validity of data is determined;
h) chemicals and equipment are used in a safe manner;
i) appropriate technology including computers, graphing calculators, and probeware, is used for gathering and analyzing data, communicating results, modeling concepts, and simulating experimental conditions;
j) research utilizes scientific literature;
k) differentiation is made between a scientific hypothesis, theory, and law;
l) alternative scientific explanations and models are recognized and analyzed; and
m) current applications of biological concepts are used.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts a) the natural world is understandable; b) science is based on evidence - both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. • Active participation in scientific investigations is necessary to develop an understanding of biology as an experimental science. • The continual use and development of cognitive and manipulative skills associated with the formulation of ~~the~~ scientific explanations is	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • conduct investigations in the classroom and field, as appropriate, and critically examine investigations reported in scientific literature and databases. • collect preliminary observations, both qualitative and quantitative. • make clear distinctions among observations, inferences, and predictions. • formulate hypotheses based on cause-and-effect relationships. • justify hypotheses based on both preliminary observations and scientific literature. • identify the independent variable (IV) and the values of the IV that will be used in the experiment. • select dependent variables that allow collection of quantitative data. • identify variables that must be held constant.

Standard BIO.1

BIO.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations of living organisms are recorded in the lab and in the field;
b) hypotheses are formulated based on direct observations and information from scientific literature;
c) variables are defined and investigations are designed to test hypotheses;
d) graphing and arithmetic calculations are used as tools in data analysis;
e) conclusions are formed based on recorded quantitative and qualitative data;
f) sources of error inherent in experimental design are identified and discussed;
g) validity of data is determined;
h) chemicals and equipment are used in a safe manner;
i) appropriate technology including computers, graphing calculators, and probeware, is used for gathering and analyzing data, communicating results, modeling concepts, and simulating experimental conditions;
j) research utilizes scientific literature;
k) differentiation is made between a scientific hypothesis, theory, and law;
l) alternative scientific explanations and models are recognized and analyzed; and
m) current applications of biological concepts are used.

Essential Understandings	Essential Knowledge and Skills
important. • The design of sound scientific experiments relies on systematic preliminary observations and data collected in the laboratory and in the field, as well as on a knowledge base gained from an examination of related scientific literature. Prior establishment of an adequate knowledge base is essential before hypotheses can be developed and tested. • ~~It is typical for scientists to disagree with one another about the interpretation of evidence or a theory being considered. This is partly a result of the unique background (social, educational, etc.) that individual scientists bring to their research.~~ • Because of ~~this inherent subjectivity, scientific inquiry~~ the rigor that scientific inquiry requires, science is a process that involves evaluating the results and conclusions proposed by other scientists. • Scientific tools including microscopes, computers, graphing calculators, and probeware allow for the gathering and analysis of data. • The analysis of evidence and data is essential in order to make sense of the content of science.	• establish controls as appropriate. • write clear, replicable procedures. • ~~Use appropriate technology for data collection, including probeware interfaced to a graphing calculator and/or computer, microscope, video microscope, or digital camera with image processing software.~~ identify and use appropriate technology for data collection and analysis, including probeware (i.e., sensors for temperature, pH and dissolved oxygen). • record quantitative data in clearly labeled tables with units. • include labeled diagrams in the data record. • determine the range, mean, and values for data, using a graphing calculator and/or computer spreadsheet software. • plot data graphically, showing independent and dependent variables. • describe ~~linear mathematical functions~~ trends from the data where appropriate, using a graphing calculator and/or computer spreadsheet.

Standard BIO.1

BIO.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) observations of living organisms are recorded in the lab and in the field;
b) hypotheses are formulated based on direct observations and information from scientific literature;
c) variables are defined and investigations are designed to test hypotheses;
d) graphing and arithmetic calculations are used as tools in data analysis;
e) conclusions are formed based on recorded quantitative and qualitative data;
f) sources of error inherent in experimental design are identified and discussed;
g) validity of data is determined;
h) chemicals and equipment are used in a safe manner;
i) appropriate technology including computers, graphing calculators, and probeware, is used for gathering and analyzing data, communicating results, modeling concepts, and simulating experimental conditions;
j) research utilizes scientific literature;
k) differentiation is made between a scientific hypothesis, theory, and law;
l) alternative scientific explanations and models are recognized and analyzed; and
m) current applications of biological concepts are used.

Essential Understandings	Essential Knowledge and Skills
• Multiple data manipulation and analysis strategies are available to help explain results of quantitative investigations. • Data and evidence should come from a variety of sources, including student investigation, peer investigation, and databases. • The scientific establishment sometimes rejects new ideas, and new discoveries often spring from unexpected findings. • Scientific knowledge usually grows slowly through contributions from many different investigators from diverse cultures. • Science depends on experimental and observational confirmation and is subject to change as new evidence becomes available. • A hypothesis can be supported, modified, or rejected based on collected data. A hypothesis is a tentative explanation that accounts for a set of facts and that can be tested by further investigation. A theory is an accepted explanation of a large body of information, experimental and inferential, and serves as an overarching framework for numerous concepts. It is subject to change as new evidence becomes available. A law is a statement of fact meant to describe, in concise terms, an action.	• recognize and discuss contradictory or unusual data. • determine the extent to which data support~~s~~/do~~es~~ not support a hypothesis, and propose further hypotheses and directions for continued research. • discuss the validity of results as related to accuracy, confidence, and sources of experimental error based on number of trials and variance in the data. • use evidence, apply logic, and construct an argument for conclusions based on reported data. • ~~explain how competing scientific theories based on the same observations can be equally valid.~~ • recognize that in order to ensure the validity of scientific investigations, ~~other members of the scientific community~~ they must be evaluated by other members of the scientific community. • compare and contrast hypotheses, theories and laws. • identify and describe scientific theories that have been changed or

Standard BIO.1

BIO.1	The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which a) observations of living organisms are recorded in the lab and in the field; b) hypotheses are formulated based on direct observations and information from scientific literature; c) variables are defined and investigations are designed to test hypotheses; d) graphing and arithmetic calculations are used as tools in data analysis; e) conclusions are formed based on recorded quantitative and qualitative data; f) sources of error inherent in experimental design are identified and discussed; g) validity of data is determined; h) chemicals and equipment are used in a safe manner; i) appropriate technology including computers, graphing calculators, and probeware, is used for gathering and analyzing data, communicating results, modeling concepts, and simulating experimental conditions; j) research utilizes scientific literature; k) differentiation is made between a scientific hypothesis, theory, and law; l) alternative scientific explanations and models are recognized and analyzed; and m) current applications of biological concepts are used.

Essential Understandings	Essential Knowledge and Skills
It is generally accepted to be true and universal.	modified over time.

Standard BIO.2

BIO.2 The student will investigate and understand the chemical and biochemical principles essential for life. Key concepts include

a) water chemistry and its impact on life processes;
b) the structure and function of macromolecules;
c) the nature of enzymes; and
d) the capture, storage, transformation, and flow of energy through the processes of photosynthesis and respiration.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Water is essential for life on Earth. Water absorbs heat when it evaporates, allowing organisms to release excess heat. The solid form of water, ice, floats, preventing lakes and oceans from freezing solid. Water molecules are both cohesive and adhesive due to the nature of hydrogen bonding ~~(polar covalent and hydrogen bonding)~~. • About two-thirds of the mass of a cell is made up of water, and most of the biochemical processes of life occur in water solutions. Water is able to dissolve many substances (due to polarity); therefore, the water inside and outside of cells is able to carry nutrients into and around cells and wastes away from cells. • ~~Water is able to absorb large amounts of heat. As a result, lakes and oceans stabilize air and land temperatures.~~ • ~~The pH scale ranges from 0 to 14. The pH of pure water is 7. Substances added to water can lower or raise the pH. A solution with a pH below 7 is acidic. A solution with a pH above 7 is basic.~~ • The pH scale ranges from 0 to 14. The pH of pure water is 7. Substances added to water can lower or raise the pH. A solution with a pH below 7 is acidic. A solution with a pH above 7 is basic. • Organisms can tolerate only small changes in pH because every cell has a particular pH at which it functions best. For example, changes in pH cause changes in enzyme conformation, resulting in a change in activity. Most cells function best within a narrow range of temperature and pH. At very low temperatures, reaction rates are too slow. High temperatures or extremes of pH can irreversibly change the structure of proteins and alter their function.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • explain the importance of the chemical and physical properties of water that make it vital to life. • recognize that ~~T~~the main components of a living cell are carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulfur. Carbon atoms can easily bond to several other carbon atoms in chains and rings to form large complex molecules. • explain the role and function of the four major categories of macromolecules (lipids, carbohydrates, proteins and nucleic acids). • identify the functions of different types of proteins and recognize the significance that their conformation play in their functions. • describe the structure of enzymes and explain their role in acting as catalysts to control the rate of metabolic reactions. • explain how light is the initial source of energy for most communities. • recognize the equations for photosynthesis and respiration and identify the reactants and products. • describe the role of ATP in the storage and release of chemical energy in the cell. • explain the interrelatedness of photosynthesis and cell respiration.

Standard BIO.2

BIO.2	The student will investigate and understand the chemical and biochemical principles essential for life. Key concepts include a) water chemistry and its impact on life processes; b) the structure and function of macromolecules; c) the nature of enzymes; and d) the capture, storage, transformation, and flow of energy through the processes of photosynthesis and respiration.

Essential Understandings	Essential Knowledge and Skills
• <u>In multicellular organisms, the fluid within the cell and the fluids surrounding the cells have a characteristic and nearly constant pH. This pH is maintained in a number of ways, and one of the most important is through buffer systems.</u> • Inside every cell is a concentrated mixture of thousands of different macromolecules forming a variety of specialized structures that carry out cell functions, such as energy production, transport, waste disposal, synthesis of new molecules, and storage of genetic material. • Cells can make a variety of macromolecules from a relatively small set of monomers. • The primary functions of carbohydrate macromolecules are to provide and store energy. • The primary functions of lipid macromolecules are to insulate, store energy, and make up cell membranes. • Nucleic acids (DNA and RNA) control cell activities by directing protein synthesis. • Proteins are polymers made by linking together amino acid monomers. Protein molecules that are assembled in cells carry out most of the cells' work. The function of each protein molecule depends on its specific conformation. The sequence of amino acids and the shape of the chain are a consequence of attractions between the chain's parts. Some proteins are structural (hair, nails). Others function in transport (hemoglobin), movement (muscle fibers and cytoskeletal elements), defense (antibodies), and regulation of cell functions (hormones and enzymes). ~~A protein's structure depends on its specific conformation.~~ • Most life processes are a series of chemical reactions influenced by	

Standard BIO.2

BIO.2	The student will investigate and understand the chemical and biochemical principles essential for life. Key concepts include a) water chemistry and its impact on life processes; b) the structure and function of macromolecules; c) the nature of enzymes; and d) the capture, storage, transformation, and flow of energy through the processes of photosynthesis and respiration.

Essential Understandings	Essential Knowledge and Skills
environmental and genetic factors. The chemical reactions that occur inside cells are directly controlled by a large set of protein molecules called enzymes, whose functions depend on their specific shapes. Each enzyme has a definite three-dimensional shape that allows it to recognize and bind with its substrate. In living cells, enzymes control the rate of metabolic reaction by acting as catalysts. • The breakdown of nutrient molecules enables all cells to store energy in specific chemicals that are used to carry out the life functions of the cell. • Plant cells and many microorganisms use solar energy to combine molecules of carbon dioxide and water into complex, energy-rich organic compounds and release oxygen into the environment. • ~~Light is the initial source of energy for most communities.~~ The process of photosynthesis provides a vital connection between the sun and the energy needs of living systems. During photosynthesis, cells trap energy from sunlight with chlorophyll, found in chloroplasts, and use the energy, carbon dioxide, and water to produce energy-rich organic molecules (glucose) and oxygen. Photosynthesis involves an energy conversion in which light energy is converted to chemical energy in specialized cells. These cells are found in autotrophs such as plants and some protists. • During cell respiration, eukaryotic cells "burn" organic molecules with oxygen~~, which produces energy, carbon dioxide, and water.~~ in the mitochondria, which releases energy in the form of ATP, carbon dioxide, and water. • Photosynthesis and cell respiration are complementary processes for cycling carbon dioxide and oxygen as well as transferring energy in ecosystems.	

Standard BIO.2

BIO.2	The student will investigate and understand the chemical and biochemical principles essential for life. Key concepts include a) water chemistry and its impact on life processes; b) the structure and function of macromolecules; c) the nature of enzymes; and d) the capture, storage, transformation, and flow of energy through the processes of photosynthesis and respiration.

Essential Understandings	Essential Knowledge and Skills
• Cells release the chemical energy stored in the products of photosynthesis. This energy is transported within the cell in the form of ATP. When cells need energy to do work, certain enzymes release the energy stored in the chemical bonds in ATP.	

Standard BIO.3

BIO.3 The student will investigate and understand relationships between cell structure and function. Key concepts include

a) evidence supporting the cell theory;
b) characteristics of prokaryotic and eukaryotic cells;
c) similarities between the activities of the organelles in a single cell and a whole organism;
d) the cell membrane model; and
e) the impact of surface area to volume ratio on cell division, material transport, and other life processes.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The cell theory is the unifying theme in biology because it emphasizes the similarity of all living things. The traditional cell theory states that 1) ~~all~~ living things are composed of one or more cells and that cells come from other cells by the process of cell reproduction; 2) ~~C~~cells are the basic units of structure and function of all living things; and 3) ~~C~~cells contain specialized structures to perform functions necessary for life. • The development of the cell theory was accelerated by the ability to make observations on a microscopic level. The development and refinement of magnifying lenses and light microscopes made the observation and description of microscopic organisms and living cells possible. • Continued advances in microscopy allowed observation of cell organelles and ultrastructure. Current technology allows the observation of cellular processes underlying both cell structure and function. • As a result of additional study and the integration of studies of cell life functions, a modern cell theory has been developed. The modern cell theory, in addition to the tenants of the traditional cell theory, states 1) energy flow (metabolism and biochemistry) occurs within cells; 2) cells contain hereditary information (DNA) that is passed from cell to cell during cell division; and 3) all cells are basically the same in chemical composition in organisms of similar species . • Cell structure is one of the ways in which organisms differ from each other. The diversity that exists ranges from simple prokaryotic cells to complex multicellular organisms. • The simplest life forms exhibiting cellular structure are the prokaryotes.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • describe the key events leading to the development of the cell theory. • compare and contrast characteristics of prokaryotic and eukaryotic cells. • compare and contrast the activities of an organelle in a single cell and a whole organism. • identify the following essential cell structures and their functions ~~include~~ - the nucleus (contains DNA; site where RNA is made) - ribosome (site of protein synthesis) - mitochondrion (site of cell respiration) - chloroplast (site of photosynthesis) - endoplasmic reticulum (transports materials through the cell) - Golgi (site where cell products are packaged for export) - lysosome (contains digestive enzymes) - cell membrane (controls what enters and leaves the cell) - cell wall (provides support) - vacuole (storage of material) - cytoplasm (contains organelles and site of many chemical reactions) - centriole (organizes spindle fibers in animal cells) - cytoskeleton • describe how the selective permeability of the cell membrane affects the life of a cell. • describe processes associated with movement across the membrane for diffusion, facilitated diffusion, osmosis, and active transport.

Standard BIO.3

BIO.3	The student will investigate and understand relationships between cell structure and function. Key concepts include a) evidence supporting the cell theory; b) characteristics of prokaryotic and eukaryotic cells; c) similarities between the activities of the organelles in a single cell and a whole organism; d) the cell membrane model; and e) the impact of surface area to volume ratio on cell division, material transport, and other life processes.

Essential Understandings	Essential Knowledge and Skills
Earth's first cells were prokaryotes. Prokaryotic cells exist in two major forms: eubacteria and archaebacteria. Prokaryotes are ~~the~~ Earth's most abundant inhabitants. They can survive in a wide range of environments and obtain energy in a variety of ways. • ~~Several differences between eukaryotes and prokaryotes include~~ Eukaryotes differ from prokaryotes based on size, genetic material surrounded by a nuclear membrane, and the addition of membrane bound organelles (i.e., mitochondria and chloroplasts). • Eukaryotes arose from prokaryotes and developed into larger more complex organisms, from single-celled protists to multicellular protists, fungi, plants, and animals. • Some organisms exist as a single cell, while others are composed of many cells, each specialized to perform distinct metabolic functions. The basic processes necessary for living things to survive are the same for a single cell as they are for a more complex organism. A single-celled organism has to conduct all life processes by itself. A multicellular organism has groups of cells that specialize to perform specific functions. • ~~Cell specialization occurs during the development of a multicellular organism. The genetic information necessary for all cellular functions remains in each cell but may not be used.~~ • Cellular activities necessary for life include chemical reactions that facilitate acquiring energy, reproduction, and ~~adaptation/~~maintaining homeostasis. Relationships between structure and function can be examined at each of the hierarchical levels of organization: molecular, cellular, organism, population, community, and ecosystem. • Cellular differences between plant and animal cells include the presence	• describe the relationship between a cell's external solute concentration and its effect on the cell's internal solute concentration. • compare the efficiency of the ability of a cell to transport material based on surface area to volume ratios.

Standard BIO.3

BIO.3	The student will investigate and understand relationships between cell structure and function. Key concepts include a) evidence supporting the cell theory; b) characteristics of prokaryotic and eukaryotic cells; c) similarities between the activities of the organelles in a single cell and a whole organism; d) the cell membrane model; and e) the impact of surface area to volume ratio on cell division, material transport, and other life processes.

Essential Understandings	Essential Knowledge and Skills
of a cell wall that gives the plant cell a defined shape, the presence of chloroplast, and the number of vacuoles. • The fluid mosaic model of a membrane emphasizes the arrangement and function of a bilayer of phospholipids, transport proteins, and cholesterol. • Homeostasis of a cell is maintained by ~~a~~ the plasma membrane comprised of a variety of organic molecules. ~~that~~ The membrane controls the movement of material in and out of the cell, communication between cells, and the recognition of cells to facilitate multiple metabolic functions. • Diffusion occurs in cells when substances (oxygen, carbon dioxide, salts, sugars, amino acids) that are dissolved in water move from an area of higher concentration to an area of lower concentration. • Facilitated diffusion occurs in cells when larger substances are moved from an area of higher concentration to an area of lower concentration with the assistance of a carrier protein without the use of energy. • Osmosis refers to the movement of water molecules through a semi-permeable membrane from an area of greater water concentration or pressure (lower solute concentration) to an area of lesser water concentration or pressure (higher solute concentration). • Active transport refers to the movement of solid ~~and~~ or liquid particles into and out of a cell with an input of energy. • As cells increase in size, surface area to volume ratios decrease, making cells unable to obtain nutrients or remove wastes. To reduce the effects of this, cells divide to stay small or change shape to increase surface area or reduce volume.	

Standard BIO.4

BIO.4 The student will investigate and understand life functions of Archaea, Bacteria and Eukarya. Key concepts include

a) comparison of their metabolic activities;
b) maintenance of homeostasis;
c) how the structures and functions vary among and within the Eukarya kingdoms of protists, fungi, plants, and animals, including humans;
d) human health issues, human anatomy, and body systems;
e) how viruses compare with organisms; and
f) evidence supporting the germ theory of infectious disease.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The ~~millions of different~~ organisms that live on Earth today share many structural and metabolic features, including cellular organization, common molecular mechanisms for energy transformation, ~~and~~ utilization and maintenance of homeostasis, common genetic code, and mechanisms for the transmission of traits from one generation to the next. • The diversity that is evident in the natural world can be studied in the local environment in the context of variations on a common theme. • Understanding normal body functioning assists in understanding situations~~, both hereditary and environmental, in which~~ when functioning is impaired. • Like other organisms, human beings are composed of groups of cells (tissues, organs, and organ systems) that are specialized to provide the human organism with the basic requirements for life: obtaining food and deriving energy from it, maintaining homeostasis, coordinating body functions, and reproducing. • Organ systems function and interact to maintain a stable internal environment that can resist disturbance from within or without (homeostasis). • For the body to use food for energy, the food must first be digested into molecules that are absorbed and transported to cells, where the food is used for energy and for repair and growth. To burn food for the release of energy, oxygen must be supplied to cells and carbon dioxide removed. The respiratory system responds to changing demands by increasing or decreasing breathing rate in order to maintain homeostasis.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • compare and contrast the metabolic activities of all domains of life. • identify the proper response an organism would exhibit in response to changes in the environment to maintain homeostasis. • categorize and compare the Eukarya kingdoms based on cell structure, locomotion, reproduction, response to the environment and metabolism. • identify the main factors that affect human health. • describe the major functions of the human body systems and the role of each in maintaining homeostasis. • compare and contrast a virus and a cell in relation to genetic material and reproduction. • describe how Pasteur's and Koch's experimentation and hypotheses led to an understanding of the presence of microorganisms and their relationship to diseases. • ~~differentiate and give examples of the following from local ecosystems:~~ - ~~autotrophs and heterotrophs (producers, consumers, and decomposers)~~ - ~~multicellular and unicellular organisms~~ - ~~motile and non-motile organisms~~ - ~~organisms with and without cell walls~~ - ~~sexually and asexually reproducing organisms~~ - ~~aquatic and terrestrial organisms~~

Standard BIO.4

BIO.4	The student will investigate and understand life functions of Archaea, Bacteria and Eukarya. Key concepts include a) comparison of their metabolic activities; b) maintenance of homeostasis; c) how the structures and functions vary among and within the Eukarya kingdoms of protists, fungi, plants, and animals, including humans; d) human health issues, human anatomy, and body systems; e) how viruses compare with organisms; and f) evidence supporting the germ theory of infectious disease.

Essential Understandings	Essential Knowledge and Skills
• The circulatory system, which moves all of these substances to or from cells, responds to changing demands by increasing or decreasing heart rate and blood flow in order to maintain homeostasis. • The urinary system disposes of dissolved waste molecules; the intestinal tract removes solid wastes; and the skin and lungs rid the body of ~~heat~~ thermal energy. • Specialized cells of the immune system and the molecules they produce are designed to protect against organisms and substances that enter from outside the body and against some cancer cells that arise from within. • Communication between cells is required for coordination of body functions. The nerves communicate with electrochemical signals, hormones circulate through the blood, and some cells secrete substances that spread only to nearby cells. • Environmental factors that impact human health include diet, exercise, sleep, stress, toxic substances that enter the body, viruses, and other living organisms that infect the body. • Genetic predisposition towards diseases impacts human health. Awareness of genetic predisposition allows individuals to make lifestyle changes that can enhance quality of life. • Viruses do not share many of the characteristics of living organisms. Viruses are not cells. Basic viral structure consists of a nucleic acid core surrounded by a protein coat. Viruses can reproduce only inside a living cell, the host cell. • The viral reproductive process includes the following steps: - A virus must insert its genetic material into the host cell.	- ~~behavioral responses to the environment.~~

Standard BIO.4

BIO.4	The student will investigate and understand life functions of Archaea, Bacteria and Eukarya. Key concepts include a) comparison of their metabolic activities; b) maintenance of homeostasis; c) how the structures and functions vary among and within the Eukarya kingdoms of protists, fungi, plants, and animals, including humans; d) human health issues, human anatomy, and body systems; e) how viruses compare with organisms; and f) evidence supporting the germ theory of infectious disease.

Essential Understandings	Essential Knowledge and Skills
- The viral genetic material takes control of the host cell and uses it to produce viruses. - The newly formed viruses are released from the host cell. • Throughout history, people have created explanations for disease. The introduction of the germ theory led to the understanding that many diseases are caused by microorganisms. Changes in health practices have resulted from the acceptance of the germ theory of disease. • Modern health practices emphasize sanitation, the safe handling of food and water, aseptic techniques to keep germs out of the body, and the development of vaccinations and other chemicals and processes to destroy microorganisms.	

Standard BIO.5

BIO.5	The student will investigate and understand common mechanisms of inheritance and protein synthesis. Key concepts include a) cell growth and division; b) gamete formation; c) cell specialization; d) prediction of inheritance of traits based on the Mendelian laws of heredity; e) historical development of the structural model of DNA; f) genetic variation; g) the structure, function, and replication of nucleic acids; h) events involved in the construction of proteins; i) use, limitations, and misuse of genetic information; and j) exploration of the impact of DNA technologies.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • All living cells come from other living cells. A typical cell goes through a process of growth, development, and reproduction called the cell cycle. • Mitosis produces two genetically identical cells. During mitosis, the nucleus of the cell divides, forming two nuclei with identical genetic information. Mitosis is referred to in the following stages: prophase, metaphase, anaphase, and telophase. • Many organisms are capable of combining genetic information from two parents to produce offspring. Sex cells are produced through meiosis. This allows sexually reproducing organisms to produce genetically differing offspring, and maintain their number of chromosomes. Meiosis occurs in sexual reproduction when a diploid germ cell produces four haploid daughter cells that can mature to become gametes (sperm or egg). • Genetically diverse populations are more likely to survive changing environments. Recombination and mutation provide for genetic diversity. Some new gene combinations have little effect, some can produce organisms that are better suited to their environments, and others can be deleterious. • Mitosis and meiosis refer to division of the nuclear material.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • create a diagram to model the stages of mitosis and explain the processes occurring at each stage. • describe the importance of cell specialization in the development of multicellular organisms. • create a diagram to model the stages of meiosis and explain the processes occurring at each stage. • compare and contrast the process of mitosis and meiosis and determine under which conditions each process will occur. • explain how the Mendelian laws of heredity apply to the patterns of inheritance. • ~~predict possible gametes in a dihybrid cross, given parental genotypes~~. • identify the traits expressed from a given genotype. • use a Punnett square to show all possible combinations of gametes and the likelihood that particular combinations will occur in monohybrid and dihybrid crosses. • evaluate karyotype charts and make a determination of the gender

Standard BIO.5

BIO.5 The student will investigate and understand common mechanisms of inheritance and protein synthesis. Key concepts include

a) cell growth and division;
b) gamete formation;
c) cell specialization;
d) prediction of inheritance of traits based on the Mendelian laws of heredity;
e) historical development of the structural model of DNA;
f) genetic variation;
g) the structure, function, and replication of nucleic acids;
h) events involved in the construction of proteins;
i) use, limitations, and misuse of genetic information; and
j) exploration of the impact of DNA technologies.

Essential Understandings	Essential Knowledge and Skills
Cytokinesis is the division of the cytoplasm and organelles. • The many body cells of an organism can be specialized to perform different functions, even though they are all descended from a single cell and contain essentially the same genetic information. • Mendel's laws of heredity are based on his mathematical analysis of observations of patterns of inheritance of traits. Geneticists apply mathematical principles of probability to Mendel's laws of heredity in order to predict the results of simple genetic crosses. The laws of probability govern simple genetic recombinations. • Genotype describes the genetic make-up of an organism and phenotype describes the organism's appearance based on its genes. Homozygous individuals have two identical alleles for a particular trait, while heterozygous individuals have contrasting alleles. When one allele masks the effect of another, that allele is called dominant and the other recessive. When an intermediate phenotype occurs and no allele dominates, incomplete dominance results. Many other patterns of inheritance exist including multiple alleles, polygenic inheritance, and sex-linked inheritance. • Once DNA was shown to be the genetic material, a race among scientists took place to work out its structure. Studies of the amounts of each DNA base in different organisms led to the concept of complementary base-paring. Interpretations of X-ray photographs of DNA were used to describe the shape and dimensions of the molecule.	and genetic health of the individual. • provide examples of reasons for genetic diversity and why it can be an advantage for populations. • provide examples of mutations that are lethal, harmful, and beneficial. • describe the basic structure of DNA and its function in inheritance. • describe the key events leading to the development of the structural model of DNA. • given a DNA sequence, write a complementary mRNA strand (A-U, T-A, C-G and G-C). • explain the process of DNA replication. • explain the process of protein synthesis, including DNA transcription and translation. • evaluate examples of genetic engineering and the potential for controversy. • describe the uses, limitations, and potential for misuse of genetic information.

Standard BIO.5

BIO.5	The student will investigate and understand common mechanisms of inheritance and protein synthesis. Key concepts include a) cell growth and division; b) gamete formation; c) cell specialization; d) prediction of inheritance of traits based on the Mendelian laws of heredity; e) historical development of the structural model of DNA; f) genetic variation; g) the structure, function, and replication of nucleic acids; h) events involved in the construction of proteins; i) use, limitations, and misuse of genetic information; and j) exploration of the impact of DNA technologies.

Essential Understandings	Essential Knowledge and Skills
An analysis of this and other available data led to a structural model for the DNA double helix. • DNA is a polymer consisting of nucleotides. A DNA nucleotide is identified by the base it contains: adenine (A), guanine (G), ~~and~~ cytosine (C) or thymine (T). DNA is a double-stranded molecule. The strands are <u>composed of covalently bonded sugar and phosphate molecules and are</u> connected by complementary nucleotide pairs (A-T and C-G) like rungs on a ladder. The ladder twists to form a double helix. • The double helix model explained how heredity information is transmitted and provided the basis for an explosion of scientific research in molecular genetics. The sorting and recombination of genes in sexual reproduction results in a great variety of gene combinations in the offspring of any two parents. • The genetic code is a sequence of DNA nucleotides in the nucleus of eukaryotic cells. Before a cell divides, the instructions are duplicated so that each of the two new cells gets all the necessary information for carrying on life functions. Cells pass on their genetic code by replicating ~~(copying)~~ their DNA. • DNA stores the information for directing the construction of proteins within a cell. These proteins determine the phenotype of an organism. The genetic information encoded in DNA molecules provides instructions for assembling protein molecules. The code is virtually the same for all life forms.	

Standard BIO.5

BIO.5	The student will investigate and understand common mechanisms of inheritance and protein synthesis. Key concepts include a) cell growth and division; b) gamete formation; c) cell specialization; d) prediction of inheritance of traits based on the Mendelian laws of heredity; e) historical development of the structural model of DNA; f) genetic variation; g) the structure, function, and replication of nucleic acids; h) events involved in the construction of proteins; i) use, limitations, and misuse of genetic information; and j) exploration of the impact of DNA technologies.

Essential Understandings	Essential Knowledge and Skills
• During DNA replication, enzymes unwind and unzip the double helix and each strand serves as a template for building a new DNA molecule. Free nucleotides bond to the template (A-T and C-G) forming a complementary strand. The final product of replication is two identical DNA molecules. • Inserting, deleting, or substituting DNA bases can alter genes. An altered gene may be passed on to every cell that develops from it, causing an altered phenotype. An altered phenotype may be neutral, beneficial or detrimental. Sometimes entire chromosomes can be added or deleted, resulting in a genetic disorder ~~such as Trisomy 21 (Down syndrome)~~. These abnormalities may be diagnosed using a Karyotype. • In order for cells to make proteins, the DNA code must be transcribed (copied) to messenger RNA (mRNA). The mRNA carries the code from the nucleus to the ribosomes in the cytoplasm. RNA is a single-stranded polymer of four nucleotide monomers. A RNA nucleotide is identified by the base it contains: adenine (A), guanine (G), and cytosine (C) or uracil (U). • At the ribosome, amino acids are linked together to form specific proteins. The amino acid sequence is ~~directed~~ determined by the mRNA molecule. • DNA technologies allow scientists to identify, study, and modify genes. Forensic identification is an example of the application of DNA technology.	

Standard BIO.5

BIO.5	The student will investigate and understand common mechanisms of inheritance and protein synthesis. Key concepts include a) cell growth and division; b) gamete formation; c) cell specialization; d) prediction of inheritance of traits based on the Mendelian laws of heredity; e) historical development of the structural model of DNA; f) genetic variation; g) the structure, function, and replication of nucleic acids; h) events involved in the construction of proteins; i) use, limitations, and misuse of genetic information; and j) exploration of the impact of DNA technologies.

Essential Understandings	Essential Knowledge and Skills
• Genetic engineering techniques are used in a variety of industries, in agriculture, in basic research, and in medicine. There is great ~~potential for the development of~~ benefit in terms of useful products derived through genetic engineering (e.g., human growth hormone, insulin, and pest- and disease-resistant fruits and vegetables). • Eugenics, a pseudo-science of selective procreation, was a movement throughout the twentieth century, worldwide as well as in Virginia, that demonstrated a misuse of the principles of heredity. • The Human Genome Project is a collaborative effort to map the entire gene sequence of organisms. This information ~~will be~~ may be useful in detection, prevention, and treatment of many genetic diseases. The potential for identifying and altering genomes raises practical and ethical questions. • Cloning is the production of genetically identical cells and/or organisms.	

Standard BIO.6

BIO.6 The student will investigate and understand bases for modern classification systems. Key concepts include

a) structural similarities among organisms;
b) fossil record interpretation;
c) comparison of developmental stages in different organisms;
d) examination of biochemical similarities and differences among organisms; and
e) systems of classification that are adaptable to new scientific discoveries.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Biological classifications are based on how organisms are related. Organisms are classified into a hierarchy of groups and subgroups based on similarities that reflect their relationships over a period of time. • Binomial nomenclature is a standard way of identifying a species with a scientific two-word name. The first word is the genus name and the second the species name. Species is the basic unit of classification. A species is defined as a group of organisms that has the ability to interbreed and produce fertile offspring in nature. • A dichotomous key is a classification tool used to identify and organize organisms using defining characteristics. • Information about relationships among living organisms and those that inhabited Earth in the past is gained by comparing biochemistry and developmental stages of organisms and by examining and interpreting the fossil record. This information is continually being gathered and used to modify and clarify existing classification systems. • Evolutionary relationships can be represented using a branching diagram called a cladogram or phylogenetic tree which are organized by shared, derived characteristics. • Similarities among organisms on the structural and metabolic levels are reflected in the large degree of similarity in proteins and nucleic acids of different organisms. Diversity is the product of variations in these molecules. • ~~Investigations of local flora and fauna provide opportunities to enhance understanding and stimulate interest in local environmental issues by~~	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • construct and utilize dichotomous keys to classify groups of objects and organisms. • describe relationships based on homologous structures. • compare structural characteristics of an extinct organism, as evidenced by its fossil record, with present, familiar organisms. • recognize similarities in embryonic stages in diverse organisms in the animal kingdom, from zygote through embryo and infer relationships. • ~~describe relationships between organisms, given amino acid or nucleotide sequences.~~ • compare biochemical evidence (DNA sequences, amino acid sequences) and describe relationships. • interpret a ~~clad gram~~ cladogram or phylogenic tree showing evolutionary relationships among organisms. • investigate flora and fauna in field investigations and apply classification systems.

Standard BIO.6

BIO.6	The student will investigate and understand bases for modern classification systems. Key concepts include a) structural similarities among organisms; b) fossil record interpretation; c) comparison of developmental stages in different organisms; d) examination of biochemical similarities and differences among organisms; and e) systems of classification that are adaptable to new scientific discoveries.

Essential Understandings	Essential Knowledge and Skills
~~developing and applying classification systems in the field.~~	

Standard BIO.7

BIO.7 The student will investigate and understand how populations change through time. Key concepts include

a) evidence found in fossil records;
b) how genetic variation, reproductive strategies, and environmental pressures impact the survival of populations;
c) how natural selection leads to adaptations;
d) emergence of new species; and
e) scientific evidence and explanations for biological evolution.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • A fossil is any evidence of an organism that lived long ago. Scientists have used the fossil record to construct a history of life on Earth. Although there is not a complete record of ancient life for the past 3.5 billion years, a great deal of modern knowledge about the history of life comes from the fossil record. • ~~Scientists have developed hypotheses about conditions on early Earth that could have led to the formation of the first organic molecules, early self-replicating molecules, the source of free oxygen in Earth's atmosphere, and the appearance of prokaryotic and later eukaryotic cells.~~ • Populations are groups of interbreeding individuals that live in the same place at the same time and compete with each other for food, water, shelter, and mates. Populations produce more offspring than the environment can support. Organisms with certain genetic variations will be favored to survive and pass their variations on to the next generation. The unequal ability of individuals to survive and reproduce leads to the gradual change in a population, generation after generation over many generations. Depending on the selective pressure, these changes can be rapid over few generations (ie., antibiotic resistance) • Genetic mutations and variety produced by sexual reproduction allow for diversity within a given population. Many factors can cause a change in a gene over time. Mutations are important in how populations change over time because they result in ~~genetic~~ changes to the gene pool. • Through his observations, including those made in the Galapagos Islands, Charles Darwin formulated a theory of how species change over	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • determine the relative age of a fossil given information about its position in the rock and absolute dating by radioactive decay. • differentiate between relative and absolute dating based on fossils in biological evolution. • recognize that adaptations may occur in populations of organisms over a period of time. • describe the impact of reproductive strategies and rates on a population's survival. • describe how genetic variation can lead to gradual changes in populations and the emergence of new species over time. • predict the impact of environmental pressures on populations. • explain how natural selection leads to changes in gene frequency in a population over time. • compare and contrast punctuated equilibrium with gradual change over time.

Standard BIO.7

BIO.7	The student will investigate and understand how populations change through time. Key concepts include a) evidence found in fossil records; b) how genetic variation, reproductive strategies, and environmental pressures impact the survival of populations; c) how natural selection leads to adaptations; d) emergence of new species; and e) scientific evidence and explanations for biological evolution.

Essential Understandings	Essential Knowledge and Skills
time, called natural selection. Natural selection is a process by which organisms with traits well suited to an environment survive and reproduce at a greater rate than organisms less suited to that environment~~.~~, and ~~Natural selection~~ is governed by the principles of genetics. The change in frequency of a gene in a given population leads to a change favoring maintenance of that gene within a population and if so, may result in the emergence of a new species. Natural selection operates on populations over many generations. • Depending on the rate of adaptation, the rate of reproduction, and the environmental factors present, structural adaptations may take millions of years to develop. • Adaptations sometimes arise abruptly in response to strong environmental selective pressures, for example, the development of antibiotic resistance in bacterial populations, morphological changes in the peppered moth population, the development of pesticide resistance in insect populations. • Stephen Jay Gould's idea of *punctuated equilibrium* proposes that organisms may undergo rapid (in geologic time) bursts of speciation followed by long periods of time unchanged. This view is in contrast to the traditional evolutionary view of gradual and continuous change.	

Standard BIO.8

BIO.8 The student will investigate and understand dynamic equilibria within populations, communities, and ecosystems. Key concepts include

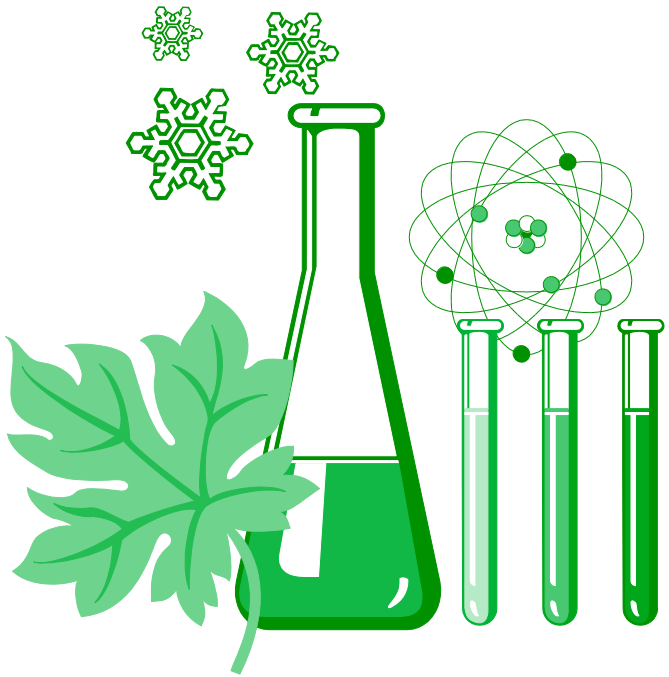
a) interactions within and among populations including carrying capacities, limiting factors, and growth curves;
b) nutrient cycling with energy flow through ecosystems;
c) succession patterns in ecosystems;
d) the effects of natural events and human activities on ecosystems; and
e) analysis of the flora, fauna, and microorganisms of Virginia ecosystems.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • As any population of organisms grows, it is held in check by interactions among a variety of biotic and abiotic factors. • Abiotic factors are the nonliving elements in an ecosystem, such as temperature, moisture, air, salinity, and pH. Biotic factors are all the living organisms that inhabit the environment, including predators, food sources, and competitors. • Population growth curves exhibit many characteristics, such as initial growth stage, exponential growth, steady state, decline, and extinction. Limiting factors are the components of the environment that restrict the growth of populations. Carrying capacity is the number of organisms that can be supported by the resources in an ecosystem. • A community is a collection of interacting populations. • Symbiosis is a close and permanent relationship between organisms of two different species. Examples include mutualism, commensalism, and parasitism. • Ecosystems demonstrate an exchange of energy and nutrients among inhabiting organisms. ~~The gradual change in an ecosystem that occurs as communities slowly replace one another is known as *ecological succession*.~~ • An ecosystem consists of all the interacting species and the abiotic environment in a given geographic area. All matter including essential ~~N~~nutrients cycle through an ecosystem. The most common examples of such matter and nutrients include carbon, ~~oxygen,~~ nitrogen, and water. • Energy flows in an ecosystem from producers to various levels of	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • graph and interpret a population growth curve and identify the carrying capacity of the populations. • make predictions about changes that could occur in population numbers as the result of population interactions. • illustrate and/or model the key processes in the water, carbon, and nitrogen cycle and explain the role of living things in each of the cycles. • given an illustration of a food chain and a food web, identify each organism as a producer (autotroph), consumer (primary/second order), or decomposer and describe their role in the ecosystem. • interpret how the flow of energy occurs between trophic levels in all ecosystems ~~and can be depicted as follows~~ in each of the following: - food chain - food web - pyramid of energy - pyramid of biomass - pyramid of numbers. • identify and describe an ecosystem in terms of the following: - effects of biotic and abiotic components - examples of interdependence - evidence of human influences - energy flow and nutrient cycling - diversity analysis

Standard BIO.8

BIO.8	The student will investigate and understand dynamic equilibria within populations, communities, and ecosystems. Key concepts include a) interactions within and among populations including carrying capacities, limiting factors, and growth curves; b) nutrient cycling with energy flow through ecosystems; c) succession patterns in ecosystems; d) the effects of natural events and human activities on ecosystems; and e) analysis of the flora, fauna, and microorganisms of Virginia ecosystems.

Essential Understandings	Essential Knowledge and Skills
consumers and decomposers. This flow of energy can be diagramed using a food chain or food web. The efficiency of this flow of energy is represented by an energy pyramid. • Ecological succession is a ~~series of changes in a community in which new populations of organisms gradually replace existing ones~~ predictable change in the sequence of species that establish in a particular area over time. • A climax community occurs when succession slows down and a stable community is established. ~~The climax community is made up of organisms that are successful at competing for resources in a given environment.~~ The climax community in most of Virginia is a deciduous oak-hickory (hardwood) forest. • As the human population increases, so does human impact on the environment. Human activities, such as reducing the amount of forest cover, increasing the amount and variety of chemicals released into the ~~atmosphere~~ environment, and intensive farming, have changed the Earth's land, oceans, and atmosphere. Some of these changes have decreased the capacity of the environment to support some life forms. • ~~Investigations of local ecosystems provide opportunities for students to enhance their understanding and stimulate their interest in local environmental issues by applying ecological principles in the field.~~	• describe the patterns of succession found in aquatic and terrestrial ecosystems of Virginia. • identify the similarities and differences between primary and secondary succession. • describe the characteristics of a climax community. • ~~Observe and identify flora and fauna in a local community,~~ use local ecosystems to apply ecological principles in the classroom and in the field where appropriate, using field guides and dichotomous keys for identifying and describing ~~organisms~~ flora and fauna that characterize the local ecosystem. • evaluate examples of human activities that have negative and positive impacts on Virginia's ecosystems. • recognize that the Chesapeake Bay watershed includes the majority of Virginia and human activities play an important role in its health.



Science Standards of Learning Curriculum Framework

Chemistry

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning Curriculum Framework* amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The *Science Curriculum Framework* provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (6 – Physics); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard
This section includes background information for the teacher (K-5). It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan lessons focusing on the standard.

Essential Understandings
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Standard CH.1

CH.1 The student will investigate and understand that experiments in which variables are measured, analyzed, and evaluated produce observations and verifiable data. Key concepts include

a) designated laboratory techniques;
b) safe use of chemicals and equipment;
c) proper response to emergency situations;
d) manipulation of multiple variables, using repeated trials;
e) accurate recording, organization, and analysis of data through repeated trials;
f) mathematical and procedural error analysis;
g) mathematical manipulations including SI units, scientific notation, linear equations, graphing, ratio and proportion, significant digits, and dimensional analysis;
h) use of appropriate technology including computers, graphing calculators, and probeware, for gathering data, communicating results, and using simulations to model concepts;
i) construction and defense of a scientific viewpoint; and
j) the use of current applications to reinforce chemistry concepts.

Essential Understandings

The concepts developed in this standard include the following:

- The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts
  a) the natural world is understandable;
  b) science is based on evidence - both observational and experimental;
  c) science is a blend of logic and innovation;
  d) scientific ideas are durable yet subject to change as new data are collected;
  e) science is a complex social endeavor; and
  f) scientists try to remain objective and engage in peer review to help avoid bias.
- Techniques for experimentation involve the identification and the proper use of chemicals, the description of equipment, and the recommended statewide framework for high school laboratory safety.
- Measurements are useful in gathering data about chemicals and how they behave.
- Repeated trials during experimentation ensure verifiable data.

Essential Knowledge and Skills

~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will

- make connections between components of the nature of science and their investigations and the greater body of scientific knowledge and research.
- demonstrate safe laboratory practices, procedures, and techniques.
- demonstrate the following basic lab techniques: filtering, ~~decanting~~, using chromatography, and lighting a gas burner.
- understand Material Safety Data Sheet (MSDS) warnings, including handling chemicals, lethal dose (LD), hazards, disposal, and chemical spill cleanup.
- identify the following basic lab equipment: beaker, Erlenmeyer flask, graduated cylinder, test tube, test tube rack, test tube holder, ring stand, wire gauze, clay triangle, crucible with lid, ~~evaporation~~ evaporating dish, watch glass, wash bottle, and dropping pipette.
- make the following measurements, using the specified equipment:
  - volume: graduated cylinder, ~~pipette,~~ volumetric flask, buret
  - mass: ~~electronic or dial-a-gram~~ triple beam and electronic balances
  - temperature: thermometer and/or temperature probe

Standard CH.1

CH.1 The student will investigate and understand that experiments in which variables are measured, analyzed, and evaluated produce observations and verifiable data. Key concepts include

a) designated laboratory techniques;
b) safe use of chemicals and equipment;
c) proper response to emergency situations;
d) manipulation of multiple variables, using repeated trials;
e) accurate recording, organization, and analysis of data through repeated trials;
f) mathematical and procedural error analysis;
g) mathematical manipulations including SI units, scientific notation, linear equations, graphing, ratio and proportion, significant digits, and dimensional analysis;
h) use of appropriate technology including computers, graphing calculators, and probeware, for gathering data, communicating results, and using simulations to model concepts;
i) construction and defense of a scientific viewpoint; and
j) the use of current applications to reinforce chemistry concepts.

Essential Understandings	Essential Knowledge and Skills
• Data tables are used to record and organize measurements. • Mathematical procedures are used to validate data~~.~~, including percent error to evaluate accuracy. • Measurements of quantity include length, volume, mass, temperature, time, and pressure to the correct number of significant digits. Measurements must be expressed in International System of Units (SI) units. • Scientific notation is used to write very small and very large numbers. • Algebraic equations represent relationships between dependent and independent variables. • Graphs are used to summarize the relationship between the independent and dependent variable. • Graphed data give a picture of a relationship. • Ratios and proportions are used in calculations. • Significant digits of a measurement are the number of known digits together with one estimated digit. • The last digit of any valid measurement must be estimated and is	- pressure: barometer and/or pressure probe. • identify, locate, and know how to use laboratory safety equipment, including aprons, goggles, gloves, fire extinguishers, fire blanket, safety shower, eye wash, broken glass container, and fume hood. • design and perform controlled experiments to test predictions, including the following key components: hypotheses, independent and dependent variables, constants, controls, and repeated trials. • ~~Identify variables.~~ • predict outcome(s) when a variable is changed. • read measurements and record data, ~~using~~ reporting the significant digits of the measuring equipment. • demonstrate precision (reproducibility) in measurement. • recognize accuracy in terms of closeness to the true value of a measurement. • determine the mean of a set of measurements. • use data collected to calculate percent error. • discover and eliminate procedural errors.

Standard CH.1

CH.1	The student will investigate and understand that experiments in which variables are measured, analyzed, and evaluated produce observations and verifiable data. Key concepts include a) designated laboratory techniques; b) safe use of chemicals and equipment; c) proper response to emergency situations; d) manipulation of multiple variables, using repeated trials; e) accurate recording, organization, and analysis of data through repeated trials; f) mathematical and procedural error analysis; g) mathematical manipulations including SI units, scientific notation, linear equations, graphing, ratio and proportion, significant digits, and dimensional analysis; h) use of appropriate technology including computers, graphing calculators, and probeware, for gathering data, communicating results, and using simulations to model concepts; i) construction and defense of a scientific viewpoint; and j) the use of current applications to reinforce chemistry concepts.

Essential Understandings	Essential Knowledge and Skills
therefore uncertain. • Dimensional analysis is a way of translating a measurement from one unit to another unit. • Graphing calculators can be used to manage the mathematics of chemistry. • Scientific questions drive new technologies that allow discovery of additional data and generate better questions. New tools and instruments provide an increased understanding of matter at the atomic, nano and molecular scale. • Constant reevaluation in the light of new data is essential to keeping scientific knowledge current. In this fashion, all forms of scientific knowledge remain flexible and may be revised as new data and new ways of looking at existing data become available.	• ~~know most frequently used~~ use common SI prefixes and their values (milli-, centi-, ~~deci -~~, kilo-) in measurements and calculations. • demonstrate the use of scientific notation, using the correct number of significant digits with powers of ten notation for the decimal place. • ~~Correctly utilize the following when graphing~~ graph data utilizing the following: - independent variable (horizontal axis) - dependent variable (vertical axis) - scale and units of a graph - regression line (best fit curve). • calculate mole ratios, percent composition, conversions, and ~~relative~~ average atomic mass. • ~~Use the rules for performing operations~~ perform calculations ~~with~~ according to significant digits rules. • ~~utilize~~ convert measurements using dimensional analysis. • use graphing calculators to solve chemistry problems. • read a measurement from a graduated scale, stating measured digits plus the estimated digit.

Standard CH.1

CH.1	The student will investigate and understand that experiments in which variables are measured, analyzed, and evaluated produce observations and verifiable data. Key concepts include a) designated laboratory techniques; b) safe use of chemicals and equipment; c) proper response to emergency situations; d) manipulation of multiple variables, using repeated trials; e) accurate recording, organization, and analysis of data through repeated trials; f) mathematical and procedural error analysis; g) mathematical manipulations including SI units, scientific notation, linear equations, graphing, ratio and proportion, significant digits, and dimensional analysis; h) use of appropriate technology including computers, graphing calculators, and probeware, for gathering data, communicating results, and using simulations to model concepts; i) construction and defense of a scientific viewpoint; and j) the use of current applications to reinforce chemistry concepts.

Essential Understandings	Essential Knowledge and Skills
	• use appropriate technology for data collection and analysis, including probeware interfaced to a graphing calculator and/or computer and computer simulations. • ~~use probeware to gather data.~~ • summarize knowledge gained through gathering and appropriate processing of data in a report that documents background, objective(s), data collection, data analysis and conclusions. • explain the emergence of modern theories based on historical development. For example, students should be able to explain the origin of the atomic theory beginning with the Greek atomists and continuing through the most modern ~~Q~~quantum models.

Standard CH.2

CH.2	The student will investigate and understand that the placement of elements on the periodic table is a function of their atomic structure. The periodic table is a tool used for the investigations of a) average atomic mass, mass number, and atomic number; b) isotopes, half lives, and radioactive decay; c) mass and charge characteristics of subatomic particles; d) families or groups; e) periods; f) trends including atomic radii, electronegativity, shielding effect, and ionization energy; g) electron configurations, valence electrons, and oxidation numbers; h) chemical and physical properties; and i) historical and quantum models.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The periodic table is arranged in order of increasing atomic number~~s~~. • The atomic number of an element is the same as the number of protons. In a neutral atom, the number of electrons is the same as the number of protons. All atoms of an element have the same number of protons. • The average atomic mass for each element is the weighted average of that element's naturally occurring isotopes. • The mass number of an element is the sum of the number of protons and neutrons. It is different for each element's isotopes. • An isotope is an atom that has the same number of protons as another atom of the same element but has a different number of neutrons. Some isotopes are radioactive; many are not. • Half-life is the length of time required for half of a given sample of a radioactive isotope to decay. • Electrons have little mass and a negative (–) charge. They are located in electron clouds or probability clouds outside the nucleus. • Protons have a positive (+) charge. Neutrons have no charge. Protons and neutrons are located in the nucleus of the atom and comprise most	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • ~~Using a periodic chart,~~ determine the atomic number, atomic mass, the number of protons, and the number of electrons~~, and the number of neutrons~~ of any ~~neutral~~ atom of a particular element using a periodic table. • determine the number of neutrons in an isotope given its mass number. • perform calculations to determine the "weighted" average atomic mass. • ~~determine~~ perform calculations involving the half-life of a radioactive substance. • ~~describe~~ differentiate between alpha, beta, and gamma radiation with respect to penetrating power, shielding, and composition. • differentiate between the major atom components (proton, neutron and electron) in terms of location, size, and charge. • distinguish between a group and a period. • identify key groups, periods, and regions of elements on the periodic

Standard CH.2

CH.2 The student will investigate and understand that the placement of elements on the periodic table is a function of their atomic structure. The periodic table is a tool used for the investigations of

a) average atomic mass, mass number, and atomic number;
b) isotopes, half lives, and radioactive decay;
c) mass and charge characteristics of subatomic particles;
d) families or groups;
e) periods;
f) trends including atomic radii, electronegativity, shielding effect, and ionization energy;
g) electron configurations, valence electrons, and oxidation numbers;
h) chemical and physical properties; and
i) historical and quantum models.

Essential Understandings	Essential Knowledge and Skills
of its mass. Quarks are also located in the nucleus of the atom. • The names of groups and periods on the periodic chart are alkali metals, alkaline earth metals, transition metals, halogens, and noble gases~~, and metalloids~~. • Metalloids have properties of metals and nonmetals. They are located between metals and nonmetals on the periodic table. Some are used in semiconductors. • Periods and groups are named by numbering columns and rows. Horizontal rows called periods have predictable properties based on an increasing number of electrons in the outer ~~orbitals~~ energy levels. Vertical columns called groups or families have similar properties because of their similar valence electron configurations. • The Periodic Law states that when elements are arranged in order of increasing atomic numbers, their physical and chemical properties show a periodic pattern. • Periodicity is regularly repeating patterns or trends in the chemical and physical properties of the elements arranged in the periodic table. • Atomic radius is the measure of the distance between radii of two identical atoms of an element. Atomic radius decreases from left to right and increases from top to bottom within given groups. • Electronegativity is the measure of the attraction of an atom for	table. • identify and explain trends in the periodic table as they relate to ionization energy, electronegativity, shielding effect, and relative sizes. • compare an element's reactivity to the reactivity of other elements in the table. • relate the position of an element on the periodic table to its electron configuration. • ~~use an element's electron configuration to~~ determine the number of valence electrons and possible oxidation numbers from an element's electron configuration. • write the electron configuration for the first 20 elements of the periodic table. • distinguish between physical and chemical properties of metals and nonmetals. • differentiate between pure substances and mixtures and between homogeneous and heterogeneous mixtures. • ~~major insights regarding the atomic model of the atom and~~ identify key contributions of principal scientists ~~include~~ including: - ~~particles~~ *atomos*, initial idea of atom – Democritus

Standard CH.2

CH.2	The student will investigate and understand that the placement of elements on the periodic table is a function of their atomic structure. The periodic table is a tool used for the investigations of a) average atomic mass, mass number, and atomic number; b) isotopes, half lives, and radioactive decay; c) mass and charge characteristics of subatomic particles; d) families or groups; e) periods; f) trends including atomic radii, electronegativity, shielding effect, and ionization energy; g) electron configurations, valence electrons, and oxidation numbers; h) chemical and physical properties; and i) historical and quantum models.

Essential Understandings	Essential Knowledge and Skills
electrons in a ~~covalent~~ bond. Electronegativity increases from left to right within a period and decreases from top to bottom within a group. • Shielding effect is constant within a given period and increases within given groups from top to bottom. • Ionization energy is the energy required to remove the most loosely held electron from a neutral atom. Ionization energies generally increase from left to right and decrease from top to bottom of a given group. • Electron configuration is the arrangement of electrons around the nucleus of an atom based on their energy level. • Electrons are added one at a time to the lowest energy levels first (Aufbau Principle). Electrons occupy equal-energy orbitals so that a maximum number of unpaired electrons results (Hund's Rule). • Energy levels are designated 1–7. Orbitals are designated s, p, d, and f according to their shapes ~~s, p, d, f orbitals~~ and relate to the regions of the Periodic Table. An orbital can hold a maximum of two electrons (Pauli Exclusion Principle). • Atoms can gain, lose, or share electrons within the outer energy level. • Loss of electrons from neutral atoms results in the formation of an ion with a positive charge (cation). Gain of electrons by a neutral atom results in the formation of an ion with a negative charge (anion).	- first atomic theory of matter, solid sphere model – John Dalton - discovery of the electron using the cathode ray tube experiment, plum pudding model – J. J. Thom~~p~~son - discovery of the nucleus using the gold foil experiment, nuclear model – Ernest Rutherford - discovery of charge of electron using the oil drop experiment – Robert Millikan - energy levels, planetary model ~~of atom~~ – Niels Bohr - periodic table arranged by atomic mass – D~~e~~mitri~~y~~ Mendeleev - periodic table arranged by atomic number – Henry Moseley - quantum nature of energy – Max Planck - uncertainty principle, quantum mechanical model – Werner Heisenberg - wave theory, quantum mechanical model – Louis de Broglie. - ~~quantum numbers, quantum mechanical model – Erwin Schrödinger.~~ • differentiate between the historical and quantum models of the atom.

Standard CH.2

CH.2	The student will investigate and understand that the placement of elements on the periodic table is a function of their atomic structure. The periodic table is a tool used for the investigations of a) average atomic mass, mass number, and atomic number; b) isotopes, half lives, and radioactive decay; c) mass and charge characteristics of subatomic particles; d) families or groups; e) periods; f) trends including atomic radii, electronegativity, shielding effect, and ionization energy; g) electron configurations, valence electrons, and oxidation numbers; h) chemical and physical properties; and i) historical and quantum models.

Essential Understandings	Essential Knowledge and Skills
• Transition metals can have multiple oxidation states. • Matter occurs as elements (pure), compounds (pure), and mixtures, which may be homogeneous (solutions) or heterogeneous. Some elements, such as oxygen, hydrogen, fluorine, chlorine, bromine, iodine, and nitrogen, naturally occur as diatomic molecules. • Matter is classified by its chemical and physical properties. • Physical properties refer to the condition or quality of a substance that can be observed or measured without changing the substance's composition. Important physical properties are density, conductivity, melting point, boiling point, malleability, and ductility. • Chemical properties refer to the ability of a substance to undergo chemical reaction and form a new substance. • Reactivity is the tendency of an element to enter into a chemical reaction. • Discoveries and insights related to the atom's structure have changed the model of the atom over time. Historical models have included solid sphere, plum pudding, nuclear, and planetary models. The modern atomic theory is called the ~~Q~~quantum ~~M~~mechanical ~~M~~model.	

Standard CH.3

CH.3 The student will investigate and understand how conservation of energy and matter is expressed in chemical formulas and balanced equations. Key concepts include

a) nomenclature;
b) balancing chemical equations;
c) writing chemical formulas;
d) bonding types;
e) reaction types; and
f) reaction rates, kinetics, and equilibrium.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Chemical formulas are used to represent compounds. Subscripts represent the relative number of each type of atom in a molecule or formula unit. The International Union of Pure and Applied Chemistry (IUPAC) system is used for naming compounds. • When pairs of elements form two or more compounds, the masses of one element that combine with a fixed mass of the other element form simple, whole-number ratios (Law of Multiple Proportions). • ~~Elements and compounds react in different ways.~~ Compounds have different properties than the elements from which they are composed. • Conservation of matter is represented in balanced chemical equations. A coefficient is a quantity that precedes a reactant or product ~~symbol or~~ formula in a chemical equation and indicates the relative number of particles involved in the reaction. • The empirical formula shows the simplest whole-number ratio in which the atoms of the elements are present in the compound. The molecular formula shows the actual number of atoms of each element in one molecule of the substance. • Lewis dot diagrams are used to represent valence electrons in an element. Structural formulas ~~also~~ show the arrangements of atoms and bonds in a molecule and are represented by Lewis dot structures. • Bonds form between atoms to achieve stability. Covalent bonds involve the sharing of electrons between atoms. Ionic bonds involve the transfer of electrons between ions. Elements with low ionization energy form	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • name binary covalent/molecular compounds. • name binary ionic compounds (using the Roman numeral system where appropriate). • predict, draw, and name molecular shapes (bent, linear, trigonal planar, tetrahedral, and trigonal pyramidal). • transform word equations into chemical equations and balance chemical equations. • write the chemical formulas for certain common substances, such as ammonia, water, carbon monoxide, carbon dioxide, sulfur dioxide, and carbon tetrafluoride. • ~~recognize the formulas and names of certain polyatomic ions, such as carbonate, sulfate, nitrate, hydroxide, phosphate, and ammonium, and~~ use ~~these~~ polyatomic ions for naming and writing ~~the~~ formulas of ionic compounds, including carbonate, sulfate, nitrate, hydroxide, phosphate, and ammonium. • draw Lewis dot diagrams to represent valence electrons in elements and draw Lewis dot ~~diagrams~~ structures to show covalent bonding. • use valence shell electron pair repulsion (VSEPR) model to ~~predict,~~ draw and name molecular shapes (bent, linear, trigonal planar, tetrahedral, and trigonal pyramidal). • recognize polar molecules and non-polar molecules.

Standard CH.3

CH.3	The student will investigate and understand how conservation of energy and matter is expressed in chemical formulas and balanced equations. Key concepts include a) nomenclature; b) balancing chemical equations; c) writing chemical formulas; d) bonding types; e) reaction types; and f) reaction rates, kinetics, and equilibrium.

Essential Understandings	Essential Knowledge and Skills
positive ions (cations) easily. Elements with high ionization energy form negative ions (anions) easily. Polar bonds form between elements with very different electronegativities. Non-polar bonds form between elements with similar electronegativities. • Polar molecules result when ~~a molecule behaves as if one end were positive and the other end negative~~ electrons are distributed unequally. • ~~Spontaneous reactions may be fast or slow. Randomness (entropy), heat content (enthalpy), and temperature affect spontaneity.~~ • Major types of chemical reactions are - synthesis ($A+B \rightarrow AB$) - decomposition ($BC \rightarrow B+C$) - single replacement ($A+BC \rightarrow B+AC$) - double replacement ($AC+BD \rightarrow AD+BC$) - neutralization ($HX+MOH \rightarrow H_2O + MX$) - combustion ($C_xH_y + O_2 \rightarrow CO_2 + H_2O$). • Kinetics is the study of reaction rates. Several factors affect reaction rates, including temperature, concentration, surface area, and the presence of a catalyst. • Reaction rates/kinetics are affected by activation energy, catalysis, and the degree of randomness (entropy). Catalysts decrease the amount of activation energy needed. • Chemical reactions ~~based on the net heat energy~~ are exothermic reactions (heat producing) and endothermic reactions (heat absorbing). • Reactions occurring in both forward and reverse directions are	• classify types of chemical reactions as synthesis, decomposition, single replacement, double replacement, neutralization, and/or combustion. • recognize that there is a natural tendency for systems to move in a direction of randomness (entropy). • recognize equations for redox reactions and neutralization reactions. • distinguish between an endothermic and exothermic process. • interpret reaction rate diagrams. • identify and explain the effect ~~of~~ the following factors ~~that affect the rate and time~~ have on the rate of a chemical reaction: ~~(~~catalyst, temperature, concentration, size of particles~~)~~. • distinguish between irreversible reactions and those at equilibrium. • predict the shift in equilibrium when a system is subjected to a stress (Le Chatelier's Principle) and identify the factors that can cause a shift in equilibrium (temperature, pressure, and concentration.) • ~~Identify common examples of reaction types.~~

Standard CH.3

CH.3	The student will investigate and understand how conservation of energy and matter is expressed in chemical formulas and balanced equations. Key concepts include a) nomenclature; b) balancing chemical equations; c) writing chemical formulas; d) bonding types; e) reaction types; and f) reaction rates, kinetics, and equilibrium.

Essential Understandings	Essential Knowledge and Skills
reversible. Reversible reactions can reach a state of *equilibrium*, where the reaction rates of both the forward and reverse reactions are constant. ~~can occur in two directions simultaneously.~~ Le Chatelier's Principle indicates the qualitative prediction of direction of change with temperature, pressure, and concentration.	

Standard CH.4

CH.4 The student will investigate and understand that chemical quantities are based on molar relationships. Key concepts include

a) Avogadro's principle and molar volume;
b) stoichiometric relationships;
c) solution concentrations; and
d) acid/base theory; strong electrolytes, weak electrolytes, and nonelectrolytes; dissociation and ionization; pH and pOH; and the titration process.

Essential Understandings

The concepts developed in this standard include the following:

- Atoms and molecules are too small to count by usual means. A *mole* is a way of counting any type of particle (atoms, molecules, and formula units).
- Avogadro's number = 6.02×10^{23} particles per mole.
- Molar mass of a substance is its average atomic mass in grams from the Periodic Table.
- Molar volume = ~~22.4 dm^3/mole and/or~~ 22.4 L/mole for any gas at standard temperature and pressure (STP).
- Stoichiometry involves quantitative relationships. Stoichiometric relationships are based on mole quantities in a balanced equation.
- Total grams of reactant(s) = total grams of product(s).
- Molarity = ~~moles/dm^3 or~~ moles of solute/L of solution.
- [ ] refers to molar concentration.
- When solutions are diluted, the moles of solute present initially remain.
- The saturation of a solution is dependent on the amount of solute present in the solution.
- Two important classes of compounds are acids and bases. Acids and bases are defined by several theories. According to ~~T~~the Arrhenius theory ~~of~~, acids are characterized by their sour taste, low pH, and the fact that they turn litmus paper red. According to ~~T~~the Arrhenius theory ~~of~~, bases are characterized by their bitter taste, slippery feel, high pH, and the fact that they turn litmus paper blue. According to ~~T~~the

Essential Knowledge and Skills

~~Knowledge Skills~~ In order to meet this standard, it is expected that students will

- perform conversions between mass, volume, particles, and moles of a substance.
- ~~Make~~ perform stoichiometric calculations involving the following relationships:
  - mole-mole;
  - mass-mass;
  - mole-mass;
  - mass-volume;
  - mole-volume; ~~and~~
  - volume-volume;
  - ~~particle-particle;~~
  - mole-particle;
  - mass-particle; and
  - volume-particle.
- identify the limiting reactant (reagent) in a reaction.
- calculate percent yield of a reaction.
- perform calculations involving the molarity of a solution, including dilutions.
- interpret solubility curves.
- differentiate between the defining characteristics of the Arrhenius theory of acids and bases and the Bronsted-Lowry theory of acids and bases.

Standard CH.4

CH.4	The student will investigate and understand that chemical quantities are based on molar relationships. Key concepts include a) Avogadro's principle and molar volume; b) stoichiometric relationships; c) solution concentrations; and d) acid/base theory; strong electrolytes, weak electrolytes, and nonelectrolytes; dissociation and ionization; pH and pOH; and the titration process.

Essential Understandings	Essential Knowledge and Skills
Bronsted-Lowry theory ~~of~~, acids are proton donors, whereas bases are proton acceptors. Acids and bases dissociate in varying degrees. • Strong electrolytes dissociate completely. Weak electrolytes dissociate partially. Non-electrolytes do not dissociate. • pH is a number scale ranging from 0 to 14 that represents the acidity of a solution. The pH number denotes hydrogen (hydronium) ion concentration. The pOH number denotes hydroxide ion concentration. The higher the hydronium [H_3O^+] concentration, the lower the pH. • pH + pOH = 14 • Strong acid-strong base titration is the process that measures [H~~+~~$^+$] and [OH-$^-$]. • Indicators show color changes at certain pH levels.	• identify common examples of acids and bases, including vinegar and ammonia. • compare and contrast the differences between strong, weak, and non-electrolytes. • relate the hydronium ion concentration to the pH scale. • perform titrations in a laboratory setting using indicators.

Standard CH.5

CH.5	The student will investigate and understand that the phases of matter are explained by kinetic theory and forces of attraction between particles. Key concepts include a) pressure, temperature, and volume; b) partial pressure and gas laws; c) vapor pressure; d) phase changes; e) molar heats of fusion and vaporization; f) specific heat capacity; and g) colligative properties.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Atoms and molecules are in constant motion~~, and the amount of motion depends on the substance's state of matter~~. • The phase of a substance depends on temperature and pressure. • Temperature is a measurement of the average kinetic energy in a sample. There is a direct relationship between temperature and average kinetic energy. • The ~~K~~kinetic ~~M~~molecular ~~T~~theory is a model for predicting and explaining gas behavior. • Gases have mass and occupy space. Gas particles are in constant, rapid, random motion and exert pressure as they collide with the walls of their containers. Gas molecules with the lightest mass travel fastest. Relatively large distances separate gas particles from each other. • Equal volumes of gases at the same temperature and pressure contain an equal number of particles. Pressure ~~U~~units include atm, ~~K~~kPa, and mm ~~of~~ Hg. • An ~~I~~ideal ~~G~~gas does not exist, but this concept is used to model gas behavior. A ~~R~~real ~~G~~gas exists, has intermolecular forces and particle volume, and can change states. The Ideal Gas Law states that PV = nRT. • The pressure and volume of a sample of a gas at constant temperature are inversely proportional to each other (Boyle's Law: $P_1V_1 = P_2V_2$).	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • explain the behavior of gases and the relationship between pressure and volume (Boyle's Law), and volume and temperature (Charles' Law). • solve problems and interpret graphs involving the gas laws. • identify how hydrogen bonding in water plays an important role in many physical, chemical, and biological phenomena. • interpret vapor pressure graphs. • graph and interpret a heating curve (temperature vs. time). • interpret a phase diagram of water. • calculate energy changes, using molar heat of fusion and molar heat of vaporization. • calculate energy changes, using specific heat capacity. • ~~Perform calorimetry calculations.~~ • examine the polarity of various solutes and solvents in solution formation.

Standard CH.5

CH.5	The student will investigate and understand that the phases of matter are explained by kinetic theory and forces of attraction between particles. Key concepts include a) pressure, temperature, and volume; b) partial pressure and gas laws; c) vapor pressure; d) phase changes; e) molar heats of fusion and vaporization; f) specific heat capacity; and g) colligative properties.

Essential Understandings	Essential Knowledge and Skills
• At constant pressure, the volume of a fixed amount of gas is directly proportional to its absolute temperature (Charles' Law: $V_1/T_1 = V_2/T_2$). • The Combined Gas Law ($P_1V_1/T_1 = P_2V_2/T_2$) relates pressure, volume, and temperature of a gas. • The sum of the partial pressures of all the components in a gas mixture is equal to the total pressure of a gas mixture (Dalton's law of partial pressures). • Forces of attraction (intermolecular forces) between molecules determine ~~the physical changes of state~~ their state of matter at a given temperature. Forces of attraction include hydrogen bonding, dipole-dipole attraction, and London dispersion (van der Waals) forces. • Vapor pressure is ~~a property of a substance determined by intermolecular forces~~ the pressure of the vapor found directly above a liquid in a closed container. When the vapor pressure equals the atmospheric pressure, a liquid boils. Volatile liquids have high vapor pressures, weak intermolecular forces, and low boiling points. Nonvolatile liquids have low vapor pressures, strong intermolecular forces and high boiling points. • Solid, liquid, and gas phases of a substance have different energy content. Pressure, temperature, and volume changes can cause a change in physical state. Specific amounts of energy are absorbed or released during phase changes. • A fourth ~~state~~ phase of matter is ~~the~~ plasma ~~phase~~. ~~A~~ Plasma is formed	

Standard CH.5

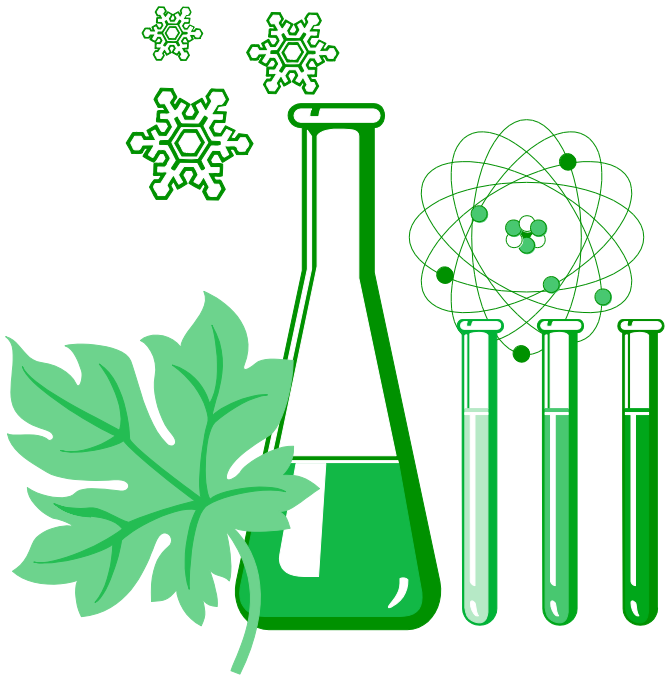
CH.5	The student will investigate and understand that the phases of matter are explained by kinetic theory and forces of attraction between particles. Key concepts include a) pressure, temperature, and volume; b) partial pressure and gas laws; c) vapor pressure; d) phase changes; e) molar heats of fusion and vaporization; f) specific heat capacity; and g) colligative properties.

Essential Understandings	Essential Knowledge and Skills
when a gas is heated to a temperature at which its electrons dissociate from the nuclei. • A heating curve graphically describes the relationship between temperature and energy (heat). It can be used to identify a substance's ~~state~~ phase of matter at a given temperature as well as the temperature(s) at which it changes ~~state~~ phase. It also shows the strength of the intermolecular forces present in a substance. • Molar heat of fusion is a property that describes the amount of energy needed to convert one mole of a substance between its solid and liquid states. Molar heat of vaporization is a property that describes the amount of energy needed to convert one mole of a substance between its liquid and gas states. Specific heat capacity is a property of a substance that tells the amount of energy needed to raise one gram of a substance by one degree Celsius. The values of these properties are related to the strength of their intermolecular forces. • Solutions can be a variety of solute/solvent combinations: gas/gas, gas/liquid, liquid/liquid, solid/liquid, gas/solid, liquid/solid, or solid/solid. • Polar substances dissolve ionic or polar substances; nonpolar substances dissolve nonpolar substances. The number of solute particles changes the freezing point and boiling point of a pure substance. • A liquid's boiling point and freezing point are affected by changes in atmospheric pressure. A liquid's boiling point and freezing point are affected by the presence of certain solutes.	

Standard CH.6

CH.6	The student will investigate and understand how basic chemical properties relate to organic chemistry and biochemistry. Key concepts include a) unique properties of carbon that allow multi-carbon compounds; and b) uses in pharmaceuticals and genetics, petrochemicals, plastics and food.

Essential Understandings	Essential Knowledge and Skills
It is expected that the content of this SOL is incorporated into the appropriate SOL as that content is being taught (i.e., bonding types, shapes, etc.) and not isolated as a discrete unit. The concepts developed in this standard include the following: • The bonding characteristics of carbon contribute to its stability and allow it to be the foundation of organic molecules. These characteristics result in the formation of a large variety of structures such as DNA, RNA and amino acids. • Carbon-based compounds include simple hydrocarbons, small carbon-containing molecules with functional groups, complex polymers, and biological molecules. • Petrochemicals contain hydrocarbons, including propane, butane, and octane. • There is a close relationship between the properties and structure of organic molecules. • Common pharmaceuticals that are organic compounds include aspirin, vitamins, and insulin. • Small molecules link to make large molecules~~,~~ called polymers~~,~~ that have combinations with repetitive subunits. Natural polymers include proteins and nucleic acids. Human-made (synthetic) polymers include polythene, nylon and Kevlar.	In order to meet this standard, it is expected that students will • describe how saturation affects shape and reactivity of carbon compounds. • draw Lewis dot structures, identify geometries, and describe polarities of the following molecules: CH_4, C_2H_6, C_2H_4, C_2H_2, CH_3CH_2OH, CH_2O, C_6H_6, CH_3COOH. • recognize that organic compounds play a role in natural and synthetic pharmaceuticals. • recognize that nucleic acids and proteins are important natural polymers. • recognize that plastics formed from petrochemicals are organic compounds that consist of long chains of carbons. • conduct a ~~synthesis~~ lab that exemplifies the versatility and importance of organic compounds (e.g., aspirin, an ester, a polymer).



Science Standards of Learning Curriculum Framework

Physics

Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
© 2010

Copyright © 2010

by the

Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Paula J. Klonowski, Science Coordinator
Barbara P. Young, Science Specialist

NOTICE
The Virginia Department of Education does not discriminate on the basis of race, sex, color, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in its programs and activities.

The 2010 *Science Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *Science Standards of Learning* Curriculum Framework 2010
Introduction

The *Science Standards of Learning* Curriculum Framework amplifies the *Science Standards of Learning for Virginia Public Schools* and defines the content knowledge, skills, and understandings that are measured by the Standards of Learning tests. The Science Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers as they plan their lessons by identifying essential understandings and defining the essential content knowledge, skills, and processes students need to master. This supplemental framework delineates in greater specificity the minimum content that all teachers should teach and all students should learn.

School divisions should use the *Science Curriculum Framework* as a resource for developing sound curricular and instructional programs. This framework should not limit the scope of instructional programs. Additional knowledge and skills that can enrich instruction and enhance students' understanding of the content identified in the Standards of Learning should be included as part of quality learning experiences.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge and skills from Standards of Learning presented in previous grades as they build scientific expertise.

The Board of Education recognizes that school divisions will adopt a K–12 instructional sequence that best serves their students. The design of the Standards of Learning assessment program, however, requires that all Virginia school divisions prepare students to demonstrate achievement of the standards for elementary and middle school by the time they complete the grade levels tested. The high school end-of-course Standards of Learning tests, for which students may earn verified units of credit, are administered in a locally determined sequence.

Each topic in the *Science Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into two columns: Understanding the Standard (K-5); Essential Understandings (middle and high school); and Essential Knowledge, Skills, and Processes. The purpose of each column is explained below.

Understanding the Standard (K-5)
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan instruction focusing on the standard.

Essential Understandings (middle and high school)
This section delineates the key concepts, ideas and scientific relationships that all students should grasp to demonstrate an understanding of the Standards of Learning.

Essential Knowledge, Skills and Processes (K-12)
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to be the key knowledge and skills that define the standard.

Standard PH.1

PH.1 The student will plan and conduct investigations using experimental design and product design processes. Key concepts include

a) the components of a system are defined;
b) instruments are selected and used to extend observations and measurements;
c) information is recorded and presented in an organized format;
d) the limitations of the experimental apparatus and design are recognized;
e) the limitations of measured quantities are recognized through the appropriate use of significant figures or error ranges;
f) models and simulations are used to visualize and explain phenomena, to make predictions from hypotheses, and to interpret data; and
g) appropriate technology, including computers, graphing calculators, and probeware, is used for gathering and analyzing data and communicating results.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Appropriate instruments are used to measure ~~displacement,~~ position, time, mass, force, volume, temperature, ~~heat exchange, energy transformations,~~ motion, fields, ~~and~~ electric ~~charge~~ current, and potential. • No measurement is complete without a statement about its ~~exactness~~ uncertainty. • Experimental records, including experimental diagrams, data, and procedures, are kept concurrently with experimentation. • Tables, spreadsheets, and graphs are used to interpret, organize, and clarify experimental observations, possible explanations, and models for phenomena being observed. • ~~The average for a set of data is a valid way to estimate the true value of the set.~~ • ~~The spread in a set of data is an indication of the error in the measurement: a large spread indicates a large error, and a small spread indicates a small error.~~ • ~~The difference between the accepted value and the measured value is the uncertainty or error.~~ • ~~Measurements are always recorded with appropriate SI units.~~ • ~~Calculations are made using appropriate SI units.~~	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • measure and record ~~displacement,~~ position, time, mass, force, volume, temperature, ~~heat exchange, energy transformations,~~ motion, fields, and electric ~~charge~~ current and potential, using appropriate technology. • determine ~~percent error from~~ accuracy of measurement by comparing the experimental averages and the theoretical value~~s~~. • determine precision of measurement using range or standard deviation. • follow safe practices in all laboratory procedures. • ~~calculate average values, and compare to theoretical values.~~ • use simulations to model physical phenomena. • draw conclusions and provide reasoning using supporting data.

Standard PH.1

PH.1	The student will plan and conduct investigations using experimental design and product design processes. Key concepts include a) the components of a system are defined; b) instruments are selected and used to extend observations and measurements; c) information is recorded and presented in an organized format; d) the limitations of the experimental apparatus and design are recognized; e) the limitations of measured quantities are recognized through the appropriate use of significant figures or error ranges; f) models and simulations are used to visualize and explain phenomena, to make predictions from hypotheses, and to interpret data; and g) appropriate technology, including computers, graphing calculators, and probeware, is used for gathering and analyzing data and communicating results.

Essential Understandings	Essential Knowledge and Skills
• <u>Accuracy is the difference between the accepted value and the measured value.</u> • <u>Precision is the spread of repeated measurements.</u> • Results of calculations or analyses of data are reported in appropriate numbers of significant digits. • Data are organized into tables and graphed when involving dependent and independent variables.	

Standard PH.2

PH.2 The student will investigate and understand how to analyze and interpret data. Key concepts include

a) a description of a physical problem is translated into a mathematical statement in order to find a solution;
b) relationships between physical quantities are determined using the shape of a curve passing through experimentally obtained data;
c) the slope of a linear relationship is calculated and includes appropriate units;
d) interpolated, extrapolated, and analyzed trends are used to make predictions; and
e) situations with vector quantities are analyzed utilizing trigonometric or graphical methods.

Essential Understandings

The concepts developed in this standard include the following:

- Mathematics is a tool used to ~~explain~~ model and describe phenomena.
- ~~Dimensional analysis is the verification of the appropriateness of the units. (This can be used as a consistency check in calculations as well as in experiments.)~~
- Graphing ~~is~~ and dimensional analysis are used to reveal relationships and other important features of data.
- Predictions are made from trends based on the data.
- The shape of the curve ~~passing through~~ fit to experimentally obtained data is used to determine the relationship of the plotted quantities.
- All experimental data do not follow a linear relationship.
- The area under the curve of experimentally obtained data is used to determine related physical quantities.
- Not all quantities add ~~algebraically~~ arithmetically. Some must be combined using trigonometry. These quantities are known as vectors.
- ~~A p~~Physical phenomena or events can often be described in mathematical terms (as an equation or inequality).

Essential Knowledge and Skills

~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will

- recognize linear and nonlinear relationships from graphed data.
- ~~draw the~~ where appropriate, draw a straight line through a set of experimental data points and determine the slope~~, using appropriate SI units~~ and/or area under the curve.
- use dimensional analysis to ~~solve problems~~ verify appropriate units.
- ~~combine vectors and resolve vectors into components, using graphical methods that place scaled vectors head-to-tail.~~
- ~~sketch a vector diagram, and trigonometrically solve for the components.~~
- ~~sketch the components of a vector, and trigonometrically solve for the resultant.~~
- combine vectors into resultants utilizing trigonometric or graphical methods.
- resolve vectors into components utilizing trigonometric or graphical methods.

Standard PH.3

PH.3 The student will investigate and demonstrate an understanding of the nature of science, scientific reasoning, and logic. Key concepts include

a) analysis of scientific sources to develop and refine research hypotheses;
b) analysis of how science explains and predicts relationships;
c) evaluation of evidence for scientific theories;
d) examination of how new discoveries result in modification of existing theories or establishment of new paradigms; and
e) construction and defense of a scientific viewpoint.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The nature of science refers to the foundational concepts that govern the way scientists formulate explanations about the natural world. The nature of science includes the following concepts a) the natural world is understandable; b) science is based on evidence - both observational and experimental; c) science is a blend of logic and innovation; d) scientific ideas are durable yet subject to change as new data are collected; e) science is a complex social endeavor; and f) scientists try to remain objective and engage in peer review to help avoid bias. • Experimentation may support a hypothesis, falsify it, or lead to new discoveries. • The hypothesis may be modified based upon data and analysis. • A careful study of prior reported research is a basis for the formation of a research hypothesis. • A theory is a comprehensive and effective explanation, which is well supported by experimentation and observation, of a set of phenomena. • Science is a human endeavor relying on human qualities, such as reasoning, insight, energy, skill, and creativity as well as intellectual honesty, tolerance of ambiguity, skepticism, and openness to new ideas.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • identify and explain the interaction between human nature and the scientific process. • identify examples of a paradigm shift (e.g., quantum mechanics). • ~~relativity and quantum mechanics are recent examples of paradigm shifts in theoretical physics.~~ • ~~the change from an earth-centered to a sun-centered model of the solar system is an example of a paradigm shift.~~

Standard PH.4

PH.4	The student will investigate and understand how applications of physics affect the world. Key concepts include a) examples from the real world; and b) exploration of the roles and contributions of science and technology.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • ~~Physics d~~Discoveries in physics, both theoretical and experimental, have resulted in advancements in communication, medicine, engineering, transportation, commerce, exploration, and technology. • Journals, books, the Internet, and other sources are used in order to identify key contributors and their contributions to physics as well as their impact on the real world.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • be aware of real-world applications of physics, and the importance of physics in the advancement of various fields, such as medicine, engineering, technology, etc.

Standard PH.5

PH.5 The student will investigate and understand the interrelationships among mass, distance, force, and time through mathematical and experimental processes. Key concepts include

a) linear motion;
b) uniform circular motion;
c) projectile motion;
d) Newton's laws of motion;
e) gravitation;
f) planetary motion; and
g) work, power, and energy.

Essential Understandings

The concepts developed in this standard include the following:

- Newton's three laws of motion are the basis for understanding the mechanical universe.
- Linear motion graphs include
  - displacement (d) vs. time (t)
  - velocity (v) vs. time (t)
  - acceleration (a) vs. time (t)
- Position, displacement, velocity, and acceleration are vector quantities.
- ~~The concept of m~~Motion is described in terms of position, displacement, time, velocity, and acceleration~~, and their dependence on time~~.
- ~~Graphical analysis is used as a representation of motion.~~
- Velocity is the change in ~~distance~~ displacement divided by the change in time. A straight-line, position-time graph indicates constant velocity. The slope of a ~~distance~~displacement-time graph is the velocity.
- Forces are interactions that can cause objects to accelerate. When one object exerts a force on a second object, the second exerts a force on the first that is equal in magnitude but opposite in direction.
- An object with no net force acting on it is stationary or moves with constant velocity.
- Acceleration is the change in velocity divided by the change in time. A

Essential Knowledge and Skills

~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will

- qualitatively explain motion in terms of Newton's Laws.
- solve problems involving force (F), mass (m), and acceleration (a).
- construct and analyze displacement (d) vs. time (t), velocity (v) vs. time (t), and acceleration (a) vs. time (t) graphs.
- solve problems involving displacement, velocity, acceleration, and time in one and two dimensions (only constant acceleration).
- resolve vector diagrams involving ~~distance~~ displacement and velocity into their components along perpendicular axes.
- draw vector diagrams of a projectile's motion. Find range, trajectory, height of the projectile, and time of flight (uniform gravitational field, no air resistance).
- distinguish between centripetal and centrifugal force.
- solve problems related to free-falling objects, including 2-D motion.
- solve problems using Newton's Law of Universal Gravitation.
- ~~solve problems using the coefficient of friction.~~
- solve problems involving multiple forces, using free-body diagrams.
- solve problems involving mechanical work, power, and energy.

Standard PH.5

PH.5	The student will investigate and understand the interrelationships among mass, distance, force, and time through mathematical and experimental processes. Key concepts include a) linear motion; b) uniform circular motion; c) projectile motion; d) Newton's laws of motion; e) gravitation; f) planetary motion; and g) work, power, and energy.

Essential Understandings	Essential Knowledge and Skills
straight-line, velocity-time graph indicates constant acceleration. A horizontal-line, velocity-time graph indicates zero acceleration. The slope of a velocity-time graph is the acceleration. • The acceleration of a body is directly proportional to the net force on it and inversely proportional to its mass. • ~~Horizontal and vertical components of the motion of a projectile are independent of one another.~~ • In a uniform vertical gravitational field with negligible air resistance, ~~a projectile moves~~ horizontal and vertical components of the motion of a projectile are independent of one another with constant horizontal velocity and constant vertical acceleration. • An object moving ~~uniformly~~ along a ~~circle~~ circular path ~~moves~~ with a constant speed ~~and with~~ experiences an acceleration directed toward the center of the circle. • The force that causes an object to move in a circular path is directed centripetally, toward the center of the circle. The object's inertia is sometimes falsely characterized as a centrifugal or outward-directed force. • ~~Friction is a force that acts in a direction opposite the velocity.~~ • Weight is the gravitational force acting on a body. • Newton's Law of Universal Gravitation can be used to determine the force between objects separated by a known distance, and ~~the distance between objects with a known gravitational attraction.~~ ~~Newton's Law of~~	• describe the forces involved in circular motion. • ~~Work and energy are measured in Joules, which is a derived unit equal to a Nm or kgm^2/s^2.~~ • ~~Power is measured in Watts, which is a derived unit equal to a J/s.~~ • ~~($F_w = mg$)~~

Standard PH.5

PH.5	The student will investigate and understand the interrelationships among mass, distance, force, and time through mathematical and experimental processes. Key concepts include a) linear motion; b) uniform circular motion; c) projectile motion; d) Newton's laws of motion; e) gravitation; f) planetary motion; and g) work, power, and energy.

Essential Understandings	Essential Knowledge and Skills
~~Universal Gravitation~~ describes the force that determines the motion of celestial objects. The total force on a body can be represented as a vector sum of constituent forces. • ~~Centripetal force is a "true" force acting on a body in circular motion while centrifugal force is a "false" force that describes the feeling experienced in centripetal acceleration.~~ • For a constant force acting on an object, the impulse by that force is the product of the force and the time the object experiences the force. The impulse also equals the change in momentum of the object. • ~~Energy is the capacity to do work. Work and energy are expressed in the same units, but are not identical. When work is done, energy converts from one form to another and energy is conserved. Work is change in kinetic energy.~~ Work is the mechanical transfer of energy to or from a system and is the product of a force at the point of application and the parallel component of the object's displacement. The net work on a system equals its change in velocity. • Forces within a system transform energy from one form to another with no change in the system's total energy. • For a constant force acting on an object, the work done by that force ~~Work~~ is the product of the force ~~exerted on an object~~ and the distance the object moves in the direction of the force. The net work performed on an object equals its change in kinetic energy. • Power is the rate of doing work.	

Standard PH.6

PH.6	The student will investigate and understand that quantities including mass, energy, momentum, and charge are conserved. Key concepts include a) kinetic and potential energy; b) elastic and inelastic collisions; and c) mass/energy equivalence.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Kinetic energy is the energy of motion. Potential energy is the energy due to an object's position or state. • ~~Quantities such as~~ Total energy and momentum are conserved ~~when they are exchanged or transformed, and their total quantity remains the same~~. • For elastic collisions, total momentum and total kinetic energy are conserved. For inelastic collisions, total momentum is conserved and some kinetic energy is transformed to other forms of energy~~, such as heat~~. • Electrical charge moves through electrical circuits and is conserved. • In some systems the conservation of mass and energy must take into account the principle of mass/energy equivalence.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • ~~Electric power (watt) is change in electrical energy divided by corresponding change in time. Current (ampere) is the amount of charge that moves through a circuit element divided by the elapsed time. Electric potential difference (voltage) is change in electric potential energy per unit charge.~~ • ~~In any system of electrical charge, electrical movement, or electrical interaction, both charge and energy are conserved.~~ • provide and explain examples of how energy can be converted from potential energy to kinetic energy and the reverse. • provide and explain examples showing linear momentum is the product of mass and velocity, and is conserved in a closed system.

Standard PH.7

PH.7	The student will investigate and understand that energy can be transferred and transformed to provide usable work. Key concepts include a) transfer and storage of energy among systems including mechanical, thermal, gravitational, electromagnetic, chemical, and nuclear systems; and b) efficiency of systems.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Energy can be transformed from one form to another. ~~(Example: Falling water turns a turbine that generates electricity and produces heat and light in a classroom.)~~ • Efficiency ~~of a machine~~ is the ratio of output work to input work.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • Illustrate that energy can be transformed from one form to another, using examples from everyday life and technology. • Calculate efficiency by identifying the useful energy in a process. • Qualitatively identify the various ~~forms of~~ energy transformations in simple demonstrations.

Standard PH.8

PH.8	The student will investigate and understand wave phenomena. Key concepts include a) wave characteristics; b) fundamental wave processes; and c) light and sound in terms of wave models.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Mechanical waves transport energy as a traveling disturbance in a medium. • In a transverse wave, particles of the medium ~~move~~ oscillate in a direction perpendicular to the direction the wave travels. • In a longitudinal wave, particles of the medium ~~move~~ oscillate in a direction parallel to the direction the wave travels. • ~~For harmonic waves,~~ Wave velocity equals the product of the frequency and the wavelength. • For small angles of oscillation, a pendulum exhibits simple harmonic motion. • Frequency and period are reciprocals of each other. • Waves are reflected and ~~refracted~~ transmitted when they encounter a change in medium or a boundary. • The overlapping of two or more waves results in constructive or destructive interference. • When source and observer are in relative motion, a shift in frequency occurs (Doppler effect). • Sound is a longitudinal mechanical wave that travels through matter. • Light is a transverse electromagnetic wave ~~(transverse)~~ that can travel through matter as well as a vacuum. • Reflection is the change of direction of the wave in the original medium. • Refraction is the change of direction ~~(bending)~~ of the wave ~~in the new medium~~ at the boundary between two media.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • ~~Period, wavelength, and frequency are measured in seconds, meters, and Hertz.~~ • ~~identify examples of longitudinal and transverse waves.~~ • identify examples of and differentiate between transverse and longitudinal waves, using ~~simple~~ simulations and/or models ~~(slinky, stadium waves)~~. • illustrate period, wavelength, and amplitude on a graphic representation of a ~~harmonic~~ wave. • solve problems involving frequency, period, wavelength, and velocity. • distinguish between superimposed waves that are in-phase and those that are out-of-phase. • graphically illustrate reflection and refraction of a wave when it encounters a change in medium or a boundary. • graphically illustrate constructive and destructive interference. • identify a standing wave, using a string.

Standard PH.8

PH.8	The student will investigate and understand wave phenomena. Key concepts include a) wave characteristics; b) fundamental wave processes; and c) light and sound in terms of wave models.

Essential Understandings	Essential Knowledge and Skills
• Diffraction is the spreading of a wave around a barrier or an aperture. • The pitch of a note is determined by the frequency of the sound wave. • The color of light is determined by the frequency of the light wave. • As the amplitude of a sound wave increases, the loudness of the sound increases. • As the amplitude of a light wave increases, the ~~brightness~~ intensity of the light increases. • Electromagnetic waves can be polarized by reflection or transmission. • ~~Polarizing filters can transmit one direction of polarized light and block the other.~~ Polarizing filters allow light oriented in one direction (or component of) to pass through.	

Standard PH.9

PH.9	The student will investigate and understand that different frequencies and wavelengths in the electromagnetic spectrum are phenomena ranging from radio waves through visible light to gamma radiation. Key concepts include a) the properties, behaviors, and relative size of radio waves, microwaves, infrared, visible light, ultraviolet, X-rays, and gamma rays; b) wave/particle dual nature of light; and c) current applications based on the respective wavelengths.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Frequency, wavelength, and energy vary across the entire electromagnetic spectrum. • The long wavelength, low frequency portion of the electromagnetic spectrum is used for communication (e.g., radio, TV, cellular phone). • Medium wavelengths (infrared) are used for heating~~ and night-vision enhancing devices~~ and remote control devices. • Visible light comprises a ~~very~~ relatively narrow portion of the electromagnetic spectrum. • Ultraviolet (UV) wavelengths (shorter than the visible spectrum) are ionizing radiation and can cause damage to humans. UV is responsible for sunburn, and can be used for sterilization and fluorescence. • X-rays and gamma rays are the highest frequency ~~and~~ (shortest wavelength) and are used primarily for medical purposes. These wavelengths are also ionizing radiation and can cause damage to humans.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • describe the change in observed frequency of waves due to the motion of a source or a receiver (the Doppler effect). • identify common uses for radio waves, microwaves, X-rays and gamma rays.

Standard PH.10

PH.10	The student will investigate and understand how to use the field concept to describe the effects of gravitational, electric, and magnetic forces. Key concepts include a) inverse square laws (Newton's law of universal gravitation and Coulomb's law); and b) technological applications.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • The electrostatic force (Coulomb's law) can be either repulsive or attractive, depending on the sign of the charges. • The gravitational force (Newton's ~~l~~Law of Gravitation) is always an attractive force. • The force found from Newton's ~~l~~Law of Gravitation and in Coulomb's law is dependent on the inverse square of the distance between two objects. • The interaction of two particles at a distance can be described as a two-step process that occur simultaneously: the creation of a field by one of the particles and the interaction of the field with the second particle. • ~~The rotation of the coil of a motor or a generator through a magnetic field is used to transfer energy.~~ • The force a magnetic field exerts on a moving electrical charge has a direction perpendicular to both the velocity and field directions. Its magnitude is dependent on the velocity of the charge, the magnitude of the charge, and the strength of the magnetic field.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • ~~Coulomb's law states that the magnitude F of the electrostatic force exerted by one point charge on another point charge is directly proportional to the magnitudes of q1 and q2 of the charges and inversely proportional to the square of the distance r between them: $F = k (q_1 q_2)/r^2$~~. • ~~Newton's Law of Universal Gravitation states that every particle in the universe attracts every other particle in the universe. $F = G (m_1 m_2)/r^2$. (F is the force, G is the universal gravitation constant, m is the mass of the two particles, and r is the distance between them.)~~ • describe the attractive or repulsive forces between objects relative to their forces and distance between them (Coulomb's Law.) • describe the attraction of particles (Newton's Law of Universal Gravitation.) • describe the effect of a uniform magnetic field on a moving electrical charge.

Standard PH.11

PH.11	The student will investigate and understand how to diagram, construct, and analyze basic electrical circuits and explain the function of various circuit components. Key concepts include a) Ohm's law; b) series, parallel, and combined circuits; c) electrical power; and d) alternating and direct currents.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • Current is ~~the flow of electrical charge~~ the rate at which charge moves through a circuit element. • Electric potential difference (~~V~~voltage) in a circuit provides the energy that drives the current. • Elements in a circuit are positioned relative to other elements either in series or parallel. • According to Ohm's law, the resistance of an element equals the voltage across the element divided by the current through the element. • ~~Voltage~~ Potential difference (voltage) is the change in electrical potential energy per unit charge across that element. • The dissipated power of a circuit element equals the product of the voltage across that element and the current through that element. • In a DC (direct current) circuit, the current flows in one direction, whereas in an AC (alternating current) circuit, the current switches direction several times per second (60Hz in the U.S.).	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • recognize a series and a parallel circuit. • apply Ohm's law to a series and a parallel circuit. • assemble simple circuits composed of batteries and resistors in series and in parallel. • solve simple circuits using Ohm's law. • calculate the dissipated power of a circuit element. • recognize that DC power is supplied by batteries and that AC power is supplied by electrical wall sockets.

Standard PH.12

PH.12	The student will investigate and understand that extremely large and extremely small quantities are not necessarily described by the same laws as those studied in Newtonian physics. Key concepts may include a) wave/particle duality; b) wave properties of matter; c) matter/energy equivalence; d) quantum mechanics and uncertainty; e) relativity; f) nuclear physics; g) solid state physics; h) nanotechnology; i) superconductivity; and j) radioactivity.

Essential Understandings	Essential Knowledge and Skills
The concepts developed in this standard include the following: • For processes that are important on the atomic scale, objects exhibit both wave characteristics (e.g., interference) as well as particle characteristics (e.g., discrete amounts and a fixed definite number of electrons per atom). • Nuclear physics is the study of the interaction of the protons and neutrons in the atom's nucleus. • The nuclear force binds protons and neutrons in the nucleus. *Fission* is the breakup of heavier nuclei to lighter nuclei. *Fusion* is the combination of lighter nuclei to heavier nuclei. • ~~The dramatic~~ Dramatic examples of ~~the~~ mass-energy transformation are the fusion of hydrogen in the sun, which provides light and heat for the earth, and the fission process in nuclear reactors that provide electricity. • Natural radioactivity is the spontaneous disintegration of unstable nuclei. Alpha, beta, and gamma rays are different emissions associated with radioactive decay. • The special theory of relativity predicts that energy and matter can be converted into each other. • Objects cannot travel faster than the speed of light.	~~Knowledge~~ ~~Skills~~ In order to meet this standard, it is expected that students will • explain that ~~T~~the motion of objects traveling near or approaching the speed of light does not follow Newtonian mechanics but must be treated within the theory of relativity. • describe the relationship between the Big Bang theory timeline and particle physics. • describe the structure of the atomic nucleus, including quarks. • provide examples of technologies used to explore the nanoscale.

Standard PH.12

PH.12	The student will investigate and understand that extremely large and extremely small quantities are not necessarily described by the same laws as those studied in Newtonian physics. Key concepts may include a) wave/particle duality; b) wave properties of matter; c) matter/energy equivalence; d) quantum mechanics and uncertainty; e) relativity; f) nuclear physics; g) solid state physics; h) nanotechnology; i) superconductivity; and j) radioactivity.

Essential Understandings	Essential Knowledge and Skills
• ~~Many substances in the natural world have a crystal structure, including most metals and minerals.~~ • ~~Atoms and molecules bind together in regular arrays to form crystals. The structure of these crystals is important in determining the properties of these materials (appearance, hardness, etc.).~~ The atoms and molecules of many substances in the natural world, including most metals and minerals, bind together in regular arrays to form crystals. The structure of these crystals is important in determining the properties of these materials (appearance, hardness, etc.). • Certain materials at very low temperatures exhibit the property of zero resistance called *superconductivity*. • Electrons ~~rotating around the nucleus of an atom~~ in orbitals can be treated as standing waves in order to model the atomic spectrum. • Quantum mechanics requires an inverse relationship between the measurable location and the measurable momentum of a particle. The more accurately one determines the position of a particle, the less accurately the momentum can be known, and vice versa. This is known as the Heisenberg uncertainty principle. • Matter behaves differently at nanometer scale (size and distance) than at macroscopic scale.	

Board of Education Agenda Item

Item: J. **Date:** November 18, 2010

Topic: Final Review of Proposed Revised Curriculum Framework for 2010 *English Standards of Learning*

Presenter: Dr. Mark R. Allan, Director Office of Standards, Curriculum, and Instruction

Telephone Number: (804) 786-3925 **E-Mail Address:** mark.allan@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

_X_ Action requested at this meeting ___Action requested at future meeting:

Previous Review/Action:

____ No previous board review/action

_X_ Previous review/action
date September 23, 2010
action Board of Education accepted the Proposed Revised Curriculum Framework for 2010 *English Standards of Learning* for first review and public comment.

Background Information:
On January 14, 2010, the Board of Education approved the 2010 *English Standards of Learning*. Following approval of the standards, the Department of Education began the process to revise the Curriculum Framework for the 2010 *English Standards of Learning*. The proposed revised Curriculum Framework was presented to the Board and accepted for first review on September 23, 2010. Following the September Board meeting, the proposed revised Curriculum Framework was posted to the Department's Web site for a 30-day public comment period.

The 2010 *English Standards of Learning* and proposed revised Curriculum Framework contain content that was recommended by Achieve, The College Board, and ACT as a result of comparison studies of Virginia's standards with their respective standards and benchmarks for postsecondary readiness. Additionally, the proposed revised Curriculum Framework contains content from the English/Language Arts Common Core State Standards released by the National Governors Association and the Council of Chief State School Officers in June 2010.

In September 2010, the Board also received for first review a preliminary analysis of the content of Virginia's 2010 *English Standards of Learning* as compared with the English/Language Arts Common Core State Standards. In October 2010, the Department of Education convened a committee of English educators to further review and refine the analysis.

Summary of Major Elements

Attachment A contains a summary of the comments on the proposed revised Curriculum Framework made during the comment period. Attachment B contains the proposed revised Curriculum Framework for the 2010 *English Standards of Learning* that reflects changes made as a result of both public comment and the final analysis of the English/Language Arts Common Core State Standards. These changes include:

- Revisions of language for clarification or enhancement of content to comport with the English/Language Arts Common Core State Standards; and
- Additional revisions of content in essential knowledge, skills, and processes for instruction, assessment, and/or vertical alignment.

Attachment C contains the final analysis of Virginia's 2010 *English Standards of Learning* as compared with the English/Language Arts Common Core State Standards. Taken together, Virginia's 2010 *English Standards of Learning* and proposed revised Curriculum Framework have a strong alignment with the English/Language Arts Common Core State Standards, and in some areas, exceed the content of the Common Core State Standards.

Superintendent's Recommendation:

The Superintendent of Public Instruction recommends that the Board of Education accept for final review the proposed revised Curriculum Framework for the 2010 *English Standards of Learning* and permit the Department of Education to make technical edits as needed.

Impact on Resources:

This responsibility can be absorbed by the agency's existing resources at this time.

Timetable for Further Review/Action:

Following the Board of Education's acceptance of the Curriculum Framework for the 2010 *English Standards of Learning*, the Department will post to its Web site the Curriculum Framework and the comparison of the 2010 *English Standards of Learning* to the English/Language Arts Common Core State Standards.

Summary of Comments on the Proposed Revised Curriculum Framework for 2010 *English Standards of Learning*

Summary of Online Comments

A total of 49 online comments was received during the online public comment period from September 24, 2010, through October 25, 2010.

The number of comments received by grade level band is as follows:

Grade Level Band	Number of Comments
K-5	10
6-8	18
9-12	21
TOTAL	**49**

Many of the comments were positive regarding the revisions to the first draft of the Curriculum Framework. Comments included:

- praise for the inclusion of fluency tables (K-5);
- appreciation for the inclusion of PALS reading levels (K-5);
- praise for a more detailed description of phonological awareness (K-5);
- concern for media literacy expectations being too rigorous for fourth- and fifth-grade students (K-5);
- concern about measuring standards 4.1 and 5.1(K-5) related to oral communication;
- requests for a list of 15 common words (K-5);
- requests for a list of common prefixes and suffixes (K-5);
- concern about a lack of poetry writing standards (K-12);
- appreciation for students avoiding plagiarism (6-8);
- praise for the modeling of higher order thinking processes (6-8);
- concern for teachers having neither background nor resources for teaching media literacy (6-8);
- appreciation for inclusion of media literacy (6-12);
- praise for the inclusion of vocabulary (9-12);
- requests to emphasize the newspaper in media literacy (9-12);
- praise for inclusion of 21st century literacies;
- appreciation for the emphasis placed on nonfiction (9-12); and
- concern for emphasis on persuasive/argumentative writing (9-12).

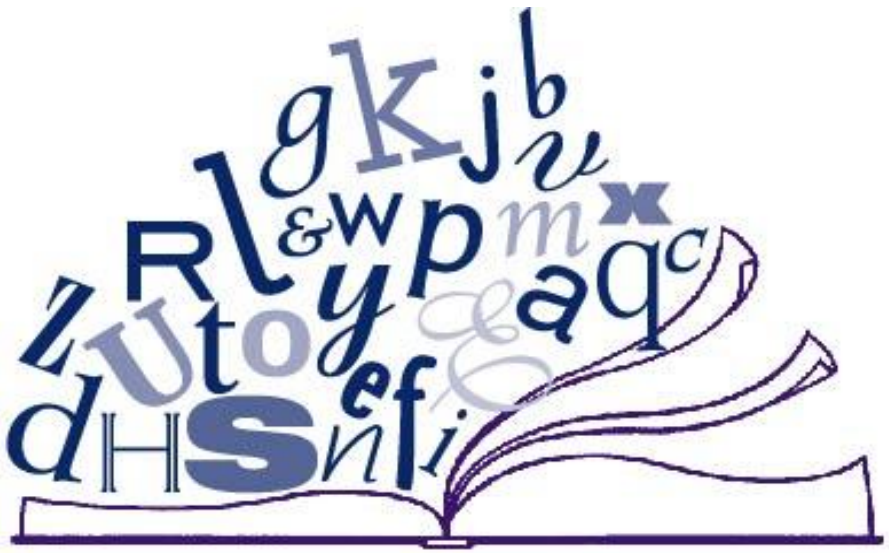
Additional changes were made to the Curriculum Framework in response to public comment and further analysis of the Common Core State Standards for English Language Arts. Changes included:

- addition of collaborative writing projects (grades 1-2);
- additional specificity concerning modes of writing (grades 1-5);
- definition of prosody (grades 1-5);
- addition of sensory words in fiction (grades 1-5);
- additional specificity of grammar, e.g., verb forms and verbals (grades 5-8);
- deletion of some technical specificity in the media literacy strand (grades 6-8);

- addition of comparison of same events from multiple points-of-view (grade 8);
- additional directives on narrative writing techniques (grades 6-9); and
- addition of a variety of timeframes in writing (grades 5-12).

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

K-12



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

Copyright © 2010
by the
Virginia Department of Education
P.O. Box 2120
Richmond, Virginia 23218-2120
http://www.doe.virginia.gov

All rights reserved. Reproduction of these materials for instructional purposes in public school classrooms in Virginia is permitted.

Superintendent of Public Instruction
Patricia I. Wright, Ed.D.

Assistant Superintendent for Instruction
Linda M. Wallinger, Ph.D.

Office of Standards, Curriculum, and Instruction
Mark R. Allan, Ph.D., Director
Tracy Fair Robertson, English Coordinator
Thomas Santangelo, Elementary English Specialist

NOTICE
The Virginia Department of Education does not unlawfully discriminate on the basis of race, color, sex, national origin, religion, age, political affiliation, veteran status, or against otherwise qualified persons with disabilities in employment or in its programs and activities.

The 2010 *English Curriculum Framework* can be found in PDF and Microsoft Word file formats on the Virginia Department of Education's Web site at http://www.doe.virginia.gov.

Virginia *English Standards of Learning* Curriculum Framework 2010
Introduction

The 2010 *English Standards of Learning* Curriculum Framework is a companion document to the 2010 *English Standards of Learning* and amplifies the *English Standards of Learning* by defining the content knowledge, skills, and understandings that are measured by the Standards of Learning assessments. The Curriculum Framework provides additional guidance to school divisions and their teachers as they develop an instructional program appropriate for their students. It assists teachers in their lesson planning by identifying essential understandings, defining essential content knowledge, and describing the intellectual skills students need to use. This supplemental framework delineates in greater specificity the content that all teachers should teach and all students should learn.

Each topic in the *English Standards of Learning* Curriculum Framework is developed around the Standards of Learning. The format of the Curriculum Framework facilitates teacher planning by identifying the key concepts, knowledge, and skills that should be the focus of instruction for each standard. The Curriculum Framework is divided into three columns: Understanding the Standard; Essential Understandings; and Essential Knowledge, Skills and Processes. The purpose of each column is explained below.

Understanding the Standard
This section includes background information for the teacher. It contains content that may extend the teachers' knowledge of the standard beyond the current grade level. This section may also contain suggestions and resources that will help teachers plan lessons focusing on the standard.

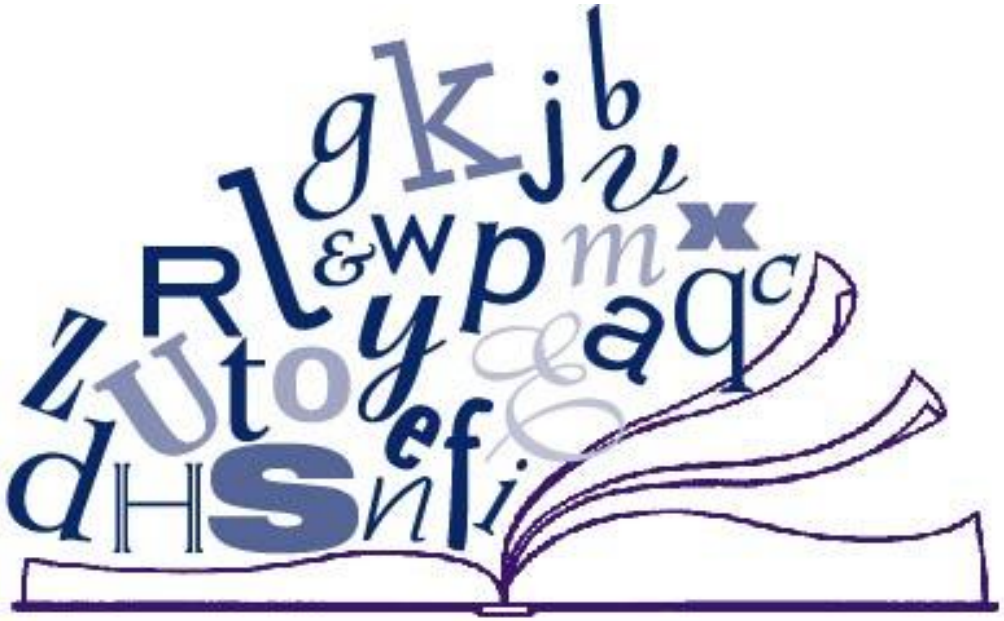
Essential Understandings
This section delineates the key concepts and ideas that all students should grasp to demonstrate an understanding of the Standards of Learning. These essential understandings are presented to facilitate teacher planning.

Essential Knowledge, Skills, and Processes
Each standard is expanded in the Essential Knowledge, Skills, and Processes column. What each student should know and be able to do in each standard is outlined. This is not meant to be an exhaustive list nor a list that limits what is taught in the classroom. It is meant to identify the key knowledge, skills, and processes that define the standard.

The Curriculum Framework serves as a guide for Standards of Learning assessment development. Assessment items may not and should not be a verbatim reflection of the information presented in the Curriculum Framework. Students are expected to continue to apply knowledge, skills, and processes from Standards of Learning presented in previous grades as they build expertise in English.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Kindergarten



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the kindergarten level, students will engage in a variety of oral language activities in order to develop their understanding of language and enhance their ability to communicate effectively. Of primary importance is the development of ~~phonemic skills~~ phonological awareness, ~~that are the precursor~~ which is essential for success in ~~learning to decode words~~ literacy. Emphasis will be placed on having the students build and use listening and speaking vocabularies through participation in oral language activities employing poems, rhymes, songs, and stories. Students will learn rules for conversation and skills for participation in discussions. They will also learn how to formulate basic investigative questions.

K.1 The student will demonstrate growth in the use of oral language.

a) Listen to a variety of literary forms, including stories and poems.
b) Participate in a variety of oral language activities including choral and echo speaking and recitation of short poems, rhymes, songs, and stories with repeated word order patterns.
c) Participate in oral generation of language experience narratives.
d) Participate in creative dramatics.
e) Use complete sentences that include subject, verb, and object.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will expand their oral language vocabulary by listening to and participating in a variety of ~~literary~~ literacy experiences~~, including fiction and nonfiction print materials and trade books~~ that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics. • ~~These interactions provide opportunities for students to mimic language and experiment with new words, word patterns, and rhymes in order to expand their working vocabularies.~~ • By participating in choral and echo speaking, language experience narratives and creative dramatics (e.g., songs, poems, role play, storytelling), students will expand their oral language. • A language experience narrative can be produced from any individual or group experience. For an individual language experience narrative the student dictates a story to the teacher. For the group language experience narrative students contribute ideas to develop sentences for a class story.	**All students should** • understand that oral language entertains and communicates information.	**To be successful with this standard, students are expected to** • ~~listen to a variety of literary forms, including predictable texts, patterned texts, poems, fairy tales, legends, stories, and informational texts found in fiction and nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~ • listen to texts read aloud and ask and answer questions for further understanding. • participate in choral and echo speaking and ~~echo reading~~ recitation of short poems, rhymes, songs, and stories with repeated patterns and refrains. • generate ideas to develop a group language experience narrative. • dictate sentences about a group experience for a group language experience narrative (e.g., a story about a class field trip). • dictate an experience or story to create an individual language experience narrative (e.g., a story about a family pet). • use drama to retell familiar stories, rhymes, and poems (e.g., storytelling with role play or puppets). • participate in creative dramatics, such as classroom songs, plays, skits, and group activities designed to give students frequent opportunities for listening and speaking. • use complete sentences that include subject, verb, and object when speaking.

K.1 The student will demonstrate growth in the use of oral language.

a) Listen to a variety of literary forms, including stories and poems.
b) Participate in a variety of oral language activities including choral and echo speaking and recitation of short poems, rhymes, songs, and stories with repeated word order patterns.
c) Participate in oral generation of language experience narratives.
d) Participate in creative dramatics.
e) Use complete sentences that include subject, verb, and object.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• ~~identify words that rhyme~~.

K.2 The student will expand understanding and use of word meanings.

a) Increase listening and speaking vocabularies.
b) Use number words.
c) Use words to describe/name people, places, and things.
d) Use words to describe/name location, size, color, and shape.
e) Use words to describe/name actions.
f) Ask about words not understood.
g) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will expand ~~and use their listening and speaking vocabularies~~ understanding and use of word meanings through ~~across the curricula~~ cross-curricular activities ~~that develop their use of descriptive/naming words~~. • ~~This v~~Vocabulary growth aids in development of reading and comprehension as students progress in school. • Teachers should provide opportunities for students to participate in partner or group activities to use descriptive words (e.g., read and sing number poems and songs). • Teacher-initiated activities will expand students' language by introducing new vocabulary in the context of ~~fiction and nonfiction print materials and trade books~~ a variety of texts that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics, and by modeling ways to participate in discussions about learning. • Teacher modeling of the appropriate use of content vocabulary will help students expand	**All students should** • understand that learning new words enhances communication. • understand that word choice makes communication clearer. • understand that information can be gained by asking about words not understood.	**To be successful with this standard, students are expected to** • understand and use number words in conversations, during partner and group activities, and during teacher-directed instruction. • use words to describe or name people, places, feelings, and things during partner and group activities and during teacher-directed instruction. • use size, shape, color, and spatial words to describe people, places, and things during group or individual activities and during teacher-directed instruction. • use words to show direction and location ~~such as~~(e.g., on, off, in, out, *over*, *under*, *between*, and *beside)* to describe location. • use a variety of words to describe the actions of characters and people in real and make-believe settings in response to stories or class activities. • recognize when they do not understand a word or phrase and seek clarification by asking a peer or an adult. • use vocabulary from content areas during partner or group activities and during teacher-directed instruction.

K.2 The student will expand understanding and use of word meanings.

a) Increase listening and speaking vocabularies.
b) Use number words.
c) Use words to describe/name people, places, and things.
d) Use words to describe/name location, size, color, and shape.
e) Use words to describe/name actions.
f) Ask about words not understood.
g) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
their use of word meanings.		

K.3 The student will build oral communication skills.

a) Express ideas in complete sentences and express needs through direct requests.
b) Begin to initiate conversations.
c) Begin to follow implicit rules for conversation, including taking turns and staying on topic.
d) Listen and speak in informal conversations with peers and adults.
e) Participate in group and partner discussions about various texts and topics.
f) Begin to use voice level, phrasing, and intonation appropriate for various language situations.
g) Follow one- and two-step directions.
h) Begin to ask how and why questions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will build oral communication skills within a language-rich environment through a variety of experiences. • ~~In this environment, students will accumulate experiences from which concepts and thoughts can be formed.~~ • With teacher support students ~~will learn to~~ generate how and why questions across ~~the~~ curricula and begin to use these questions to guide their search for answers. • ~~Students will have opportunities~~ ~~i~~In various group settings, students should have opportunities to initiate informal conversations with peers and adults, learning and practicing implicit rules for conversation ~~such as~~ (e.g., voice level and intonation appropriate for specific language situations).	**All students should** • understand that conversation is ~~a two-way interaction~~ interactive. • begin to understand that the setting influences rules for communication. • understand that information can be gained by ~~seeking answers to~~ generating questions and seeking answers.	**To be successful with this standard, students are expected to** • speak audibly in complete~~, simple~~ sentences, expressing thoughts, feelings and ideas clearly. • verbally express needs through direct requests. • participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, small group, teacher-led). • initiate conversations with peers and teachers in a variety of school settings. • listen attentively to others in a variety of formal and informal settings involving peers and adults. • participate in partner or group activities, (i.e., conversations, discussions, book chats, retellings of stories, choral speaking, language experience narratives, morning routines, dramatizations and role play). • listen to and discuss ~~fiction and nonfiction print materials and trade books~~ a variety of texts that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics. • wait for their turn to speak, allowing others to speak without unnecessary interruptions. • ~~wait for their turn to speak~~

K.3 The student will build oral communication skills.

a) Express ideas in complete sentences and express needs through direct requests.
b) Begin to initiate conversations.
c) Begin to follow implicit rules for conversation, including taking turns and staying on topic.
d) Listen and speak in informal conversations with peers and adults.
e) Participate in group and partner discussions about various texts and topics.
f) Begin to use voice level, phrasing, and intonation appropriate for various language situations.
g) Follow one- and two-step directions.
h) Begin to ask how and why questions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• ~~stay~~ maintain conversation on topic through multiple exchanges. • in group and partner discussions clearly state a thought related to the book or topic being discussed. • begin to use voice level, phrasing~~,~~ and intonation appropriate for the language situation. • match language to the purpose, situation, environment, and audience. • repeat and follow one~~-step~~ and two-step oral directions. • ~~ask how and why questions to gain information.~~ • ~~understand the difference between stating known facts and formulating how and why questions~~ • ask who, what, where, when, why, and how questions to obtain information, seek help, or clarify something not understood. • ~~predict how to find answers to questions~~ • ~~begin to use pictures and other visuals to answer questions.~~

K.4 The student will identify, say, segment, and blend various units of speech sounds.

a) Begin to discriminate between spoken sentences, words, and syllables.
b) Identify and produce words that rhyme.
c) Blend and segment multisyllabic words at the syllable level.
d) Segment one-syllable words into speech sound units including beginning phoneme(s) (onset) and ending (rimes).
e) Identify words according to shared beginning and/or ending sounds.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will focus on various units of speech sounds in words ~~and discern the phonemes of spoken language~~. • This skill includes an understanding of the hierarchical concepts of sentence, word, syllable, and letter. Consequently, students need to demonstrate the ability to ~~break down~~ segment a sentence orally into individual words and to ~~break down~~ segment individual words into individual syllables and sounds. • Phonological awareness is the term used to describe a student's understanding that spoken words consist of sounds. Students who are *phonologically aware* demonstrate an ability to hear and manipulate the sound structure of language at each of the word, syllable and phoneme (individual sound) levels. • Phonological awareness typically progresses in a developmental continuum, (i.e., rhyming → sentence segmenting → syllable blending/segmenting → syllable splitting [onset and rime blending/segmenting] → phoneme blending, segmenting, and manipulating). • Students who are *phonemically aware* are able to attend to the individual phonemes of spoken	**All students should** • understand that words are made up of small units of sound and that these sounds can be blended to make a word. • understand that words are made up of syllables. • understand that a spoken sentence is made up of individual words.	**To be successful with this standard, students are expected to** • focus on speech sounds. • ~~break down a sentence into individual words~~ • demonstrate the concept of word by ~~dividing~~ segmenting spoken sentences into individual words. • ~~break down~~ segment a word into individual syllables by clapping hands or snapping fingers. • discriminate between large phonological units of running speech, sentences, words, and syllables. • identify a word that rhymes with a spoken word. • supply a word that rhymes with a spoken word. • produce rhyming words and recognize pairs of rhyming words presented orally. • generate rhyming words based on a given rhyming pattern. • supply an appropriate rhyming word to complete a familiar nursery rhyme or a predictable text with rhyming lines. • blend and segment consonants and rimes of spoken words (e.g., /b/- /oat/ = *boat*, *black* = /bl/- /ack/). • blend and segment multisyllabic words into syllables (e.g. the teacher asks students to *say robot without the /ro-/* and students respond with */bot/)*. • recognize that a word ~~breaks down~~ can be segmented into individual

K.4 The student will identify, say, segment, and blend various units of speech sounds.

a) Begin to discriminate between spoken sentences, words, and syllables.
b) Identify and produce words that rhyme.
c) Blend and segment multisyllabic words at the syllable level.
d) Segment one-syllable words into speech sound units including beginning phoneme(s) (onset) and ending (rimes).
e) Identify words according to shared beginning and/or ending sounds.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
language by demonstrating the higher-order ability to blend, segment and manipulate them. • Students orally **blend** speech sound units **(**phonemes) together to make a word (e.g., /m/-/a/-/n/ → man). • Students **segment** spoken words into individual sounds (e.g., man → /m/- /a/- /n/. • Understanding rhyme allows students to generate new words from a known word (e.g., if the student knows the word "fun," then he/she can orally produce the word "run.") It is more difficult to produce a rhyme than to identify a rhyme when presented orally. • **Syllables** are units of speech that consist of a vowel preceded and/or followed by consonants. Each time a syllable is produced, the mouth opens and closes. Each syllable spoken consists of a single rhythmic beat (e.g., the word *absent* has two syllables: ab/sent). • ~~The level of complexity increases as students then isolate the initial and final sounds of a word. Isolating the medial sound is yet more complex. The most sophisticated skill is breaking the word into the phonemes that comprise it.~~ • **Phonemes** are the smallest units of sound in spoken language.		~~phonemes (onset) and ending (rimes)~~ speech sound units. • recognize how phonemes sound when spoken in isolation. • recognize similarities and differences in beginning and ending sounds ~~(phonemes)~~ of words. • determine the order of speech sounds ~~(phonemes)~~ in a given word by answering the following questions: ° What is the beginning sound you hear? ° What is the ending sound you hear? • ~~supply~~ produce a word that has the same beginning or ending sound ~~(phoneme)~~ as a spoken word (e.g., /***s***ock/- /***s***un/ and /ho***t***/- /ra***t***/). • identify pictures of objects whose names share the same beginning or ending sound ~~(phoneme)~~. • sort pictures ~~of~~ or objects whose names share the same beginning or ending sound ~~(phoneme)~~. • blend three ~~given~~ spoken phonemes to make words (e.g., ~~For example,~~ the teacher says */c/ /a/ /t/*, and the student blends the phonemes to say the word *cat*). • segment one-syllable words into onset and rime (e.g., the teacher says the word *hat* and when asked, the student verbally says */h/* for the onset and */-at/* for the rime.) Students are not expected to know the terms onset and rime. • segment one-syllable words into speech sound~~s~~ units ~~(phonemes)~~ (e.g., the teacher says the word bat, and the student segments the sounds */b/- /a/- /t/*). • substitute the beginning consonant to make a new word (e.g., the teacher asks the student to say *cat, but in the place of /c/ she asks them to say /b/,*

K.4 The student will identify, say, segment, and blend various units of speech sounds.

a) Begin to discriminate between spoken sentences, words, and syllables.
b) Identify and produce words that rhyme.
c) Blend and segment multisyllabic words at the syllable level.
d) Segment one-syllable words into speech sound units including beginning phoneme(s) (onset) and ending (rimes).
e) Identify words according to shared beginning and/or ending sounds.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Through many learning experiences with songs, rhymes, and language play, students will develop the ability to hear, ~~say~~ produce, and manipulate phonemes. • The ability to segment and blend phonemes facilitates spelling and decoding. • **Onsets** are speech sounds (/b/, /c/, /f/, /h/) before a vowel. **Rimes** are comprised of the vowel and what follows (e.g., -at, -it, -op). If a one-syllable word begins with a vowel, it has only a rime. Many words are formed by combining onsets and rimes (bat, ~~cat~~ bit, ~~fat~~ but~~, hat~~) ~~(Note: Students are not expected to know these terms)~~.		and the student responds with *bat*).

At the kindergarten level, students will be immersed in a print-rich environment. They will learn the concepts of print, basic phonetic principles, comprehension of stories, and letter identification skills through systematic, direct instruction, individual and small group activities, and time spent exploring and reading books and other print material. Students will learn to identify and name the uppercase and lowercase letters of the alphabet, understand that letters represent sounds, and identify beginning consonant sounds in single consonant words. They will also learn to comprehend and relate stories through drama, retelling, drawing, and their own writing.

K.5 The student will understand how print is organized and read.

a) Hold print materials in the correct position.
b) Identify the front cover, back cover, and title page of a book.
c) Distinguish between print and pictures.
d) Follow words from left to right and from top to bottom on a printed page.
e) Match voice with print (concept of word).

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand book handling skills, directionality of print, and the correspondence of the spoken word to the written word. • The ability to match spoken words to print involves developing a student's *concept of word.* Instruction may include modeling how print is organized, pointing to words on a page as it is read, and having students "finger-point read" memorized text.	**All students should** • understand that all print materials in English follow similar patterns. • understand that there is a one-to-one correspondence between the spoken and written word.	**To be successful with this standard, students are expected to** • hold printed material the correct way. • identify the front and back covers of a book. • distinguish the title page from all the other pages in a book. • turn pages appropriately. • distinguish print from pictures. • follow text with a finger, pointing to each word as it is read from left to right and top to bottom. • locate lines of text, words, letters, and spaces. • match voice with print in syllables, words, and phrases. • locate and name periods, question marks, and exclamation points.

K.6 The student will demonstrate an understanding that print conveys meaning.

a) Identify common signs and logos.
b) Explain that printed materials provide information.
c) Read and explain own writing and drawings.
d) Read his/her name and read fifteen meaningful, concrete words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will learn that books, environmental print (print seen in one's environment), and other printed materials ~~have a constant~~ convey meaning and provide information for the reader. • Teachers should provide a variety of opportunities for ~~S~~students ~~should~~ to demonstrate their understanding of the constancy of print by drawing pictures and producing their own written messages to communicate ~~with others~~ ideas and information. • These messages may include scribbles, letter approximations, letter strings, and invented spellings. • Concrete words are specific words that refer to definite persons, places or things. • Students who recognize words automatically spend less time decoding and can pay more attention to comprehending what is being read. • ~~Students will read his/her name~~. • Provide opportunities for the student to read his/her name.	**All students should** • understand that print ~~communicates a message~~ conveys meaning.	**To be successful with this standard, students are expected to** • apply knowledge that print conveys ~~a message~~ meaning. • recognize and identify common signs, logos, and labels. • explain that printed ~~text~~ material provides information. • read and explain their own drawings and writings. • locate ~~high-frequency~~ commonly used words and phrases in familiar text. • recognize ~~ten~~ a selection of high-frequency and sight words as well as read fifteen meaningful, concrete words. (Each student may know a different set of words.) • recognize and identify their own first and last names. ~~and the first names of classmates~~ • ~~retell information gathered from looking at a picture or from listening to a text read to them.~~

K.7 The student will develop an understanding of basic phonetic principles.

a) Identify and name the uppercase and lowercase letters of the alphabet.
b) Match consonant, short vowel, and initial consonant digraph sounds to appropriate letters.
c) Demonstrate a speech-to-print match through accurate finger-point reading in familiar text that includes words with more than one syllable.
d) Identify beginning consonant sounds in single-syllable words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will ~~learn and understand how letters and sounds work in written language~~ develop an understanding of basic phonetic principles. • ~~Students will learn and understand how letters and sounds work in written language.~~ • ~~Students will learn to identify uppercase and lowercase letters in isolation in sequential order and in random order.~~ • Phonetic skills are the foundation for decoding and encoding words — i.e., they are the basic skills needed to develop fluency and automaticity in reading and writing. • A **digraph** is the spelling of one sound using two letters. Digraphs can spell consonant sounds (e.g., sh, ch, th, ng) or vowel sounds (e.g., ai, ay, ee, ea, oo, ow, ey, oi, oy, au, aw).	**All students should** • understand that there is a one-to-one correspondence between spoken and written words. • understand that written words are composed of letters that represent specific sounds.	**To be successful with this standard, students are expected to** • recognize and name rapidly and with ease uppercase and lowercase letters in sequence and in random order. • match uppercase and lowercase letter pairs. • ~~recognize and say~~ produce the usual sounds of ~~all letters~~ consonants, short vowels and initial consonant digraphs. • demonstrate concept of word by: ° tracking familiar print from left to right and top to bottom; and ° matching spoken words to print including words with more than one syllable. • write the grapheme (letter) that represents a spoken sound. • use basic knowledge of one-to-one letter-sound correspondences by producing sounds for each consonant. • isolate initial consonants in single-syllable words (~~For example,~~ e.g., */t/* is the first sound in *top*). • ~~associate~~ identify long and short sounds with common spellings for the five major vowels. • distinguish between similarly spelled words by identifying sounds of the letters that differ. • ~~identify the~~ segment onsets ~~(*/c/*)~~ and rimes ~~(*-at*)~~ and begin to ~~separate the sounds fully (*/c/ /a/ /t/*) by saying each sound aloud~~ blend to form the words.

K.7 The student will develop an understanding of basic phonetic principles.

a) Identify and name the uppercase and lowercase letters of the alphabet.

b) Match consonant, short vowel, and initial consonant digraph sounds to appropriate letters.

c) Demonstrate a speech-to-print match through accurate finger-point reading in familiar text that includes words with more than one syllable.

d) Identify beginning consonant sounds in single-syllable words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• ~~blend onsets (*/c/*) and rimes (*-at*) to form words (*cat*)~~ • ~~substitute other onsets (*/b/* for */c/*) to form different words (*bat*).~~

K.8 The student will expand vocabulary.

a) Discuss meanings of words.

b) Develop vocabulary by listening to a variety of texts read aloud.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will expand their ~~oral language~~ vocabulary by listening to and participating in a variety of ~~literary~~ literacy experiences, including, but not limited to, discussion and listening to a variety of texts read aloud ~~including fiction and nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics~~. • ~~These interactions~~ Teachers reading texts aloud provide opportunities for students to have ~~mimic~~ language modeled for them and expose them to ~~experiment with~~ new words~~, word patterns, and rhymes~~ in order to expand their working vocabularies. • ~~This~~ Vocabulary growth aids in development of reading and comprehension ~~as students progress in school~~.	**All students should** • understand that vocabulary is made up of words and that words have meaning.	**To be successful with this standard, students are expected to** • discuss meanings of specific words including synonyms and antonyms in partner, group and teacher-guided settings. • identify new meanings for familiar words and apply them accurately (e.g., knowing *water* as a drink and learning the verb *water the flowers*). • sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent. • use common adjectives to distinguish objects (e.g., the *small red* square; the *shy white cat*) (Students are not required to know the term adjective at this level.). • ask and respond to questions about unknown words in a text. • identify real-life connections between words and their use (e.g., places that are *loud*). • use newly learned words in literacy tasks. • ~~listen to a variety of literary forms, including predictable texts, patterned texts, poems, fairy tales, legends, stories, and informational texts found in fiction and nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~

K.9 The student will demonstrate comprehension of fictional texts.

a) Identify what an author does and what an illustrator does.
b) Relate previous experiences to what is read.
c) Use pictures to make predictions.
d) Begin to ask and answer questions about what is read.
e) Use story language in discussions and retellings.
f) Retell familiar stories, using beginning, middle, and end.
g) Discuss characters, setting, and events.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard ~~relative to fiction~~ is that students will understand the elements of a story (characters, setting, problem/solution, events) and begin to analyze these elements for meaning. • Students will learn that comprehension is an active process requiring them to use their own experiences and learn new vocabulary in order to get meaning from fictional texts ~~and nonfiction~~ that ~~is~~ are read aloud to them. • Students should be exposed to and be able to recognize various types of fictional texts (e.g., storybooks, poems).	**All students should** • understand that ~~print material~~ fictional texts tell~~s~~ a story ~~or provides information~~. • understand that authors tell stories through words and illustrators ~~create books~~ tell stories with pictures.	**To be successful with this standard, students are expected to** • identify the roles of ~~an~~ the author and ~~an~~ the illustrator of selected texts. • make ongoing predictions based on illustrations and ~~or portions of a~~ text. • describe the relationship between illustration and the story (e.g., what moment in the story does the illustration depict). • link knowledge from their own experiences to make sense of and talk about a text. • give evidence that they understand the meaning of what is being read aloud, including the who, what, when, where, why, and how. • ask and respond to simple questions about the content of a book. • use vocabulary from a story in discussions and retellings. • retell a story from pictures or text in their own words ~~or re-enact it~~, arranging the events in the correct sequence (beginning, middle, and end). • use words to sequence events ~~such as~~ (e.g., *before*, *after*, and *next*). • produce artwork or a written response (letters or phonetically spelled words) that demonstrates comprehension of a story that they have heard read aloud. • use descriptive language to talk about characters, settings, and events of a story. • recognize various types of fictional texts (e.g., storybooks, poems).

K.10 The student will demonstrate comprehension of nonfiction texts.
a) Use pictures to identify topic and make predictions.
b) Identify text features specific to the topic, such as titles, headings, and pictures.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard relative to nonfiction is that students will demonstrate comprehension of ~~nonfiction print materials and trade books~~ a variety of texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics~~, in order to build vocabulary and content knowledge~~. • Students will learn that comprehension is an active process requiring them to use their own experiences and learn new vocabulary in order to get meaning from ~~fiction and~~ nonfictional texts that ~~is~~ are read aloud to them. • Students' understanding of text features, (i.e., titles, headings, and graphics) will support comprehension of nonfiction texts.	**All students should** • understand that ~~print material tells a story or~~ nonfictional texts provide~~s~~ information.	**To be successful with this standard, students are expected to** • make ongoing predictions based on ~~illustrations~~ graphics ~~or~~ and ~~portions of a~~ text. • relate pictures and illustrations to the text in which they appear. • link knowledge from their own experiences to make sense of and talk about a text. • identify ~~name~~ the topic of a nonfiction selection. • ask and respond to simple questions about the content of a book. • discuss simple facts and information relevant to the topic. • identify text features including titles, headings and pictures in text. • identify the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

At the kindergarten level, students will begin to build a connection between oral and written language. Awareness that spoken language can be written and written language can be read is a fundamental concept in communicating ideas. Students will learn to print the uppercase and lowercase letters of the alphabet as well as their first and last names. Kindergarten writing reflects the students' oral language. Students will communicate their ideas through drawings, scribbles, letter strings, letter approximations, and dictation to adults.

K.11 The student will print in manuscript.

a) Print uppercase and lowercase letters of the alphabet independently.

b) Print his/her first and last names.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will begin developing neat, legible handwriting. • ~~The intent of this standard is that s~~Students will learn to print uppercase and lowercase letters of the alphabet. • Students need explicit, direct instruction to learn to form uppercase and lowercase manuscript letters correctly. • Reproducing letters with automaticity assists with learning sounds, spelling words and word recognition. • ~~Students also need to be taught~~ Teaching appropriate pencil grip will assist students with printing in manuscript.	**All students should** • understand that there are correct ways to write the manuscript letters of the alphabet. • understand that their written name provides identification. • understand that printing properly formed letters makes manuscript writing legible.	**To be successful with this standard, students are expected to** • use appropriate pencil grip. • print upper- and lower-case letters of the alphabet legibly and independently. • use ~~standard~~ manuscript letter formation. • use ~~standard~~ manuscript number formation. • ~~recognize their first and last names~~ • form the letters of and space their first and last names. • ~~know that the first letter of their first name and the first letter of their last name are always capital letters~~ • write their first and last names for a variety of purposes. • capitalize the first word in a sentence and the pronoun *I*.

K.12 The student will write to communicate ideas for a variety of purposes.

a) Differentiate pictures from writing.
b) Draw pictures and/or use letters and phonetically spelled words to write about experiences.
c) Use letters and beginning consonant sounds to spell phonetically words to describe pictures or write about experiences.
d) Write left to right and top to bottom.

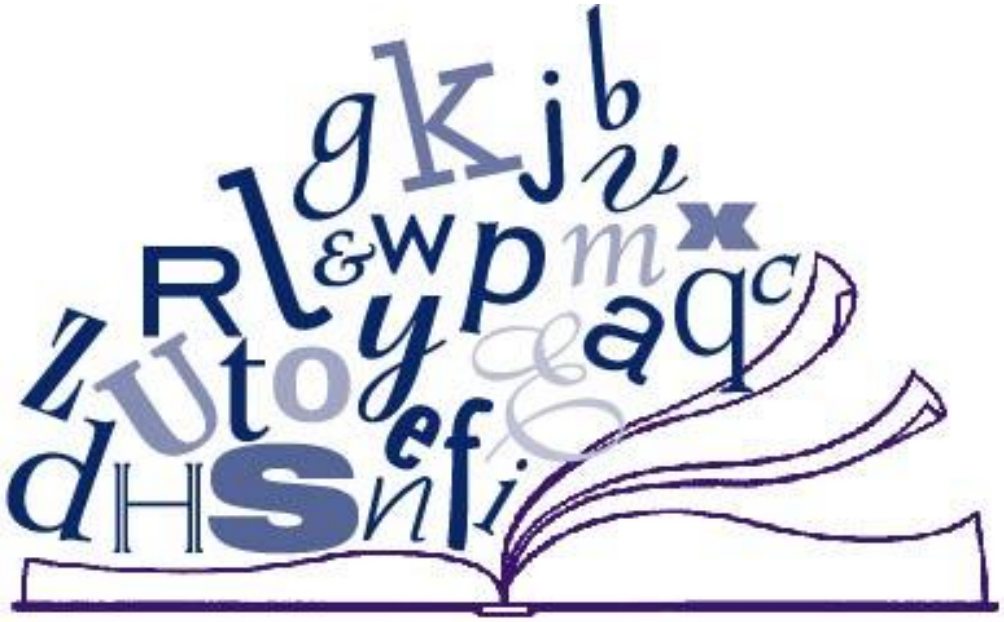
UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand that writing is used for a variety of purposes, including sharing events and telling stories (narrative writing), informing others and making reports (informational writing), labeling and making lists (functional writing), and responding to literature. • Writing in kindergarten ~~sets the stage~~ prepares students for ~~formal writing~~ more formalized writing styles in ~~other~~ subsequent grades. • Students will draw upon their growing phonetic knowledge to spell words using letters and beginning consonant sounds when describing pictures or writing about experiences. • Beginning writings may include drawings, letter strings, scribbles, letter approximations, and other graphic representations, as well as phonetically spelled words.	**All students should** • understand that their writing serves a variety of purposes.	**To be successful with this standard, students are expected to** • distinguish print from pictures. • write daily for a variety of purposes (e.g., practicing formation of alphabet letters, labeling, and journal writing). • write on assigned and/or self-selected topics. • use writing, dictation, and drawing to compose informative/explanatory texts that ~~name~~ introduce a topic (what they are writing about), state an opinion or some facts and provide some information (e.g., ~~My family~~ My favorite book is …). • use writing, dictation, and drawing to narrate an event. • ~~write without resistance when given the necessary time, place, and materials~~ • generate text to communicate and make meaning by creating drawings, letter strings, scribbles, letter approximations, or other graphic representations, as well as phonetically spelled words. • write left to right and top to bottom.

K.13 The student will use available technology for reading and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use available technology for reading and writing.	**All students should** • understand that ~~computers are~~ technology is a way to interact with print.	**To be successful with this standard, students are expected to** • ~~use "skill and practice" software.~~ • ~~use word processing software.~~ • use available digital tools for reading and writing. • ask and respond to questions about material presented through various media formats. • share their writing with others.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade One



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the first-grade level, students will continue to engage in a variety of oral language activities to develop their understanding of language and to enhance their ability to communicate effectively. They will continue to build vocabulary as they participate in listening and speaking activities in the classroom. They will also begin to use their oral language skills to gain and explain information. In addition, students will continue to develop the higher-level phonemic awareness skills of segmentation, deletion, and substitution.

1.1 The student will continue to demonstrate growth in the use of oral language.

a) Listen and respond to a variety of electronic media and other age-appropriate materials.
b) Tell and retell stories and events in logical order.
c) Participate in a variety of oral language activities, including choral speaking and reciting short poems, rhymes, songs, and stories with repeated patterns.
d) Participate in creative dramatics.
e) Express ideas orally in complete sentences.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to demonstrate growth in the use of oral language and vocabulary by listening to and discussing ~~fiction and nonfiction print materials and trade books~~ a variety of texts that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics. • Students ~~will~~ should have opportunities to interact with a variety of electronic media and participate in numerous oral language activities. • ~~These activities will~~ Students should be engaged in activities that encourage the use of complete sentences and include the telling or retelling of stories and events in logical order.	**All students should** • understand that oral language is ~~can be~~ used to ~~tell a story and to express ideas~~ communicate a variety of ideas for a variety of purposes.	**To be successful with this standard, students are expected to** • produce complete sentences when appropriate to task and situation. • participate in a variety of oral language activities, such as: ◦ ~~listening to and discussing fiction and nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~ ◦ ~~listening and responding to stories and poems presented through recordings and experiencing other audiovisual materials in the context of curricular goals and objectives~~. ◦ listening to stories and poems read aloud daily; ◦ participating in discussions about stories and poems; ◦ talking about words and their meanings as they are encountered in stories, poems, and conversations; ◦ giving reactions to stories and poems; ◦ asking and answering questions about what is said in order to gather additional information or clarify something not understood; ◦ verbally express ideas and feelings; and ◦ describe people, places, things, and events with details. • tell and retell stories and events in logical order by: ◦ retelling stories orally and through informal drama; ◦ dictating retelling of stories; ◦ indicating first, next, and last events in a story; and ◦ creating their own stories, poems, plays, and songs. • participate in daily oral language activities~~, including~~ (e.g., choral speaking and the reciting of short poems, rhymes, songs, and stories with repeated

1.1 The student will continue to demonstrate growth in the use of oral language.

a) Listen and respond to a variety of electronic media and other age-appropriate materials.
b) Tell and retell stories and events in logical order.
c) Participate in a variety of oral language activities, including choral speaking and reciting short poems, rhymes, songs, and stories with repeated patterns.
d) Participate in creative dramatics.
e) Express ideas orally in complete sentences.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		patterns). • participate in creative dramatics, (e.g., classroom songs, plays, skits, and group activities) designed to give students frequent opportunities for listening and speaking. • speak to one another, and listen to each other at appropriate times during lessons. • ~~express themselves in complete sentences.~~

1.2 The student will expand understanding and use of word meanings.

a) Increase listening and speaking vocabularies.
b) Begin to ask for clarification and explanation of words and ideas.
c) Use common singular and plural nouns.
d) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will expand their listening and speaking vocabularies and their understanding and use of word meanings through activities across curricula ~~that develop the use of describing and naming words~~. • ~~Students will demonstrate an increase in vocabulary by giving and following directions.~~ • Students ~~will learn~~ should have opportunities to practice asking for clarification and explanation of unfamiliar words that are encountered across curricula. • Students should have opportunities to use vocabulary from other content areas. • ~~This v~~Vocabulary growth aids in the development of reading ~~and~~ comprehension as students progress in school. • One method for increasing listening (receptive) and speaking (expressive) vocabulary is for the teacher to pause at times during classroom read-aloud sessions to draw attention to key vocabulary and to encourage students to use the words while speaking.	**All students should** • understand that specific word choice makes communication clearer. • understand that nouns can have quantifiable attributes (singular or plural).	**To be successful with this standard, students are expected to** • learn and use new words encountered in discussions and in books that the teacher ~~are~~ reads aloud. • ~~use words to orally describe actions, people, places, things, and ideas~~ participate in listening and speaking activities. • ask for meanings and clarification of unfamiliar words and ideas. • use common singular and plural nouns ~~appropriately~~ with matching verbs in basic sentences (e.g., *She walks.*, *We walk.*). • use common irregular plural forms, such as *man*/*men*, *child*/*children*, and *mouse*/*mice*. • use common pronouns (e.g., I, me, mine; they, them, theirs, anyone, everything). • use articles (e.g., a, an, the), conjunctions (e.g., and, but, or, so, because), and prepositions (e.g., during, beyond, toward) correctly. • use vocabulary from other content areas.

1.3 The student will adapt or change oral language to fit the situation.

a) Initiate conversation with peers and adults.
b) Follow rules for conversation using appropriate voice level in small-group settings.
c) Ask and respond to questions.
d) Follow simple two-step oral directions.
e) Give simple two-step oral directions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use oral language to respond appropriately in group situations to both peers and adults. • Teacher modeling of questioning techniques will support students in generating a variety of questions across curricula and in using questions to guide their search for answers.	**All students should** • understand that the setting influences the rules for communication. • ~~ask and answer relevant questions about a specific topic.~~ • understand that information can be gained by asking and answering relevant questions about a specific topic.	**To be successful with this standard, students are expected to** • initiate conversation in a variety of school settings. • participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., partner, small-group, teacher led). • ask and respond to questions to check for understanding of information presented (e.g., stay on topic, link remarks to those of others). • sustain two-person conversation through multiple exchanges. • ~~stay on topic~~ • use voice level and intonation appropriate for ~~the~~ small-group settings. • follow rules for conversation, including listening and taking turns. • ask and respond to relevant questions in partner, group, and teacher-led settings. • follow simple two-step oral directions. • give simple two-step directions. • use words of time and position, including *first*, *second*, *next*, *on*, *under*, *beside*, and *over,* to give directions orally. • use action words (verbs), including, but not limited to, *mark*, *circle*, *color*, and *draw,* to give directions orally.

1.4 The student will orally identify, produce, and manipulate various units of speech sounds within words.

a) Create rhyming words.
b) Count phonemes (sounds) in one-syllable words.
c) Blend sounds to make one-syllable words.
d) Segment one-syllable words into individual speech sounds (phonemes).
e) Add or delete phonemes (sounds) to make new words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to build and practice ~~phonemic~~ phonological awareness skills. • Explicit instruction allows students to consciously reflect on, produce, and manipulate sounds. • Through songs, poems, stories, and word play, students will ~~count phonemes,~~ create rhyming words, count phonemes, ~~segment and substitute sounds and~~ blend sounds, ~~to make words.~~ and add or delete phonemes to make new words. • Phonological awareness is the term used to describe a student's understanding that spoken words consist of sounds. Students who are *phonologically aware* demonstrate an ability to hear and manipulate the sound structure of language at each of the word, syllable and phoneme (individual sound) levels. • Phonological awareness typically progresses in a developmental continuum, (i.e., rhyming → sentence segmenting → syllable blending/segmenting → syllable splitting [onset and rime blending/segmenting] → phoneme blending, segmenting, and manipulating). • **Phonemes** are the smallest units of sound in language. • Students who are *phonemically aware* are able	**All students should** • understand that spoken words are made up of ~~individual phonemes~~ units of speech sounds within words, which can be ~~added or deleted~~ manipulated to make new words.	**To be successful with this standard, students are expected to** • identify, isolate, produce, and manipulate various units of speech sounds within words (e.g., syllables, onsets, rimes, and phonemes). • ~~generate~~ orally produce words that rhyme with an ~~teacher-given~~ audible guide word. • count phonemes in one-syllable words ~~with a maximum of three syllables~~. • ~~identify the onset and rime of words~~ • blend separately spoken phonemes to make ~~word parts and~~ ~~words with~~ one ~~to three~~ syllable~~s~~ into words. • segment words by ~~saying~~ producing each ~~sound~~ phoneme. • ~~add, delete, or change phonemes orally to change syllables or words~~ • ~~identify~~ determine whether the ~~middle~~ medial vowel sound is the same or different in a set of one-syllable words. • sort picture cards by beginning, medial, and ending phonemes. • delete a phoneme from an orally presented word to make a new word (e.g., rice/ice, beach/bee, weight/weigh, couch/cow). • add a phoneme from an orally presented word or rime to make a new word (e.g., pie/pipe, four/fork, cab/crab, ot/lot, ap/map). • change phonemes orally to make new words (e.g., rug/jug, bunch/lunch, card/cart, sat/sit).

1.4 The student will orally identify, produce, and manipulate various units of speech sounds within words.

a) Create rhyming words.
b) Count phonemes (sounds) in one-syllable words.
c) Blend sounds to make one-syllable words.
d) Segment one-syllable words into individual speech sounds (phonemes).
e) Add or delete phonemes (sounds) to make new words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
to attend to the individual phonemes of spoken language by demonstrating the higher-order ability to blend, segment, and manipulate them. • **Syllables** are units of speech that consist of a vowel preceded and/or followed by consonants. Each time a syllable is produced; the mouth opens and closes. Each syllable spoken consists of a single rhythmic beat. For example, the word *absent* has two syllables: ab/sent. • **Onsets** are speech sounds (*/b/, /j/, /s/, /p/*) before a vowel. **Rimes** are the vowel and what follows (*-ack*). If a one-syllable word begins with a vowel, it has only a **rime**. Many words are formed by combining **onsets** and **rimes** (*back, jack, sack, pack*). (Note: Students are not expected to know these terms.) • Phonemic awareness can be developed as students practice distinguishing minimal pairs aurally. **Minimal pairs** are pairs of words which differ in only one phoneme (cape/tape, kite/tight, gas/gash).		

At the first-grade level, students will continue to be immersed in a print-rich environment. Having developed a concept of word and letter-sound correspondence, students will now concentrate on learning and integrating basic phonetic principles, decoding words in isolation, using meaning clues, and employing language and sentence structure to read and substantially increase their sight-word vocabulary. By the end of the first grade, they should have a reading vocabulary of 300 to 500 commonly used sight words and be able to decode single-syllable words.

These concepts and skills will be learned through systematic explicit direct instruction, individual and small-group activities, and time spent exploring and reading books and other print material. Through reading decodable books, students will build fluency and automaticity in using their knowledge of phonetic principles and print to read. Reading and listening to both fiction and nonfiction texts will give students opportunities to respond to readings in group discussions and through writing and drawing. Through reading and rereading, the students will build fluency and vocabulary and will become independent readers. Students will learn to use their knowledge of alphabetical order by first letter to find the meanings of unfamiliar words in picture and simple word dictionaries.

1.5 The student will apply knowledge of how print is organized and read.

a) Read from left to right and from top to bottom.
b) Match spoken words with print.
c) Identify letters, words, sentences, and ending punctuation.
d) Read his/her own writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand how to read print. • As students begin to read, they will apply their knowledge of directionality of text and their ability to match the spoken word to the print. • The ability to match spoken words to print involves a student's *concept of word*. A firm concept of word requires students to have an automatic knowledge of letter sounds, to be able to isolate consonant sounds at the beginning of words in context, and to remember previously viewed words from text.	**All students should** • understand that written text consists of letters, words, and sentences. • understand that oral language can be written and read.	**To be successful with this standard, students are expected to** • demonstrate concepts of ~~print and spoken~~ word by tracking print from left to right and top to bottom, following print from one line to the next line (return sweep), and matching spoken words to print. • identify letters, words, ~~and~~ sentences, and ending punctuation (i.e., periods, question and quotation marks, and exclamation points). • differentiate between letters and words by recognizing spaces between words in sentences and ~~locating capital letters in sentences locating periods, question marks, and exclamation points, speech bubbles, and quotation marks~~ recognizing that a sentence starts with a capital letter and ends with a period, question mark, or exclamation point. • read their own writing.

1.6 The student will apply phonetic principles to read and spell.

a) Use beginning and ending consonants to decode and spell single-syllable words.
b) Use two-letter consonant blends to decode and spell single-syllable words.
c) Use beginning consonant digraphs to decode and spell single-syllable words.
d) Use short vowel sounds to decode and spell single-syllable words.
e) Blend beginning, middle, and ending sounds to recognize and read words.
f) Use word patterns to decode unfamiliar words.
g) Read and spell simple two-syllable compound words.
h) Read and spell commonly used sight words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to learn and apply phonetic principles to decode unfamiliar words. • Students will learn to ~~sound out words~~ apply phonetic skills rather than rely on pictures and context as their primary strategies for decoding words. • Students **blend** speech sound units (phonemes) together to produce a word (e.g., /m/-/a/-/n/ → man). • Students **segment** words into individual sounds (e.g., man→ /m/- /a/- /n/. • ~~Students will segment and blend beginning and ending consonant sounds and vowel sounds to decode single-syllable words.~~ • Students will transfer their knowledge of word patterns to identify other words with the same pattern. • Students will also continue to develop their skill at automatically recognizing ~~high-frequency~~ commonly used sight words. Students who recognize words automatically	**All students should** • understand that knowledge of phonetic principles ~~the sounds of letters~~ can be applied to read ~~or~~ and spell words.	**To be successful with this standard, students are expected to** • apply knowledge of ~~beginning and ending consonants and short vowels~~ letter sounds in single-syllable words by: ° recognizing beginning, medial and ending ~~consonant sounds~~ phonemes; ° ~~separating~~ segmenting the ~~sounds~~ phonemes in a word into their complete sequence of individual phonemes (e.g., top: /t/-/o/-/p/, jump: /j/-/u/-/m/-/p/); and ° blending ~~separately spoken~~ phonemes to ~~make~~ decode or spell a word. ° ~~spelling words~~ • accurately decode unknown unfamiliar, orthographically regular, single-syllable words and nonsense words (e.g., *sit*, *zot*), using letter-sound mappings to sound them out. • apply knowledge of word patterns to decode unfamiliar words by recognizing word patterns~~, such as~~ (e.g., CVC) using onsets and rimes to create, read, and spell new words that include blends~~, such as~~(e.g., the *l* and *r* blends; and digraphs, including *ch*, *sh*, *th*, and *wh*). • use the consonant-vowel patterns CVC (e.g., pin), VC (e.g., in), and CVCC (e.g., wind), to decode and spell single-syllable words. • use the consonant-vowel patterns CVVC and CVCE to decode and spell some single-syllable words. • use knowledge that every syllable has a vowel sound to help determine if a word has one or two syllables.

1.6 The student will apply phonetic principles to read and spell.

a) Use beginning and ending consonants to decode and spell single-syllable words.
b) Use two-letter consonant blends to decode and spell single-syllable words.
c) Use beginning consonant digraphs to decode and spell single-syllable words.
d) Use short vowel sounds to decode and spell single-syllable words.
e) Blend beginning, middle, and ending sounds to recognize and read words.
f) Use word patterns to decode unfamiliar words.
g) Read and spell simple two-syllable compound words.
h) Read and spell commonly used sight words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
spend less time decoding and can pay more attention to comprehending what is being read. • **Onsets** are speech sounds (*/b/, /j/, /s/, /p/*) before a vowel. **Rimes** are the vowel and what follows (*-ack*). If a one syllable word begins with a vowel, it has only a **rime**. Many words are formed by combining **onsets** and **rimes** (*back, jack, sack, pack*). (Note: Students are not expected to know these terms.) • Alphabet letters written between /slashes/ refer to their pronunciation (e.g., */sh/* refers to the initial sound heard in the word *sugar).*		• ~~recognize and use~~ read and spell simple two-syllable compound words. • read and spell simple two-syllable compound words following basic patterns by segmenting the words into syllables. • read and spell commonly used ~~high-frequency~~ sight words.

1.7 The student will use semantic clues and syntax to expand vocabulary when reading.

a) Use words, phrases, and sentences.
b) Use titles and pictures.
c) Use information in the story to read words.
d) Use knowledge of sentence structure.
e) Use knowledge of story structure.
f) Reread and self-correct.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use ~~meaning~~ semantic clues and syntax to assist in developing an understanding of a text. • **Semantics** refer to the *meanings* of words or sentences. **Syntax** refers to the *rules or conventions* for the formation of grammatical sentences. (Note: Students are not expected to know these terms.) • Students will use pictures as well as the understanding of the story and topic to predict and check for comprehension ~~meaning~~ as they read. • ~~Students will use their knowledge of sentence structure (the order of words in a given type of sentence) when reading.~~ • Students' knowledge of sentence structure will include understanding that a sentence is a complete idea, which has a subject and a predicate. • ~~Whenever meaning breaks down, students will reread and self-correct to regain meaning~~. • Teacher prompting and scaffolding to direct the student to reread and self-correct will support comprehension. • **Prosody** refers to the rhythmic and intonational	**All students should** • understand that they will use a variety of strategies to read unfamiliar words.	**To be successful with this standard, students are expected to** • expand vocabulary by using frequently occurring root words to read inflectional forms (e.g., *look, looks, looked, looking*). • use sentence-level context as a clue to the meaning of words and phrases. • ~~use prior knowledge to interpret pictures~~ • use titles and pictures to make predictions about text. • use pictures and/or rereading to confirm vocabulary choice. • use ~~knowledge of the story or topic~~ information in the story to make predictions about vocabulary and text. • notice when words or sentences do not make sense in context. • ~~recognize complete sentences when reading~~ • use intonation, pauses, and ~~emphasis~~ emphases that signal the structure of the sentence when reading aloud (prosody). • use ~~clues of~~ punctuation clues, including period, question mark, exclamation point, commas, and quotation marks, to guide their ~~reading~~ comprehension. • ~~reread to confirm vocabulary choice~~ • use knowledge of story structure (i.e., characters, setting, problem/solution) to guide comprehension. • reread and self-correct when text does not make sense.

1.7 The student will use semantic clues and syntax to expand vocabulary when reading.

a) Use words, phrases, and sentences.
b) Use titles and pictures.
c) Use information in the story to read words.
d) Use knowledge of sentence structure.
e) Use knowledge of story structure.
f) Reread and self-correct.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
aspect of language, which should be noticeable during oral reading. Prosody contributes to reading fluency and comprehension.		

1.8 The student will expand vocabulary.

a) Discuss meanings of words in context.
b) Develop vocabulary by listening to and reading a variety of texts.
c) Ask for the meaning of unknown words and make connections to familiar words.
d) Use text clues such as words or pictures to discern meanings of unknown words.
e) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will expand their vocabulary by participating in a variety of literacy experiences. • Teachers reading texts aloud provide opportunities for students to have language modeled for them and expose them to new words, in order to expand their working vocabularies. • ~~Teacher-initiated activities will expand students' language by introducing new vocabulary in the context of fiction and nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~	**All students should** • understand that word meanings can be comprehended through context, discussion, connections to familiar words, and knowledge of vocabulary from other content areas.	**To be successful with this standard, students are expected to** • understand and discuss the meanings of new words as presented in context. • develop their vocabulary by listening to and reading a variety of texts (e.g., predictable, decodable, and narrative/expository texts written in the original, natural language of the authors). • use words, pictures, and other clues from text to confirm or self-correct, rereading as necessary. • ask for the meaning of unknown words and make connections to familiar words by: ° sorting words into categories (e.g., colors, animals); ° defining words by category and by one or more attributes (e.g., *a swan is a bird that swims, a cardinal is a red bird*); and ° identifying real-life connections between words and their use (e.g., places that are *safe*). • use vocabulary from other content areas in literacy tasks.

1.9 The student will read and demonstrate comprehension of a variety of fictional texts.

a) Preview the selection.
b) Set a purpose for reading.
c) Relate previous experiences to what is read.
d) Make and confirm predictions.
e) Ask and answer who, what, when, where, why, and how questions about what is read.
f) Identify characters, setting, and important events.
g) Retell stories and events, using beginning, middle, and end.
h) Identify the main idea or theme.
i) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard ~~relative to fiction~~ is that students will build fluency and experience success as ~~a~~ readers while reading aloud and will begin to develop and demonstrate comprehension skills by reading a variety of fiction and poetry selections. • Students will demonstrate comprehension of story elements in fiction and poetry selections by identifying the character, setting, and topic or main idea. • Students will continue to learn to relate their prior knowledge to the topic of the text and use this knowledge and information from the text to make and confirm predictions as well as to ask and answer questions. • Teachers should read a wide range of fiction and nonfiction texts aloud and explain differences between books that tell stories and books that provide information. • To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological	**All students should** • understand that they should use a variety of strategies to assist with comprehension. • understand that orally read text has a rhythm and expression that helps convey meaning.	**To be successful with this standard, students are expected to** • preview reading material by looking at the book's cover and illustrations and by reading titles and headings. • ~~choose~~ set a purpose for reading by looking at the illustrations, ~~determining~~ activating prior knowledge, and predicting the outcome of the selection. • identify who is telling the story at various points in a text. • ~~draw on prior knowledge to make predictions before and during reading~~ • use knowledge from their own experience to make sense of and talk about a text. • draw on prior knowledge to make and confirm predictions ~~based on illustrations or portions of the text~~ before, during, and after reading. • ask and answer simple questions (e.g., who, what, when, where, why, and how)~~questions~~ about a selection. • ~~identify characters, setting, and important events~~ • identify and describe characters, settings, and important events in a story using details. • use illustrations and details to describe characters, settings, and important events in a story.

1.9 The student will read and demonstrate comprehension of a variety of fictional texts.

a) Preview the selection.
b) Set a purpose for reading.
c) Relate previous experiences to what is read.
d) Make and confirm predictions.
e) Ask and answer who, what, when, where, why, and how questions about what is read.
f) Identify characters, setting, and important events.
g) Retell stories and events, using beginning, middle, and end.
h) Identify the main idea or theme.
i) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
Awareness Literacy Screening (PALS): ~~Reading levels~~: ° independent level – ~~95%~~ 98-100% accuracy, or about ~~1~~ two of every ~~20~~ 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ° instructional level – 90-97% accuracy, or ~~about 1 of every 10~~ three to ten words of every 100 words misread (For preprimer text, instructional level is between 85%-97%.); student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ° frustration level – less than 90% accuracy, or more than ~~1 of every 10~~ ten of every 100 words misread (For preprimer text, frustration level is less than 85%.); student reads with neither accuracy nor fluency, and therefore his or her comprehension will be affected. • Fluency develops as students have the opportunity to practice reading on their independent reading level. • ~~Students should read at least 60 words per~~		• demonstrate comprehension by retelling stories and events orally or in writing, using beginning, middle, and end structure, and demonstrating comprehension of the central message or lesson. • identify the ~~topic or~~ main idea or theme of a short fiction ~~or nonfiction~~ selection. • identify words and phrases in stories or poems that suggest feelings or appeal to the senses. • read a wide variety of self-selected and teacher-selected stories, and poems ~~and informational texts~~ aloud. • use expression and intonation to convey meaning when reading aloud (prosody). • ~~practice reading in texts on their independent reading level to develop accuracy, fluency, and expression~~ • reread as necessary to confirm and self-correct word recognition and understanding. • practice reading and rereading familiar stories, poems, and passages at their independent reading level to develop fluency, accuracy, and meaningful expression. • ~~create artwork or a written response that shows comprehension of a selection~~ • ~~extend the story orally or with drawings~~

1.9 The student will read and demonstrate comprehension of a variety of fictional texts.

a) Preview the selection.
b) Set a purpose for reading.
c) Relate previous experiences to what is read.
d) Make and confirm predictions.
e) Ask and answer who, what, when, where, why, and how questions about what is read.
f) Identify characters, setting, and important events.
g) Retell stories and events, using beginning, middle, and end.
h) Identify the main idea or theme.
i) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
~~minute in grade-level material~~ • The table below presents the results of research on oral reading fluency rates for students at the 90th, 75th and 50th percentiles throughout the school year. These fluency rates are reported as words correct per minute (WCPM) for first-grade students reading first-grade text: Percentile / Midyear WCPM / Spring WCPM 90 / 81 / 111 75 / 47 / 82 50 / 23 / 53 Hasbrouck, J.E., & Tindal, G.A. (2006) • **Prosody** refers to the rhythmic and intonational aspect of language, which should be noticeable during oral reading. Prosody contributes to reading fluency and comprehension.		

1.10 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Preview the selection.
b) Use prior and background knowledge as context for new learning.
c) Set a purpose for reading.
d) Identify text features such as pictures, headings, charts, and captions.
e) Make and confirm predictions.
f) Ask and answer who, what, where, when, why, and how questions about what is read.
g) Identify the main idea.
h) Read and reread familiar passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard ~~relative to nonfiction~~ is that students will read and demonstrate comprehension of nonfiction ~~print materials and trade books~~ texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics~~, in order to build vocabulary and content knowledge~~. • Students will continue to learn to relate their prior knowledge to the topic of the text and use this knowledge and information from the text to make and confirm predictions as well as to ask and answer questions. • Strategies to increase prior knowledge include building on what students already know, discussing real-life experiences, and providing vicarious experiences through reading.	**All students should** • understand that they should use a variety of strategies to assist with comprehension of nonfiction texts. • understand that orally read text has a rhythm and expression that helps convey meaning.	**To be successful with this standard, students are expected to** • read with purpose and understanding. • preview reading material by looking at the book's cover and illustrations or other graphics and by reading titles and headings. • ~~choose~~ set a purpose for reading by looking at the illustrations or other graphics, ~~determining~~ activating prior knowledge, and predicting the outcome of the selection. • identify text features (e.g., illustrations, photographs, headings, charts and captions). • use text features to locate facts and information in a text (e.g., headings, tables of contents, glossaries). • distinguish between information provided by pictures or illustrations and information provided by words in the text. • make and confirm predictions before, during, and after reading. • ask and answer simple questions (e.g., who, what, when, where, why, and how) about a selection. • read a wide variety of self-selected and teacher-selected informational texts aloud. • read various nonfiction forms, including letters, lists, recipes, newspapers, and magazines.

1.10 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Preview the selection.
b) Use prior and background knowledge as context for new learning.
c) Set a purpose for reading.
d) Identify text features such as pictures, headings, charts, and captions.
e) Make and confirm predictions.
f) Ask and answer who, what, where, when, why, and how questions about what is read.
g) Identify the main idea.
h) Read and reread familiar passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• identify the ~~topic or~~ main idea and key details of a short ~~fiction or~~ nonfiction selection. • identify the reasons an author gives to support points in a text. • practice reading and rereading texts on their independent reading level to develop accuracy, fluency, and meaningful expression.

1.11 The student will use simple reference materials.

a) Use knowledge of alphabetical order by first letter.

b) Use a picture dictionary to find meanings of unfamiliar words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that ~~students will use~~ simple, and accessible reference materials will serve as resources for student learning. • Students will use their knowledge of alphabetical order by first letter to find words in picture dictionaries.	**All students should** • understand that many reference materials are organized in alphabetical order. • understand that reference materials provide information.	**To be successful with this standard, students are expected to** • use simple reference materials. • alphabetize a list of five to eight words according to first letter. • use a picture dictionary to locate unfamiliar words.

At the first-grade level, reading and writing will develop together. Students will be given daily opportunities to write and read their writing. As their knowledge of letter-sound correspondence and their sight-word vocabulary increases, they will be able to use these skills to put their ideas and thoughts on paper. Students need to be encouraged to write for real purposes by writing such things as letters, notes, signs, stories, and labels. At this level, students will concentrate on writing a complete simple sentence, using basic conventions. With teacher guidance and support, ~~T~~they will also begin to revise and edit selected pieces of their writing for a specific audience.

1.12 The student will print legibly.

a) Form letters accurately.
b) Space words within sentences.
c) Use the alphabetic code to write unknown words phonetically.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will learn to produce manuscript writing that can be easily read. • Students need explicit, direct instruction in order to learn to form uppercase and lowercase letters correctly. • Students also need many purposeful opportunities to ~~practice~~ develop ~~and master~~ sound-symbol correspondence while practicing and mastering handwriting skills. • Students need to develop their understanding that each speech sound or phoneme of language has its own distinctive graphic representation. This is referred to as the *alphabetic principle*.	**All students should** • understand that there are correct ways to write the letters of the alphabet and that proper spacing is necessary in order for writing to be legible. • understand sound-symbol correspondence in writing unfamiliar words.	**To be successful with this standard, students are expected to** • use appropriate pencil grip. • use manuscript ~~standard l~~etter formation. • print all upper and lowercase letters. • use manuscript ~~standard~~ number formation. • space words in sentences. • apply the alphabetic principle while writing unfamiliar words. • ~~space sentences in writing.~~

1.13 The student will write to communicate ideas for a variety of purposes.

a) Generate ideas.
b) Focus on one topic.
c) Revise by adding descriptive words when writing about people, places, things, and events.
d) Use complete sentences in final copies.
e) Begin each sentence with a capital letter and use ending punctuation in final copies.
f) Use correct spelling for commonly used sight words and phonetically regular words in final copies.
g) Share writing with others.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will ~~begin to learn the process for communicating their ideas~~ understand that writing is used for a variety of purposes, including sharing events and telling stories (narrative writing), informing others and making reports (informational writing), labeling and making lists (functional writing), and responding to literature. • ~~Students will learn to plan and write their thoughts in complete sentences with appropriate end punctuation.~~ • Students will use their phonetic knowledge and growing knowledge of ~~high-frequency~~ commonly used sight words to spell words correctly when writing. • ~~Students will be given~~ Providing opportunities for students to share their writing with friends, family, and teachers gives student writing a purpose.	**All students should** • understand that writers communicate ideas for a variety of purposes. • understand that writers plan, write, and share their writing with others.	**To be successful with this standard, students are expected to** • use previous experiences to generate ideas. • participate in teacher-directed brainstorming activities to generate ideas. • participate in shared research and writing projects • participate in teacher-directed prewriting strategies, such as webbing, clustering, and semantic mapping, to organize ideas and information. • ~~participate in teacher-directed charting activities to organize information~~ • ~~write a sentence that focuses on one topic~~ • write informative/explanatory ~~pieces~~ texts that ~~name~~ introduce a topic, state an opinion or some facts, and provide a concluding sentence ~~(e.g., write about Benjamin Franklin)~~. • write narrative pieces that include at least two sequenced events, with some details, and conclusion. • ~~begin to elaborate ideas~~ revise their written pieces by ~~using~~ adding descriptive words (adjectives) when writing about people, places, things, and events; focusing on the topic; and responding to questions and suggestions from peers and teachers. • ~~write~~ in final copies, use ~~simple,~~ complete sentences that begin with a capital letter ~~and~~, use correct ending punctuation, and use commas in dates. • capitalize days of the week and months of the year. • capitalize names of people.

1.13 The student will write to communicate ideas for a variety of purposes.

a) Generate ideas.
b) Focus on one topic.
c) Revise by adding descriptive words when writing about people, places, things, and events.
d) Use complete sentences in final copies.
e) Begin each sentence with a capital letter and use ending punctuation in final copies.
f) Use correct spelling for commonly used sight words and phonetically regular words in final copies.
g) Share writing with others.

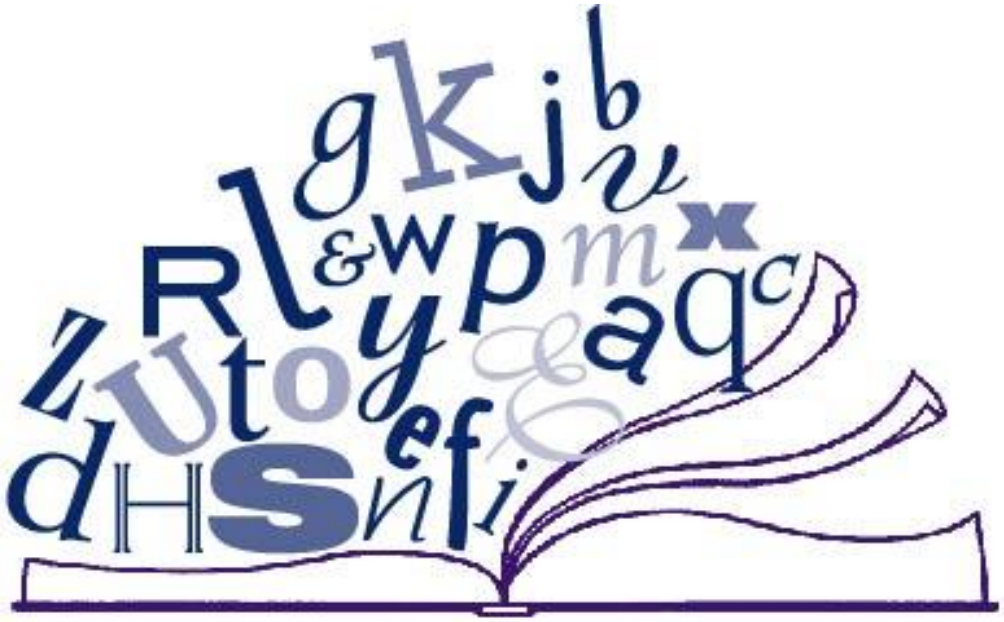
UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• spell commonly used ~~high-frequency~~ sight words and phonetically regular words correctly in final copies. • ~~sound out~~ apply the alphabetic principle when writing words ~~in order to spell them phonetically~~. • use print resources in the classroom in order to spell words. • ~~use correct end punctuation~~ • ~~begin each sentence with a capital letter~~ • use familiar writing forms, including lists, letters, stories, reports, messages, and poems. • distinguish draft writing from final-product writing. • share their writing with others.

1.14 The student will use available technology for reading and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use available technology for reading and writing. • Students also need opportunities to explore and use ~~word processing software~~ available technology to facilitate their writing.	**All students should** • understand that technology is a way to interact with print. • understand that reading and writing skills can be adapted for use with available technology.	**To be successful with this standard, students are expected to** • use ~~a~~ ~~word processor~~ digital tools to produce and publish writing including in collaboration with peers. • use available media for reading and writing. • use electronic templates (e.g., graphic organizers) to organize information. • ask and respond to questions about material presented through various media formats. • share their writing with others.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Two



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the second-grade level, students will engage in a variety of oral activities to develop an understanding of language structure and enhance their ability to communicate effectively. They will listen and speak in discussions and presentations that expand their vocabularies, increase their background knowledge, and enhance both their reading and writing skills.

2.1 The student will demonstrate an understanding of oral language structure.

a) Create oral stories to share with others.
b) Create and participate in oral dramatic activities.
c) Use correct verb tenses in oral communication.
d) Use increasingly complex sentence structures in oral communication.
e) Begin to self-correct errors in language use.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to demonstrate their growth in the use of oral language and vocabulary. • ~~Students will~~ Teachers ~~should~~ will provide opportunities for students to use their knowledge of sentence structure, verb tenses, and vocabulary to create oral stories that have a beginning, middle, and end.	**All students should** • participate in group activities by creating oral stories using complex sentences and appropriate verb tenses.	**To be successful with this standard, students are expected to** • use the story structure of beginning, middle, and end to tell a story of an experience. • maintain and manipulate voice, such as pausing, tempo, and pitch, to convey mood. • add appropriate elaboration and detail while recounting or describing an event. • dramatize familiar stories (e.g., plays, skits, reader's theater). • use present, past, and future tenses appropriately. • provide a referent for pronouns (e.g., ***Serena*** *wanted to sing but* ***she*** *was afraid*). • demonstrate subject-verb agreement. • use more complex sentence structure with conjunctions, such as *while, when, if, because, so,* and *but,* when describing events and giving explanations. • speak in complete sentences when appropriate to task and situation to provide details and clarification. • begin to self-correct errors made when communicating orally.

2.2 The student will expand understanding and use of word meanings.

a) Increase listening and speaking vocabularies.
b) Use words that reflect a growing range of interests and knowledge.
c) Clarify and explain words and ideas orally.
d) Identify and use synonyms and antonyms.
e) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will ~~continue to~~ expand ~~listening and speaking vocabularies~~ understanding and use of word meanings ~~in the context of fiction and nonfiction trade books and other print materials~~ through the use of a variety of texts that reflect the Virginia Standards of Learning for English, history and social science, science, and mathematics. • ~~Students will learn~~ Teachers ~~should~~ will provide opportunities for students to use antonyms, synonyms, and descriptive language to explain and clarify ideas. • Growth in oral language aids in the development of fluency, vocabulary, and comprehension.	**All students should** • understand that specific vocabulary helps explain and clarify ideas.	**To be successful with this standard, students are expected to** • listen to and discuss ~~fiction and nonfiction trade books and other print materials~~ a variety of texts ~~that reflect the Virginia Standards of Learning for English, history and social science, science, and mathematics~~. • use appropriate descriptive language to express ideas, opinions, and feelings. • use language to categorize objects, people, places, or events. • explain the meanings of words within the context of how they are used. • ask questions to clarify or gain further information. • recognize when two or more different words are being used orally to mean contrasting or opposite things. • recognize when different words are being used orally to mean the same or similar things. • use synonyms and antonyms in oral communication. • use specific content area vocabulary in discussions.

2.3 The student will use oral communication skills.

a) Use oral language for different purposes: to inform, to persuade, to entertain, to clarify, and to respond.
b) Share stories or information orally with an audience.
c) Participate as a contributor and leader in a group.
d) Retell information shared by others.
e) Follow three- and four-step directions.
f) Give three- and four-step directions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use oral language skills to respond appropriately in group situations. • Students learn to use selected vocabulary and information to match their purpose — to inform, to persuade, ~~or~~ to entertain, to clarify, and to respond. • Students will learn to ~~summarize~~ retell information as they continue to share stories. • Teachers should provide opportunities for students ~~will~~ to learn the dynamics and roles of working in small groups. • ~~Students will demonstrate an increase in vocabulary by giving and following three-step or four-step directions.~~	**All students should** • understand that oral communication can be used for a variety of purposes. • participate in group activities by sharing stories or information and by following and giving directions.	**To be successful with this standard, students are expected to** • participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, small-group, teacher led). • participate in collaborative conversations for various purposes (e.g., to inform, to persuade, to entertain, to clarify, and to respond). • ask and respond to questions to check for understanding of information presented (e.g., stay on topic, link remarks to those of others). • follow rules for discussions and assigned group roles. • use proper pitch and volume. • speak clearly and distinctly. • share and retell an experience or story to an audience in a logical order, with appropriate facts, and descriptive details. • select vocabulary and nonverbal expressions appropriate to purpose and audience. • express ideas clearly and in an organized manner. • ~~share with an audience stories or information relevant to a topic~~ • contribute information, ask questions, clarify, ~~summarize~~ gather additional information, retell, respond, or build on another person's idea in a small-group setting. • confer with small-group members about how to present information to the class.

2.3 The student will use oral communication skills.

a) Use oral language for different purposes: to inform, to persuade, to entertain, to clarify, and to respond.
b) Share stories or information orally with an audience.
c) Participate as a contributor and leader in a group.
d) Retell information shared by others.
e) Follow three- and four-step directions.
f) Give three- and four-step directions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• carry out a specific group role, such as leader, recorder, materials manager, or reporter. • engage in taking turns in conversations by: ° making certain all group members have an opportunity to contribute; ° listening attentively by making eye contact while facing the speaker; and ° eliciting information or opinions from others. • follow three-step and four-step directions. • give three-step and four-step directions. • sequence three or four steps chronologically in oral directions.

2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words.

a) Count phonemes (sounds) within one-syllable words.
b) Blend sounds to make one-syllable words.
c) Segment one-syllable words into individual speech sounds (phonemes).
d) Add or delete phonemes (sounds) to make words.
e) Blend and segment multisyllabic words at the syllable level.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will orally identify, produce, and manipulate various units of speech sounds within words. • Explicit, step by step, instruction is engaging and allows students to consciously reflect on and manipulate sounds. • Through songs, poems, stories, and word play, students will count phonemes, create rhyming words, segment, substitute and blend sounds to make words. • Phonological awareness is the term used to describe a student's understanding that spoken words consist of sounds. Students who are *phonologically aware* demonstrate an ability to hear and manipulate the sound structure of language at each of the word, syllable and phoneme (individual sound) levels. • Phonological awareness typically progresses in a developmental continuum, (i.e., rhyming → sentence segmenting → syllable blending/segmenting → syllable splitting [onset and rime blending/segmenting] → phoneme blending, segmenting, and manipulating). • **Phonemes** are the smallest units of sound in language (e.g., man has three phonemes /m/-/a/-/n/).	**All students should** • understand that spoken words are made up of individual phonemes, which can be manipulated to make new words.	**To be successful with this standard, students are expected to** • count phonemes in one-syllable words (e.g., man has three phonemes /m/-/a/-/n/, chop has three phonemes /ch/-/o/-/p/, and drop has four phonemes /d/-/r/-/o/-/p/). • isolate and manipulate phonemes. • blend sounds to make one-syllable words (e.g., /p/-/a/-/n/ → pan , /d/-/r/-/i/-/p/ → drip). • segment words by saying each sound (e.g., pan → /p/-/a/-/n/, drip → /d/-/r/-/i/-/p/). • add a phoneme from an orally presented word or rime to make a new word (e.g., pie/pipe, four/fork, cab/crab, ot/lot, ap/map). • delete a phoneme from an orally presented word to make a new word (e.g., rice/ice, beach/bee, weight/weigh, couch/cow). • blend and segment multisyllabic words at the syllable level. identify syllables in a word (e.g., students tap *snowball* → /*snow*/- /*ball*/, clapout the word *hamburger* → /*ham*/- /*bur*/-/*ger*/). • state the word created by blending given syllables together (e.g., /*fan*/-/*tas*/-/*tic*/ → *fantastic*). • delete a syllable from a word and state what remains (e.g., say ~~*snowman*~~ *celebrate* without ~~*snow-*~~*brate [cele]*). • manipulate sounds in words to form new or nonsense words ~~(e.g., say *snowball*. Now say *snowball* with /*man*/ instead of /*ball*/. Say *hamburger*. Now say *hamburger* with /*gum*/ instead of /*ger*/).~~

2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words.

a) Count phonemes (sounds) within one-syllable words.
b) Blend sounds to make one-syllable words.
c) Segment one-syllable words into individual speech sounds (phonemes).
d) Add or delete phonemes (sounds) to make words.
e) Blend and segment multisyllabic words at the syllable level.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students who are *phonemically aware* are able to attend to the individual phonemes of spoken language by demonstrating the higher-order ability to blend, segment, and manipulate them. • Students orally **blend** phonemes (sounds) together to make a word (e.g., /m/-/a/-/n/ → man, /ch/-/o/-/p/ → chop). • Students **segment** spoken words into individual sounds (e.g., man → /m/- /a/- /n/, chop → /ch/- /o/- /p/).		

At the second-grade level, students will continue to be immersed in a print-rich environment. To decipher text, they will use what they have learned about phonemes, decoding, rhyming words, onsets and rimes, contextual clues, and the structure of sentences. Silent and independent reading will increase, with some parts of books read aloud for emphasis, clarification, or pleasure. When they read independently, students will understand and enjoy books that are considerably longer and more complex in plot, syntax, and structure. Students will read and reread to build fluency, which provides the bridge between word recognition and comprehension. Fluent readers are able to make connections among the ideas in the text and between the text and their background knowledge. Students will learn and apply the comprehension strategies of identifying main ideas, making and confirming predictions, and formulating questions about what they are learning across the curricula. Students will also use their knowledge of alphabetical order to locate information.

2.5 The student will use phonetic strategies when reading and spelling.

a) Use knowledge of consonants, consonant blends, and consonant digraphs to decode and spell words.

b) Use knowledge of short, long, and r-controlled vowel patterns to decode and spell words.

c) Decode regular multisyllabic words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to learn and apply their phonetic skills to decode and spell words. • **Consonant blends** are voiced (each letter is heard) combinations of two or three consonants (e.g., *fl-, cl-, dr-, str-).* • **Consonant digraphs** are combinations of two consonants forming a new sound (e.g., *sh-, wh-, ch-, th-*). • **R-controlled vowel patterns** – when a vowel is followed by an *r* it makes a special sound (e.g., /*ar*/- as in *car*, /or/- as in ~~*manor*~~ *storm*, /*ir*/-as in *bird*, /*ur*/- as in *turn*, /*er*/- as in *butter*).	**All students should** • understand the need to apply phonetic strategies to decode and spell words.	**To be successful with this standard, students are expected to** • ~~use phonics, meaning clues, and language structure strategies to reread and self-correct.~~ • apply knowledge of consonants and consonant blends to decode and spell words. • apply knowledge of consonant digraphs *(sh, wh, ch, th)* to decode and spell words. • distinguish long and short vowels when reading one-syllable regularly spelled words. • apply knowledge of the consonant-vowel patterns~~, such as~~ CV (e.g., *go*), VC (e.g., *in*) , CVC (e.g., *pin*), CVCE (e.g., *take*), CVVC (e.g., *wait*), and CVCC (e.g., *wind*), to decode and spell words. • apply knowledge of r-controlled vowel patterns to decode and spell words. • read regularly spelled one- and two-syllable words automatically. • decode regular multisyllabic words. • use phonetic strategies and context to self-correct ~~reading when meaning breaks down~~ for comprehension. • decode words with common prefixes and suffixes.

2.6 The student will use semantic clues and syntax to expand vocabulary when reading.

a) Use information in the story to read words.
b) Use knowledge of sentence structure.
c) Use knowledge of story structure and sequence.
d) Reread and self-correct.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use information from the story and their knowledge of ~~language structure~~ semantic clues and syntax to expand vocabulary when reading. • **Semantic clues** are words that provide meaning and help readers decode and comprehend a text (e.g., The *bear* scared me. The test was a *bear*.) • **Syntactic (syntax) knowledge** is based on familiar word order or grammar that helps readers determine meaning (e.g., students familiar with oral language would know which of the following two sentences sounds right and/or makes sense: *The pitcher threw the ball* or *The ball threw the pitcher*).	**All students should** • understand that they will use a variety of strategies to read unfamiliar words.	**To be successful with this standard, students are expected to** • ~~use prior knowledge to interpret pictures and diagrams in order to predict text~~ • use meaning clues to support decoding. • use surrounding words in a sentence to determine the meaning of a word. • ~~use the context of the sentence to distinguish~~ determine which of the multiple meanings of a word in context makes sense by using semantic clues. • use knowledge of word order, including subject, verb, and adjectives, to check for meaning. • use story structure, titles, pictures, and diagrams to check for meaning. • use ~~phonics~~ phonetic strategies, semantic ~~meaning~~ clues, and ~~language structure strategies~~ syntax to reread and self-correct. • reread to clarify meaning.

2.7 The student will expand vocabulary when reading.

a) Use knowledge of homophones.
b) Use knowledge of prefixes and suffixes.
c) Use knowledge of antonyms and synonyms.
d) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts.
e) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~The intent of this standard is that students will use a variety of strategies to increase fluency and get meaning from print.~~ • The intent of this standard is that students will expand their vocabulary through an understanding of homophones, prefixes, suffixes, ~~contractions, singular possessives, abbreviations,~~ synonyms, and antonyms. • Students will also develop vocabulary by discussing meanings of words and by listening and reading a variety of text across the content areas. • ~~**Homonyms** are words that are typically pronounced the same and have different meanings. Two common types of homonyms are *homophones and homographs.*~~ • **Homophones** are words that are pronounced the same and have different meanings regardless of their spelling (e.g., principle/ principal, prince/prints). • ~~**Homographs** are words that are pronounced differently and share the same spelling (e.g., *We saw the dove fly*, or *She dove into the swimming pool*).~~ • **Antonyms** are words with opposite meanings	**All students should** • understand that their knowledge of homophones, prefixes, suffixes, ~~contractions, singular possessives, simple abbreviations,~~ synonyms, and antonyms can help them read unfamiliar words.	**To be successful with this standard, students are expected to** • use knowledge of homophones (e.g., such as *pair* and *pear*). • identify and recognize meanings of common prefixes and suffixes (e.g., *un-*, *re-*, *mis-*, *dis-*, *-y*, *-ly*, *-er*, *-ed*, *-ing*, *-est*, *-ful*, *-less*, *-able*). • use a known root word as a clue to the meaning of an unknown word with the same root (e.g., *sign*, *signal*). • use common prefixes and suffixes to decode words. • determine the meaning of words when a known prefix is added to a known word (e.g., tie/untie, fold/unfold, write/rewrite, call/recall). • ~~demonstrate an understanding of common suffixes, such as *-er*, *-y*, *-ful*, *-less*, *-est*, and *-ly*~~ • supply synonyms and antonyms for a given word. • use knowledge of antonyms when reading (e.g., *hot/cold*, *fast/slow*, *first/last*). • use knowledge of synonyms when reading (e.g., *small/little*, *happy/glad*). • demonstrate an understanding of what the apostrophe signifies in singular possessive words (e.g., ~~*Mary's*~~ *Maria's*). • demonstrate an understanding of the meaning of contractions (e.g., *don't-do not*). • discuss meanings of words and develop vocabulary (e.g., closely related adjectives such as slender, thin, scrawny; closely related verbs such as look, peek, glance).

2.7 The student will expand vocabulary when reading.

a) Use knowledge of homophones.
b) Use knowledge of prefixes and suffixes.
c) Use knowledge of antonyms and synonyms.
d) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts.
e) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
(e.g., off/on, fast/slow). • **Synonyms** are words with similar meanings (e.g., small, little, tiny). • **Affixes** are word elements that are attached to a stem, base, or root. Common affixes are **prefixes,** which are added to the beginning of words (e.g., *un-*, *re-*, *mis-*, *dis-*, *non-* and *pre-*), and **suffixes**, which are added to the end of words (e.g., *-ly*, *-er*, *-y*, *-ful*, *-less*, *-able*, *-ed*, *-ing*, *-est*).		• use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, notebook). • use specific vocabulary from content area study to express interests and knowledge (e.g., in discussions, by summarizing, through generating and answering questions).

2.8 The student will read and demonstrate comprehension of fictional texts.

a) Make and confirm predictions.
b) Relate previous experiences to the main idea.
c) Ask and answer questions about what is read.
d) Locate information to answer questions.
e) Describe characters, setting, and important events in fiction and poetry.
f) Identify the problem and solution.
g) Identify the main idea.
h) Summarize stories and events with beginning, middle, and end in the correct sequence.
i) Draw conclusions based on the text.
j) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to develop and demonstrate comprehension skills by reading a variety of fictional texts ~~and nonfiction selections~~. • Students will continue to learn to relate their prior knowledge to the topic of the text and use this knowledge, along with information from the text, to make and confirm predictions. • ~~Strategies to activate prior knowledge include brainstorming, class discussions, pre-questions, visual aids, and graphic organizers.~~ • Strategies to increase prior knowledge include building on what students already know, discussing real-life experiences, and providing vicarious experiences through reading. • Students will demonstrate comprehension of story elements in fiction by identifying the characters, setting, and main idea. • The **main idea** is the most important idea from the paragraph or story.	**All students should** • understand that comprehension requires making, confirming and revising predictions. • understand that they must attend to the details of the text in order to comprehend.	**To be successful with this standard, students are expected to** • set a purpose for reading. • use prior knowledge to predict information, and to interpret pictures and diagrams. • use titles and headings to generate ideas about the text • use information from the text to make predictions before, during and after reading. • use information from a selection to confirm predictions (e.g., recall and/or return to the text to locate information to confirm predictions). • find evidence to support predictions (e.g., return to text to locate information, support predictions, and answer questions). • apply knowledge of story structure to predict what will happen next (e.g., beginning/middle/end, problem/solution). • ask and answer simple who, what, when, where, why, and how questions to demonstrate understanding of main details and events in text. • begin to skim for information to answer questions. • explain how illustrations and images contribute to and clarify text.

2.8 The student will read and demonstrate comprehension of fictional texts.

a) Make and confirm predictions.
b) Relate previous experiences to the main idea.
c) Ask and answer questions about what is read.
d) Locate information to answer questions.
e) Describe characters, setting, and important events in fiction and poetry.
f) Identify the problem and solution.
g) Identify the main idea.
h) Summarize stories and events with beginning, middle, and end in the correct sequence.
i) Draw conclusions based on the text.
j) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Teachers should provide opportunities for students ~~will continue~~ to respond in writing to what is read. • ~~Reading levels~~ To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ° independent level – ~~95%~~ 98-100% accuracy, or about ~~1~~ two of every ~~20~~ 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ° instructional level – 90-97% accuracy, or ~~about 1 of every 10~~ three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ° frustration level – less than 90% accuracy, or more than ~~1 of every 10~~ ten of every 100 words misread; student reads with neither accuracy nor fluency, and therefore his or		• describe a character's traits, feelings, and actions as presented in a story or poem. • describe how characters in a story or poem respond to key events. • describe the setting and important events of a story. • identify the problems and solutions ~~presented in a story~~ in stories. • use information from illustrations and words to demonstrate comprehension of characters, settings, and plots. • compare and contrast characters, setting, and important events in at least two versions of the same story (e.g., Cinderella stories). • ~~identify~~ determine the main idea or theme ~~in~~ of paragraphs or stories ~~(e.g., identify the sentence or idea that best summarizes the paragraph or story)~~. • begin to use knowledge of transition words ~~(signal words), such as~~ (e.g., *first*, *next*, and *soon)*, to understand how information is organized in sequence. • organize information, using graphic organizers (e.g., story map, sequence of events). • use the framework of beginning, middle, and end to summarize and retell story events.

2.8 The student will read and demonstrate comprehension of fictional texts.

a) Make and confirm predictions.
b) Relate previous experiences to the main idea.
c) Ask and answer questions about what is read.
d) Locate information to answer questions.
e) Describe characters, setting, and important events in fiction and poetry.
f) Identify the problem and solution.
g) Identify the main idea.
h) Summarize stories and events with beginning, middle, and end in the correct sequence.
i) Draw conclusions based on the text.
j) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD
(Teacher Notes)

her comprehension will be affected.

- **Prosody** refers to the rhythmic and intonational aspect of language, which should be noticeable during oral reading. Prosody contributes to reading fluency and comprehension.
- ~~Students should read about 70 to 110 words per minute in grade-level material by spring~~.
- The table below presents the results of research on oral reading fluency rates for students at the 90th, 75th and 50th percentiles throughout the school year. These rates are reported as words correct per minute (WCPM) for second-grade students reading second-grade text:

Percentile	Fall WCPM	Midyear WCPM	Spring WCPM
90	106	125	142
75	79	100	117
50	51	72	89

Hasbrouck, J.E., & Tindal, G.A. (2006)

- When fully developed, reading *fluency* refers to

ESSENTIAL UNDERSTANDINGS

ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

- describe the structure of a story (e.g., beginning introduces the story, ending concludes the action).
- write responses to what they read (e.g., response logs, write the story with a new ending).
- practice reading and rereading ~~in~~ text that is on their independent reading level to develop accuracy, fluency, and ~~expression~~ prosody.
- pause at commas and periods during oral reading.
- apply phonics, meaning clues, and language structure to decode words and increase fluency.

2.8 The student will read and demonstrate comprehension of fictional texts.

a) Make and confirm predictions.
b) Relate previous experiences to the main idea.
c) Ask and answer questions about what is read.
d) Locate information to answer questions.
e) Describe characters, setting, and important events in fiction and poetry.
f) Identify the problem and solution.
g) Identify the main idea.
h) Summarize stories and events with beginning, middle, and end in the correct sequence.
i) Draw conclusions based on the text.
j) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
a level of accuracy and rate where decoding is relatively effortless; where oral reading is smooth and accurate with correct prosody; and where attention can be allocated to comprehension.*		

* Wolf, M. & Katzir-Cohen, T. (2001). Reading fluency and its intervention. *Scientific Studies of Reading*. (Special Issue on Fluency. Editors: E. Kameenui & D. Simmons). 5, p. 211-238.

2.9 The student will read and demonstrate comprehension of nonfiction texts.

a) Preview the selection using text features.
b) Make and confirm predictions about the main idea.
c) Use prior and background knowledge as context for new learning.
d) Set purpose for reading.
e) Ask and answer questions about what is read.
f) Locate information to answer questions.
g) Identify the main idea.
h) Read and reread familiar passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard ~~relative to nonfiction~~ is that students will read and demonstrate comprehension of nonfiction ~~print materials and trade books~~ texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics~~, in order to build vocabulary and content knowledge~~. • ~~The intent of this standard is that students will continue to develop and demonstrate comprehension skills by reading a variety of fiction and nonfiction selections~~ • Students will continue to learn to relate their prior knowledge to the topic of the text and use this knowledge, along with information from the text, to make and confirm predictions. • ~~Students will relate their own experiences to make sense of and talk about a topic by :~~ ~~○ recognizing similarities between personal experiences and the text (text to self);~~ ~~○ recognizing similarities between the current text and other texts read (text to~~	**All students should** • demonstrate comprehension of nonfiction. • understand that comprehension requires making, confirming and revising predictions. • understand that they must attend to the details of the text in order to comprehend.	**To be successful with this standard, students are expected to** • set a purpose for reading. • use prior knowledge to predict information. • interpret illustrations, such as diagrams, charts, graphs, and maps, to make predictions about the text. • explain how illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify text. • use titles and headings to generate ideas about the text. • skim text for section headings, bold type, and picture captions to help set a purpose for reading. • use print clues, such as bold type, italics, and underlining, to assist in reading. • use information from the text to make and revise predictions. • ~~use text features to make predictions (e.g., illustrations and captions, heading and subheadings, bold and italic print, tables of contents, glossaries, graphs, charts, tables).~~ • use ~~information from the~~ text features to make predictions, locate information, and answer questions (e.g., illustrations and captions, heading and subheadings, bold and italic print, tables of contents, glossaries, graphs, charts, tables).

2.9 The student will read and demonstrate comprehension of nonfiction texts.

a) Preview the selection using text features.
b) Make and confirm predictions about the main idea.
c) Use prior and background knowledge as context for new learning.
d) Set purpose for reading.
e) Ask and answer questions about what is read.
f) Locate information to answer questions.
g) Identify the main idea.
h) Read and reread familiar passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
~~text); and~~ ~~○ recognizing similarities between what is known about the topic and what is discovered in the new text (text-to-world).~~ • Students will also begin to learn the skills of summarizing and ~~locating~~ skimming to locate specific information in nonfiction text. • Students will continue to respond in writing to what is read. • The **main idea** is the most important idea from the paragraph or story. • Common graphic organizers include: ○ Venn diagram; ○ cause and effect; ○ sequencing; ○ compare and contrast; and ○ cycle. • Fluency develops as students have many opportunities to practice reading ~~on~~ at their independent reading level.		• use information from a selection to confirm predictions (e.g., return to the text to locate information, support predictions and answer questions). • ~~find evidence to support predictions~~ • use knowledge of sequence to make predictions while reading functional text such as recipes and other sets of directions (e.g., *first*, *second*, *next*). • begin to skim text for information to answer specific questions. • use knowledge from their own experiences to make sense of and talk about a topic, recognizing similarities between: ○ personal experiences and the text; ○ the current text and other texts read; and ○ what is known about the topic and what is discovered in the new text. • ~~identify~~ determine the main idea ~~(e.g., identify the most important idea from a paragraph).~~ • identify the sequence of steps in functional text such as recipes or other sets of directions. • follow the steps in a set of written directions (e.g., recipes, crafts, board games, mathematics problems, science experiments). • ask and answer questions about what is read to demonstrate understanding (e.g., who, what, when, where, why, and how). • locate information in ~~textbooks and other trade books~~ texts to answer questions (e.g., use text features to locate and answer questions - headings,

2.9 The student will read and demonstrate comprehension of nonfiction texts.

a) Preview the selection using text features.
b) Make and confirm predictions about the main idea.
c) Use prior and background knowledge as context for new learning.
d) Set purpose for reading.
e) Ask and answer questions about what is read.
f) Locate information to answer questions.
g) Identify the main idea.
h) Read and reread familiar passages with fluency, accuracy, and meaningful expression.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		subheadings, bold print, charts, tables of contents). • begin to use knowledge of transition words (signal words) ~~such as~~ (e.g., *first*, *next*, and *soon*), to understand how information is organized. • organize information, using graphic organizers. • write responses to what they read. • reread as necessary to confirm and self-correct for word accuracy and comprehension. • ~~read fiction and nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~

2.10 The student will demonstrate comprehension of information in reference materials.

a) Use table of contents.
b) Use pictures, captions, and charts.
c) Use dictionaries, glossaries, and indices.
d) Use online resources.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use available reference materials to locate information.	**All students should** • understand how to locate information in simple reference materials.	**To be successful with this standard, students are expected to** • locate titles and page numbers, using a table of contents. • use a table of contents to locate information in content-area books. • interpret pictures, captions, diagrams, and tables. • interpret information presented in bar graphs, charts, and pictographs. • use dictionaries, glossaries, and indices to locate key facts or information. • consult reference materials as needed to spell, check spelling, and understand grade-appropriate words. • alphabetize words to the second and third letter. • locate words in reference materials, using first, second, and third letter. • locate guide words, entry words, and definitions in dictionaries and indices. • use online resources to gather information on a given topic (e.g., teacher identified Web sites and online reference materials).

At the second-grade level, students will continue to develop reading and writing together. They will be given daily opportunities to write and will be expected to revise selected pieces and share them with others. Students often pattern their writing after familiar authors. When students write stories and letters, the instructional emphasis will be on having a beginning, middle, and end. At the sentence level, they will be expected to begin to elaborate on their ideas and use basic conventions. They will also begin to apply written communication skills across all content areas.

2.11 The student will maintain legible printing and begin to make the transition to cursive.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will maintain ~~manuscript~~ legible printing ~~through use and at the same time begin to make~~ while making the transition to cursive. • When to make the transition to cursive is a local decision, however, once begun, cursive writing should be taught and practiced in a systematic, direct manner.	**All students should** • understand that legible printing is an important tool of written communication.	**To be successful with this standard, students are expected to** • write ~~neatly~~ legibly. • space words in sentences. • space sentences in writing. • learn basic strokes for cursive.

2.12 The student will write stories, letters, and simple explanations.

a) Generate ideas before writing.
b) Organize writing to include a beginning, middle, and end for narrative and expository writing.
c) Expand writing to include descriptive detail.
d) Revise writing for clarity.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to learn the process for communicating their ideas through writing. • The emphasis will be on generating and organizing ideas before writing and revising for clarity after writing. • At this level, teachers should introduce two important modes for writing: ◦ **Informative/explanatory** – students write informative/explanatory texts to examine a topic and convey ideas and information clearly; and ◦ **Narrative** - students write narratives to develop real or imagined experiences or events using descriptive details, and clear event sequences. • The three domains of writing are: ◦ **composing** – the structuring and elaborating a writer does to construct an effective message for readers (e.g., staying on topic; providing a beginning, middle, and end); ◦ **written expression** – those features that show the writer purposefully shaping and controlling language to affect readers (e.g., specific vocabulary, descriptive words, tone/voice); and ◦ **usage/mechanics** – the features that cause	**All students should** • understand that written communication should be well planned and clear to the reader.	**To be successful with this standard, students are expected to** • generate ideas and organize information before writing by: ◦ participating in brainstorming activities; ◦ making lists of information; ◦ talking to classmates or teacher about what to write; and ◦ use~~e~~ing graphic organizers to plan their writing. • ~~brainstorm for ideas~~ • ~~organize information with graphic organizers, such as story maps, webs, and event frames.~~ • ~~verbalize their writing plan to a partner or teacher~~ • ~~write stories that~~ include a beginning, middle, and end in narrative and expository writing. • participate in shared research and writing projects. • write informative/explanatory pieces that introduce the topic, use facts or opinions, and provide a concluding statement. • write narratives describing events with details, sequence, and a closure. • stay on topic. • write complete sentences. • begin to ~~group sentences into~~ compose paragraphs. • use adjectives to elaborate and expand simple sentences. • describe events, ideas, and personal stories with descriptive details. • use time-order words, such as *first*, *next*, *then*, and *last*, to sequence and

2.12 The student will write stories, letters, and simple explanations.

a) Generate ideas before writing.
b) Organize writing to include a beginning, middle, and end for narrative and expository writing.
c) Expand writing to include descriptive detail.
d) Revise writing for clarity.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
written language to be acceptable and effective for standard discourse (e.g., spelling, punctuation, capitalization, grammar). (Note: Students are not expected to know these terms.)		organize their writing. • produce, and expand complete simple and compound sentences (e.g., *The girl listened to the music; The little girl listened to the loud music*). • strengthen writing as needed by revising writing for clarity (e.g., sentences begin with capital letters and end with punctuation, writing stays on topic, writing includes details). • consult beginning reference materials, to check and correct spelling (e.g., beginning dictionaries). • delete or add words to clarify meaning during the revising process. • avoid stringing ideas together with *and* or *then*. • begin to learn and use the writing domains of composing, written expression, and usage/mechanics. • ~~use available technology to write.~~

2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

a) Recognize and use complete sentences.
b) Use and punctuate declarative, interrogative, and exclamatory sentences.
c) Capitalize all proper nouns and the word *I*.
d) Use singular and plural nouns and pronouns.
e) Use apostrophes in contractions and possessives.
f) Use contractions and singular possessives.
g) Use knowledge of simple abbreviations.
h) Use correct spelling for commonly used sight words, including compound words and regular plurals.
i) Use commas in the salutation and closing of a letter.
j) Use verbs and adjectives correctly in sentences.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to learn to edit and self-correct their writing. • Students should apply grammatical rules to their writing. • **Declarative sentences** form a statement (e.g., She is my friend.). • **Interrogative sentences** form a question (e.g., What time is it?). • **Exclamatory sentences** use powerful emotions or feelings (e.g.,We won the game!).	**All students should** • understand that proper grammar, capitalization, punctuation and spelling contribute to the meaning of writing.	**To be successful with this standard, students are expected to** • recognize and use complete sentences. • punctuate declarative, interrogative, and exclamatory sentences (e.g., period, question mark, exclamation point). • capitalize all proper nouns and ~~all~~ words at the beginning of sentences. • capitalize the word *I*. • use singular and plural nouns and pronouns. • ~~use singular and plural pronouns~~ • use frequently occurring irregular plural nouns (e.g., *feet*, *children*, *teeth*, *fish*). • use apostrophes ~~in~~ to form contractions and common singular possessives. • identify simple abbreviations, including those for titles (e.g., *Mr*., *Mrs*., *Ms*., and *Dr*.), calendar words (e.g., *Jan., Feb., Mon., Tue.*), and address words (e.g., *St., Rd.*). • spell ~~high-frequency~~ commonly used sight words, compound words, and regular plurals correctly. • use commas in the salutation (e.g., *Dear Tyrell*,) and closing (e.g.,

2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

a) Recognize and use complete sentences.
b) Use and punctuate declarative, interrogative, and exclamatory sentences.
c) Capitalize all proper nouns and the word *I*.
d) Use singular and plural nouns and pronouns.
e) Use apostrophes in contractions and possessives.
f) Use contractions and singular possessives.
g) Use knowledge of simple abbreviations.
h) Use correct spelling for commonly used sight words, including compound words and regular plurals.
i) Use commas in the salutation and closing of a letter.
j) Use verbs and adjectives correctly in sentences.

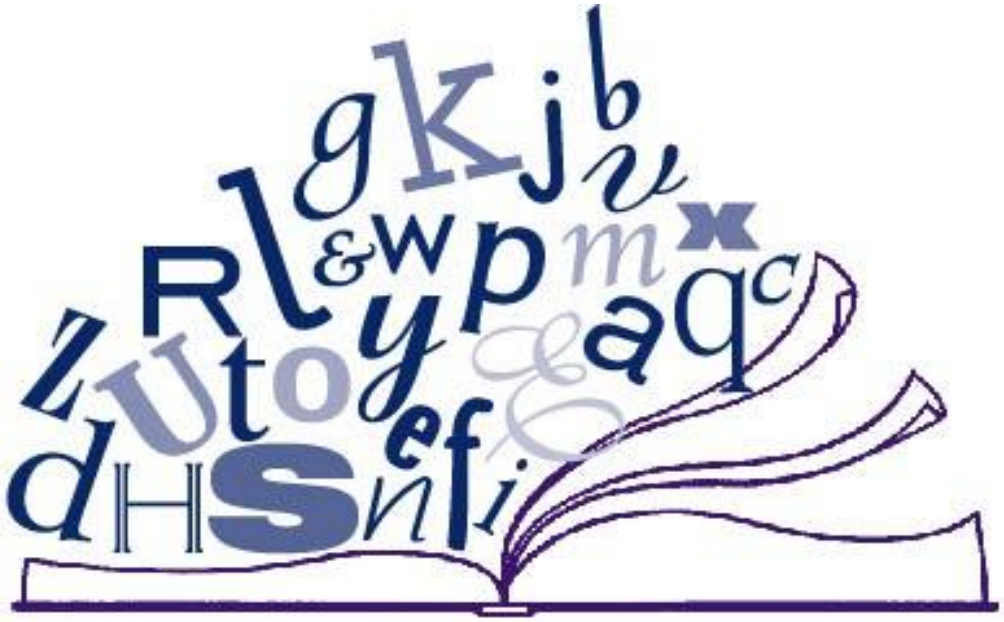
UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		(*Sincerely,*) of a letter. • use verbs and adjectives correctly in sentences (e.g., The friendly *girls talk* loudly. The friendly *girl talks* loudly.).

2.14 The student will use available technology for reading and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will make use of available technology for reading and writing. • Provide opportunities for students to explore and use available technology to facilitate their reading and writing.	**All students should** • use available technology for reading and writing.	**To be successful with this standard, students are expected to** • use available technology and media ~~to write~~ for reading and writing, including in collaboration with peers. • use available technology to produce writing. • use available media for reading and writing. • ask and respond to questions about material presented through various media formats.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Three



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the third-grade level, students will learn oral communication skills to participate in discussions about learning and take part in collaborative learning projects. In order to be contributing participants in discussions, students must know the skills involved in effectively communicating ideas and opinions, including such skills as actively listening to others and constructively agreeing or disagreeing with them. While using grammatically correct language, students will learn how to present information succinctly and confidently in oral presentations.

3.1 The student will use effective communication skills in group activities.

a) Listen attentively by making eye contact, facing the speaker, asking questions, and summarizing what is said.
b) Ask and respond to questions from teachers and other group members.
c) Explain what has been learned.
d) Use language appropriate for context.
e) Increase listening and speaking vocabularies.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will communicate effectively during discussions in group settings. • Students will interact with group members by asking and responding to questions and explaining what has been said or learned. • Teacher should provide opportunities for students to develop skills for both speaking (expressive) and listening (receptive) vocabulary (e.g., have one student read a paragraph that is rich in descriptive detail aloud to a partner or group of students. Those students then draw the scene as they listen.)	**All students should** • participate effectively in group activities by using language appropriate for the context and by taking turns in conversations and moving group discussions forward. • increase listening and speaking vocabularies.	**To be successful with this standard, students are expected to** • participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, small-group, teacher led). • engage in taking turns in conversations by: ◦ making certain all group members have an opportunity to contribute; ◦ listening attentively by making eye contact while facing the speaker; ◦ eliciting information or opinions from others; ◦ supporting opinions with appropriate ideas, examples, and details; and ◦ indicating disagreement in a constructive manner. • take initiative in moving a group discussion forward by: ◦ following rules for discussions and assigned group roles; ◦ contributing information that is on topic; ◦ answering questions; ◦ asking clarifying questions of the speaker; ◦ summarizing the conclusions reached in the discussion; and ◦ explaining what has been learned. • ask and respond to questions to check for understanding of information presented (e.g., stay on topic, link remarks to those of others). • use language appropriate for the context of the discussion. • increase their listening and speaking vocabularies through group activities such as: ◦ engaging in activities that require following directions; and ◦ attempting to use new words in meaningful sentences.

3.2 The student will present brief oral reports using visual media.

a) Speak clearly.
b) Use appropriate volume and pitch.
c) Speak at an understandable rate.
d) Organize ideas sequentially or around major points of information.
e) Use contextually appropriate language and specific vocabulary to communicate ideas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

• The intent of this standard is that students will convey information through a formal oral presentation using visual media.
• Students will be expected to organize information logically, ~~and~~ use ~~correct grammar~~ language appropriate for the context, and use specific vocabulary for communicating ideas.
• During the oral report, students will be expected to use a rate, volume, and pitch that keeps the audience engaged.
	All students should
	• ~~cluster or sequence~~ organize information on a topic when presenting an oral report.
	• speak clearly at an understandable rate and volume.
		To be successful with this standard, students are expected to
		• deliver oral presentations in an engaging manner that maintains audience interest by:
		  ◦ reporting on a topic, telling a story, or recounting an experience with appropriate facts and relevant details;
		  ◦ presenting information with expression and confidence;
		  ◦ varying tone, pitch, and volume to convey meaning;
		  ◦ speaking at an understandable rate;
		  ◦ selecting words and phrases for effect;
		  ◦ using visual media (e.g., images, posters, and charts) to emphasize or enhance facts or details;
		  ◦ using specific vocabulary appropriate for the audience and the topic; and
		  ◦ using grammatically correct language.
		• stay on topic during presentations.
		• organize ideas sequentially or around major points of information.
		• answer questions from the audience.
		• evaluate their own presentations, using class-designed criteria.

At the third-grade level, students will make the transition from a focus on learning how to read to an emphasis on reading to learn and reading for enjoyment. An emphasis will be placed on learning about words, reading age-appropriate text with fluency and expression, and learning comprehension strategies. They will build reading comprehension through reading a variety of literature, to include, but not be limited to, narrative fiction, such as folktales, and nonfiction materials, such as biographies and autobiographies. Students will continue to develop strategic reading skills, such as word analysis and construction of meaning from text. Process strategies that they implement before, during, and after reading will assist their comprehension in all subjects (for example, when reading word problems in mathematics, investigating scientific concepts, and comparing important people and events in history). Students will use a variety of print resources to research topics.

3.3 The student will apply word-analysis skills when reading.
a) Use knowledge of regular and irregular vowel patterns.
b) Decode regular multisyllabic words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use word-attack skills to decode words in order to read fluently. • These skills include the use of phonics (~~all~~ regular and irregular vowel patterns and consonant combinations), ~~structural analysis (roots and affixes),~~ and context to read multisyllabic words ~~with multiple pronunciations~~.	**All students should** • understand the need to apply word-analysis skills to decode words.	**To be successful with this standard, students are expected to** • apply knowledge of ~~all~~ regular and irregular vowel patterns to decode words. • apply knowledge of ~~diphthongs, such as, *aw* and *oy*~~ ambiguous vowel patterns (e.g., ou/ow, oi/oy, oo, aw) to decode words. • apply knowledge of the change in tense (-*ed*), number (-*s*), and degree (-*er* and -*est*) signified by inflected endings to decode words. • decode regular multisyllabic words in order to read fluently.

3.4 The student will expand vocabulary when reading.

a) Use knowledge of homophones.
b) Use knowledge of roots, affixes, synonyms, and antonyms.
c) Apply meaning clues, language structure, and phonetic strategies.
d) Use context to clarify meaning of unfamiliar words.
e) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts.
f) Use vocabulary from other content areas.
g) Use word reference resources including the glossary, dictionary, and thesaurus.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

• The intent of this standard is that students will expand their vocabulary when reading.
• Students who are able to apply ~~meaning~~ semantic clues, language structure, and phonetic strategies independently become fluent readers.
• Students will use combined knowledge of phonics and word analysis skills in decoding words (e.g., prefixes, suffixes, multisyllabic words).
• ~~**Homonyms** are words that are typically pronounced the same and have different meanings. Two common types of homonyms are *homophones and homographs.*~~
• **Homophones** are words that are pronounced the same and have different meanings regardless of their spelling (e.g., principle/ principal, prince/prints).
• ~~**Homographs** are words that are pronounced differently and share the same spelling (e.g., *We saw the dove fly*, or *She dove into the swimming pool*).~~
• **Affixes** are added to root words and change the word's meaning (e.g., prefix, suffix).
	All students should
	• use meaning clues, language structure, phonetic strategies, text structure, and surface features of text to read.
	• use reference resources to learn word meanings.
		To be successful with this standard, students are expected to
		• use knowledge of ~~homonyms/~~homophones~~, such as~~ (e.g., *be/bee*, *hear/here*, and *sea/see*) to understand unfamiliar words.
		• apply knowledge of roots to decode unknown words with the same root (e.g., *company, companion*).
		• apply knowledge of affixes, (e.g., prefixes such as *ex-*, *dis-*, *un-*, *re-*, *mis-*, *non-*, *pre-*; suffixes such as *-ly*, *-ful*, *-less*, *-able*, *-tion*, *-ness*, *and –ment*) to decode words.
		• determine the meaning of new words formed when a known affix is added to the known word (e.g., *care*/*careless*, *heat*/*reheat*).
		• use knowledge of synonyms (e.g., *big/large*, *mad/angry*, *ache/pain*).
		• use knowledge of antonyms, (e.g., asleep/awake, smile/frown, start/finish).
		• use context clues to verify meaning of unfamiliar words and determine appropriate homophone usage.
		• using context clues, such as a restatement, a ~~renaming or~~ synonym, an example, or a direct description or definition included in the sentence or paragraph, to clarify the meaning of unfamiliar words.
		• apply understanding of language structure to make meaning from text by
		  ° using ~~signal~~ transition words of time sequence~~, such as~~ (e.g., *first*, *second*, *next*, *later*, *after*, and *finally*);
		  ° using ~~signal~~ transition words of compare-contrast~~, such as~~ (e.g., *like*, *unlike*, *different*, and *same*); and

3.4 The student will expand vocabulary when reading.

a) Use knowledge of homophones.
b) Use knowledge of roots, affixes, synonyms, and antonyms.
c) Apply meaning clues, language structure, and phonetic strategies.
d) Use context to clarify meaning of unfamiliar words.
e) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts.
f) Use vocabulary from other content areas.
g) Use word reference resources including the glossary, dictionary, and thesaurus.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ using ~~signal~~ transition words of cause-effect~~, such as~~ (e.g., *because*, *if…then*, *when…then*). ◦ using vocabulary from history and social science, mathematics, and science; and ◦ using the glossary, dictionary, and thesaurus as reference resources to learn word meanings.

3.5 The student will read and demonstrate comprehension of fictional text and poetry.

a) Set a purpose for reading.
b) Make connections between previous experiences and reading selections.
c) Make, confirm, or revise predictions.
d) Compare and contrast settings, characters, and events.
e) Identify the author's purpose.
f) Ask and answer questions about what is read.
g) Draw conclusions about text.
h) Identify the problem and solution.
i) Identify the main idea.
j) Identify supporting details.
k) Use reading strategies to monitor comprehension throughout the reading process.
l) Differentiate between fiction and nonfiction.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~The intent of this standard is that students will develop a variety of comprehension strategies that they can apply to make meaning from text.~~ • The intent of this standard is that students will apply different strategies to read and comprehend fictional text ~~including fiction, nonfiction, content texts, and other printed materials~~ and poetry. • Students should be able to connect their previous experiences and knowledge to the text in order to make predictions and then use evidence from the text to confirm or revise their predictions. • Students will talk and write about similarities and differences that they see in various books by the same author or in various selections within the same genre. • In classroom discussion, students will	**All students should** • develop a variety of comprehension strategies that can be applied to make meaning from fictional text and poetry ~~selections~~. • develop an increased understanding of the essential elements and characteristics of fictional text and poetry. • develop the ability to use key supporting details to determine the lessons or morals from fictional text and poetry.	**To be successful with this standard, students are expected to** • read for a specific purpose by: ◦ locating specific information in a reading selection; ◦ identifying details that support a stated main idea; and ◦ expressing a stated main idea in their own words. • make a variety of connections with the text, such as: ◦ connections between their own personal experiences and what is happening in the text; ◦ connections between the text they are reading and other texts they have read, such as identifying a similar plot or character; and ◦ connections between what they already know about the topic and what they find in the reading that is new to them. • use specific details to make, justify, and modify predictions by: ◦ identifying details from their own experiences and knowledge that supports their predictions; ◦ identifying information from the text that supports or contradicts a prediction; and ◦ revising predictions based on new understandings.

3.5 The student will read and demonstrate comprehension of fictional text and poetry.

a) Set a purpose for reading.
b) Make connections between previous experiences and reading selections.
c) Make, confirm, or revise predictions.
d) Compare and contrast settings, characters, and events.
e) Identify the author's purpose.
f) Ask and answer questions about what is read.
g) Draw conclusions about text.
h) Identify the problem and solution.
i) Identify the main idea.
j) Identify supporting details.
k) Use reading strategies to monitor comprehension throughout the reading process.
l) Differentiate between fiction and nonfiction.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
contribute their ideas about an author's craft, including such elements as word choice, plot and organization, beginnings and endings of selections, and character development. • Students will ~~learn about specific~~ read various types of ~~folktales~~ fictional texts (e.g., children's adventure stories, folktales, legends, fables, fantasy, realistic fiction, and myth), and poetry. ◦ ~~**tall tale** – exaggerates larger-than-life characters, such as Pecos Bill and John Henry, which may or may not have a historical basis and may create a humorous picture of these characters~~ ◦ ~~**trickster tale** – tells the story of a character (the trickster) who fools others, the good character does not fall for the trick, the bad character does fall for the trick and gets what he/she deserves~~ ◦ ~~**legend** – records the deeds of real or supposedly real individuals who have been~~		• gain meaning before, during, and after reading by: ◦ asking and answering questions about what is read to clarify meaning; ◦ asking and answering questions to predict what will happen next; ◦ understanding that sometimes two or more pieces of information need to be put together to answer a question; ◦ understanding that some questions are answered directly in the text; ◦ understanding that the answers to some questions must be inferred from the reader's background experiences and knowledge; and ◦ understanding the basic ~~plots~~ lessons or morals of fairy tales, myths, folktales, legends, and fables from diverse cultures. • apply knowledge of characterization by ◦ describing ~~identifying~~ a character's attributes (traits, motivations or feelings); ◦ using evidence from the text to support generalizations about the character; ◦ ~~identifying how the attributes of one character are similar to or different from those of another character~~ ◦ compare~~ing~~ and contrasting ~~two~~ characters within a selection or between/among two or more selections; and

3.5 The student will read and demonstrate comprehension of fictional text and poetry.

a) Set a purpose for reading.
b) Make connections between previous experiences and reading selections.
c) Make, confirm, or revise predictions.
d) Compare and contrast settings, characters, and events.
e) Identify the author's purpose.
f) Ask and answer questions about what is read.
g) Draw conclusions about text.
h) Identify the problem and solution.
i) Identify the main idea.
j) Identify supporting details.
k) Use reading strategies to monitor comprehension throughout the reading process.
l) Differentiate between fiction and nonfiction.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
~~elevated to the status of hero because they demonstrated virtues respected by their culture~~ ◦ ~~**fairy tale** – begins with "Once upon a time…" and ends with "…happily ever after," has events usually happening in threes, and usually involves magic~~ ◦ ~~**pourquoi tale** – explains how or why something has come to be~~ ◦ ~~**myth** – a traditional story of a supposedly historical event, presenting part of the world view of a people or explaining a practice, belief, or natural phenomenon~~ • After reading, students should be able to demonstrate new understandings through writing, discussion, and graphic representations. • Fluent readers read with automaticity, and they reread and self-correct as needed.		◦ explaining how the actions of characters contribute to the sequence of events. • make generalizations about a character based on that character's response to a problem, the character's goal, and what the character says ~~to other characters~~ or thinks. • apply knowledge of setting by: ◦ identifying the time and place of a story, using supporting details from the text; and ◦ identifying the details that make two settings similar or different. • ~~write responses that go beyond literal restatements.~~ • ~~support with specific details generalizations about characters from a selection~~ • compare and contrast settings, characters, and events. • identify the author's purpose (e.g., entertain, perform, persuade). • ask and answer questions about the text to demonstrate understanding. • draw conclusions about text to make meaning ~~a character and/or the plot~~

3.5 The student will read and demonstrate comprehension of fictional text and poetry.

a) Set a purpose for reading.
b) Make connections between previous experiences and reading selections.
c) Make, confirm, or revise predictions.
d) Compare and contrast settings, characters, and events.
e) Identify the author's purpose.
f) Ask and answer questions about what is read.
g) Draw conclusions about text.
h) Identify the problem and solution.
i) Identify the main idea.
j) Identify supporting details.
k) Use reading strategies to monitor comprehension throughout the reading process.
l) Differentiate between fiction and nonfiction.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~Reading levels~~ To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ◦ independent level – ~~95%~~ 98-100% accuracy, or about ~~1~~ two of every ~~20~~ 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ◦ instructional level – 90-97% accuracy, or ~~about 1 of every 10~~ three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ◦ frustration level – less than 90% accuracy, or more than ~~1 of every 10~~ ten of every 100 words misread; student reads with		~~from a selection~~. • identify the problem (conflict) and solution, main idea or theme, and supporting details. • use reading strategies to monitor comprehension throughout the reading process by: ◦ previewing and making predictions before reading; ◦ asking questions to confirm or refute predictions during reading; ◦ using context to confirm or self-correct word recognition and understanding, rereading as necessary; ◦ becoming aware of when they do not understand (e.g., by reflecting upon and articulating what exactly is causing difficulty); and ◦ discussing the story or poem and/or writing a summary after reading. • learn to differentiate between fiction and nonfiction by distinguishing realism from fantasy, and fact from opinion. • ~~organize information or events~~ • read with sufficient accuracy and fluency to support comprehension. • practice reading and rereading familiar ~~fiction and nonfiction~~ text that is on

3.5 The student will read and demonstrate comprehension of fictional text and poetry.

a) Set a purpose for reading.
b) Make connections between previous experiences and reading selections.
c) Make, confirm, or revise predictions.
d) Compare and contrast settings, characters, and events.
e) Identify the author's purpose.
f) Ask and answer questions about what is read.
g) Draw conclusions about text.
h) Identify the problem and solution.
i) Identify the main idea.
j) Identify supporting details.
k) Use reading strategies to monitor comprehension throughout the reading process.
l) Differentiate between fiction and nonfiction.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
neither accuracy nor fluency, and therefore his or her comprehension will be affected. • **Prosody** refers to the rhythmic and intonational aspect of language, which should be noticeable during oral reading. Prosody contributes to reading fluency and comprehension. • The table below presents the results of research on oral reading fluency rates for students at the 90th, 75th and 50th percentiles throughout the school year. These rates are reported as words correct per minute (WCPM) for third-grade students reading third-grade text:		their independent reading level to develop ~~with~~ fluency, ~~and~~ accuracy, and ~~expression~~ prosody.

Percentile	Fall WCPM	Midyear WCPM	Spring WCPM
90	128	146	162
75	99	120	137
50	71	92	107

Hasbrouck, J.E., & Tindal, G.A., 2006

3.5 The student will read and demonstrate comprehension of fictional text and poetry.

a) Set a purpose for reading.
b) Make connections between previous experiences and reading selections.
c) Make, confirm, or revise predictions.
d) Compare and contrast settings, characters, and events.
e) Identify the author's purpose.
f) Ask and answer questions about what is read.
g) Draw conclusions about text.
h) Identify the problem and solution.
i) Identify the main idea.
j) Identify supporting details.
k) Use reading strategies to monitor comprehension throughout the reading process.
l) Differentiate between fiction and nonfiction.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• When fully developed, reading *fluency* refers to a level of accuracy and rate where decoding is relatively effortless; where oral reading is smooth and accurate with correct prosody; and where attention can be allocated to comprehension.*		

* Wolf, M. & Katzir-Cohen, T. (2001). Reading fluency and its intervention. *Scientific Studies of Reading*. (Special Issue on Fluency. Editors: E. Kameenui & D. Simmons). 5, p. 211-238.

3.6 The student will continue to read and demonstrate comprehension of nonfiction texts.

a) Identify the author's purpose.
b) Use prior and background knowledge as context for new learning.
c) Preview and use text features.
d) Ask and answer questions about what is read.
e) Draw conclusions based on text.
f) Summarize major points found in nonfiction texts.
g) Identify the main idea.
h) Identify supporting details.
i) Compare and contrast the characteristics of biographies and autobiographies.
j) Use reading strategies to monitor comprehension throughout the reading process.
k) Identify new information gained from reading.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will read and demonstrate comprehension of nonfiction ~~print materials and trade books~~ texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics~~, in order to build vocabulary and content knowledge~~. • ~~Students will demonstrate comprehension of a selection by using before , during , and after reading strategies.~~ • ***Before*** reading, students should preview the text and activate prior knowledge to formulate ideas and make predictions of what the text is about and how it is organized. • ***During*** reading, students should maintain an active interaction with text while revising and refining their previous ideas and predictions.	**All students should** • demonstrate comprehension of nonfiction. • understand that text formats can be used to set a purpose for reading. • demonstrate an understanding of the characteristics of biography and autobiography.	**To be successful with this standard, students are expected to** • ~~read nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~ • identify the author's purpose (e.g., entertain, inform, persuade). • ~~make a variety of connections with the text~~ use prior and background knowledge as context for new learning by: ~~such as~~ ◦ ~~connections~~ recognizing similarities between their own personal experiences and the text; ◦ ~~connections~~ recognizing similarities between the text they are reading and other texts they have read; and ◦ ~~connections~~ recognizing similarities between what they already know about the topic and what they find in the reading that is new to them. • use text formats such as the following to preview, ~~and~~ set a purpose for reading, and locate information relevant to a given topic efficiently: ◦ ~~poetry features, such as lines and stanzas~~ ◦ content text features, such as headings and chapter layout by topic; ◦ functional formats, such as advertisements, flyers, and directions;

3.6 The student will continue to read and demonstrate comprehension of nonfiction texts.

a) Identify the author's purpose.
b) Use prior and background knowledge as context for new learning.
c) Preview and use text features.
d) Ask and answer questions about what is read.
e) Draw conclusions based on text.
f) Summarize major points found in nonfiction texts.
g) Identify the main idea.
h) Identify supporting details.
i) Compare and contrast the characteristics of biographies and autobiographies.
j) Use reading strategies to monitor comprehension throughout the reading process.
k) Identify new information gained from reading.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
New ideas are linked to prior learning. • ***After*** reading, students should consolidate what they have read in an effort to fully comprehend the text. New ideas are linked to prior learning. • Students will learn the shared characteristic of biography and autobiography: both are based on verifiable facts about real-life people. • Students will learn the distinguishing characteristics of biography and autobiography. ~~autobiography is a type of nonfiction in which a person tells the story of his/her own life, while biography is a type of nonfiction in which a person tells the story of someone else's life~~.		◦ specialized type, such as bold face and italics; and ◦ visually and graphically represented information, such as charts, graphs, graphic organizers, pictures, and photographs. • apply understanding of text structure to guide reading by: ◦ making predictions based on knowledge of text form types, such as narrative, informational, graphic, and functional; ◦ making predictions based on knowledge of literary forms, such as ~~folktale,~~ biography~~,~~ and autobiography; and ◦ identifying sequence and cause-effect relationships of information in functional texts, such as recipes and other sets of directions. • gain meaning before, during, and after reading by: ◦ asking and answering questions to clarify meaning; ◦ understanding that sometimes two or more pieces of information need to be put together to answer a question; and ◦ understanding that some questions are answered directly in the text. • draw conclusions about what they have read. • summarize major points in a selection. • identify details that support the main idea of a nonfiction selection.

3.6 The student will continue to read and demonstrate comprehension of nonfiction texts.

a) Identify the author's purpose.
b) Use prior and background knowledge as context for new learning.
c) Preview and use text features.
d) Ask and answer questions about what is read.
e) Draw conclusions based on text.
f) Summarize major points found in nonfiction texts.
g) Identify the main idea.
h) Identify supporting details.
i) Compare and contrast the characteristics of biographies and autobiographies.
j) Use reading strategies to monitor comprehension throughout the reading process.
k) Identify new information gained from reading.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• state in their own words the main idea of a nonfiction selection. • ~~organize, using graphic organizers such as a Venn diagram or time line, information by chronological sequence, by cause-effect relationship, and through comparing and contrasting~~ • ~~summarize what they have read~~ • ~~know the shared and distinguishing characteristics of autobiography and biography~~ • compare and contrast the ~~lives of two people described in~~ characteristics of biographies and~~/or~~ autobiographies. • monitor their comprehension throughout the reading process by: ° becoming aware of when they do not understand; ° identifying exactly what is causing them difficulty; and ° generating their own questions to help integrate units of meaning. • use ~~surface~~ text features ~~of text~~ to make meaning ~~from text~~ by: ° applying phonetic strategies; ° using punctuation indicators, such as commas, periods, exclamation points, question marks, and apostrophes showing contraction and possession;

3.6 The student will continue to read and demonstrate comprehension of nonfiction texts.

a) Identify the author's purpose.
b) Use prior and background knowledge as context for new learning.
c) Preview and use text features.
d) Ask and answer questions about what is read.
e) Draw conclusions based on text.
f) Summarize major points found in nonfiction texts.
g) Identify the main idea.
h) Identify supporting details.
i) Compare and contrast the characteristics of biographies and autobiographies.
j) Use reading strategies to monitor comprehension throughout the reading process.
k) Identify new information gained from reading.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ applying knowledge of simple and compound sentence structures; ◦ knowing when meaning breaks down and then rereading to self-correct; and ◦ using illustrations to gain information (e.g., maps, photographs). • identify new information gained from reading. • practice reading and rereading ~~read~~ familiar ~~fiction and~~ nonfiction texts with fluency and accuracy.

3.7 The student will demonstrate comprehension of information from a variety of print and electronic resources.
a) Use encyclopedias and other reference books, including online reference materials.
b) Use table of contents, indices, and charts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use a variety of print and electronic resources to gather information on a specific topic. • Students will select which resource is best for locating a specific type of information.	**All students should** • understand ways to select the best resource for gathering information on a given topic.	**To be successful with this standard, students are expected to** • make decisions about which resource is best for locating a given type of information. • locate selected information in ~~glossaries, dictionaries, thesauruses~~, encyclopedias, atlases, and other print and online reference materials. • retrieve information from electronic sources. • use the Internet to find information on a given topic. • ~~use a printer to create hard copies of information retrieved from electronic sources.~~

At the third-grade level, students will continue to develop their writing skills. When they write letters, stories, and simple explanations, the instructional emphasis will be on paragraph development. Their sentences will become more complex, and they will learn to select details to elaborate the ~~central~~ main idea of the paragraph. Students will revise and edit for correct sentence formation, grammar, capitalization, punctuation, and spelling. They will use their written communication skills across the curricula.

3.8 The student will write legibly in cursive.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand that good handwriting is an important tool of written communication. Neat and legible handwriting is well received by the reader, while messy, hard-to-read writing may lead to misunderstanding ~~and annoyance~~. • Although cursive letters are often introduced in second grade, it is at the third-grade level that the transition from manuscript to cursive should be completed. • Toward this long-term goal of developing legible, neat, rapid handwriting, this standard focuses on students' developing and practicing good handwriting habits, such as proper posture, paper position, and pencil grip.	**All students should** • understand that neat, legible cursive handwriting is an important tool of written communication.	**To be successful with this standard, students are expected to** • use correct letter formation. • practice appropriate handwriting habits, including proper posture, position of paper, and pencil grip. • learn to write ~~neatly~~ legibly in cursive.

3.9 The student will write for a variety of purposes.

a) Identify the intended audience.
b) Use a variety of prewriting strategies.
c) Write a clear topic sentence focusing on the main idea.
d) Write a paragraph on the same topic.
e) Use strategies for organization of information and elaboration according to the type of writing.
f) Include details that elaborate the main idea.
g) Revise writing for clarity of content using specific vocabulary and information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

• The intent of this standard is that students will develop ~~strategies for~~ writing strategies to communicate ideas for a variety of purposes.
• In order to produce ~~copies~~ written pieces that vary in purpose, form, and audience, students need to be able to draw from a personal bank of strategies appropriate for planning, organizing, and revising their writing.
• Two important modes for writing are:
  ° **Informative/explanatory** – students write informative/explanatory texts to examine a topic and convey ideas and information clearly; and
  ° **Narrative** – students write narrative to develop real or imagined experiences or events using descriptive details, and clear event sequences.
• Students will continue learning the features of the domains of writing and how to revise their writing for clarity.
• The three domains of writing are:
  ° **composing** – the structuring and elaborating a writer does to construct an effective message for readers;
  ° **written expression** – those features that
	All students should
	• understand how to plan and compose a ~~descriptive~~ paragraph on the same topic.
	• understand how to plan and compose written pieces for a variety of purposes ~~stories, friendly letters, simple explanations, and short reports~~.
		To be successful with this standard, students are expected to
		• ~~generate ideas and plan writing~~ use a variety of pre-writing strategies by:
		  ° identifying the intended audience;
		  ° using ideas from class brainstorming activities;
		  ° making lists of information;
		  ° talking to classmates about what to write;
		  ° reading texts by peer and professional authors;
		  ° using ~~a cluster diagram, story map, or other~~ graphic organizers; and
		  ° selecting an appropriate writing form for nonfiction writing (~~such as~~ e.g., explanation, directions, simple report), expressive writing (~~such as~~ e.g., narrative, reflection, and letter), and creative writing (~~such as~~ e.g., fiction and poetry).
		• write a clear topic sentence that focuses on the main idea.
		• keep their written paragraphs on one topic.
		• follow the organization of particular forms of writing for:
		  ° ~~stories – beginning, middle, and end;~~
		  ° letters – date, greeting, body, and closing;
		  ° ~~explanations – opening; information presented in a way to show the relationship of ideas, such as chronological order; and closing~~
		  ° ~~short reports – opening, grouping of like information into clear paragraphs, ordering of paragraphs so that there is a logical flow of information, and closing~~
		  ° informative/explanatory purposes
		  – introduce a topic and group related information in paragraph form
		  – use facts, definitions, opinions, quotations, details, or other

3.9 The student will write for a variety of purposes.

a) Identify the intended audience.
b) Use a variety of prewriting strategies.
c) Write a clear topic sentence focusing on the main idea.
d) Write a paragraph on the same topic.
e) Use strategies for organization of information and elaboration according to the type of writing.
f) Include details that elaborate the main idea.
g) Revise writing for clarity of content using specific vocabulary and information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
show the writer purposefully shaping and controlling language to affect readers; and ° **usage/mechanics** – the features that cause written language to be acceptable and effective for standard discourse. • Students should have practice writing on demand, for shorter time frames, and over extended periods of time.		examples and information to develop the topic – use specific vocabulary to inform and explain the topic – provide a concluding statement or section ° narratives – sequence events – use transition words and phrases for sentence variety and to manage the sequence of events – use specific vocabulary to convey experiences and events – provide a conclusion • incorporate transitional ~~(signal)~~ words that clarify sequence~~, such as~~ (e.g., *first*, *next*, and *last*). • use linking words (e.g., *also*, *another*, *and*, *more*) and linking phrases (e.g., *in order to*, *because of this*, *for example*) to connect ideas within categories of information. • apply knowledge of the writing domains of composing, written expression, and usage/mechanics. • ~~use available technology to write~~ • read their own writing orally to check for sentence rhythm (sentence variety). • ~~select~~ add specific details ~~of sight, sound, touch, taste, and smell in order to paint a verbal picture of a person, place, thing, or event~~ that further elaborate the main idea. • use examples from their reading as models to imitate in their writing.

3.9 The student will write for a variety of purposes.

a) Identify the intended audience.
b) Use a variety of prewriting strategies.
c) Write a clear topic sentence focusing on the main idea.
d) Write a paragraph on the same topic.
e) Use strategies for organization of information and elaboration according to the type of writing.
f) Include details that elaborate the main idea.
g) Revise writing for clarity of content using specific vocabulary and information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• ~~create verbal pictures,~~ use~~ing~~ precise nouns, verbs, and adjectives. • use strategies for organization of information ~~that~~ and elaborate~~e~~ion ~~ideas within a sentence~~ relevant to the type of writing. • clarify writing when revising by including specific vocabulary and information.

3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

a) Use complete sentences.
b) Use transition words to vary sentence structure.
c) Use the word *I* in compound subjects.
d) Use past and present verb tense.
e) Use singular possessives.
f) Use commas in a simple series.
g) Use simple abbreviations.
h) Use apostrophes in contractions with pronouns and in possessives.
i) Use the articles *a*, *an*, and *the* correctly.
j) Use correct spelling for frequently used sight words, including irregular plurals.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand and use the editing process. • Students will demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. • Students will identify the following parts of speech: nouns, verbs, and pronouns. • *Articles* are used to modify nouns. There are two articles in English: *a/an* and *the*. *A/an* is used to modify nouns that are neither specific nor particular while *the* is used to refer to specific or particular nouns. Therefore, *a/an* is referred to as the *indefinite* article and *the* as the *definite* article (e.g., "Let's play *a* game", refers to any game while "Let's play *the* game", refers to a specific game.).	**All students should** • understand that grammatically correct language and mechanics contribute to the meaning of writing.	**To be successful with this standard, students are expected to** • use complete sentences. • use transition words to vary sentence structure. • use the word *I* in compound subjects. • use past and present verb tenses. • use singular possessives. • punctuate correctly: ° commas in a simple series; ° apostrophes in contractions with pronouns, (e.g., *I'd, we've*); ° using conventions of dialogue, ~~such as~~ (e.g., quotation marks to indicate someone is saying something, indentation to show that the speaker has changed, and signal words like *he said* and *she exclaimed*); and ° using knowledge of how ideas are connected between sentences when one word is used in place of another, such as the use of a pronoun for a noun, the use of a general location word (~~such as~~ e.g., *here* or *there*) for a specific location, and the use of a synonym for an earlier word (~~such as~~ e.g., *animal* for *dog*). • use simple abbreviations.

3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

a) Use complete sentences.
b) Use transition words to vary sentence structure.
c) Use the word *I* in compound subjects.
d) Use past and present verb tense.
e) Use singular possessives.
f) Use commas in a simple series.
g) Use simple abbreviations.
h) Use apostrophes in contractions with pronouns and in possessives.
i) Use the articles *a*, *an*, and *the* correctly.
j) Use correct spelling for frequently used sight words, including irregular plurals.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use articles ***a***, ***an*** and ***the*** correctly. • use correct spelling for frequently used words, including irregular plurals (e.g., *men*, *children*). • use correct spelling for frequently used sight words, including irregular plurals.

3.11 The student will write a short report.

a) Construct questions about the topic.
b) Identify appropriate resources.
c) Collect and organize information about the topic into a short report.
d) Understand the difference between plagiarism and using own words.

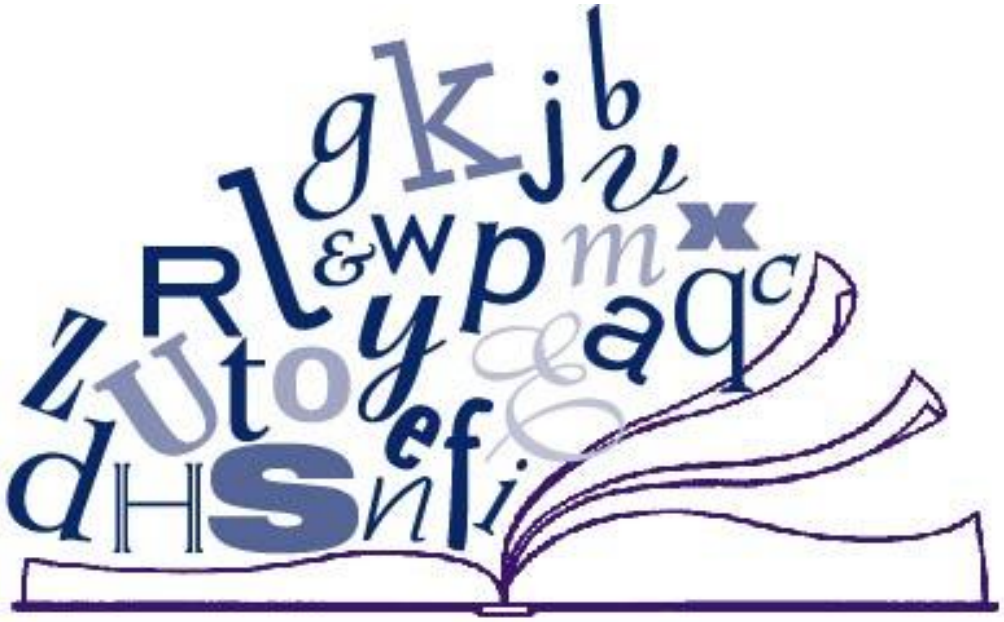
UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will develop the skills necessary to produce a short written report. • **Plagiarism** is using someone else's ideas or words without giving credit.	**All students should** • understand how information should be collected, analyzed and organized as a part of the process of writing a short report. • understand the difference between plagiarism and using their own words in their writing.	**To be successful with this standard, students are expected to** • focus on a central topic. • develop a list of questions pertaining to a specific topic. • identify and use appropriate resources. • follow the organization of particular forms of writing for short reports (e.g., opening, grouping of like information into clear paragraphs, ordering of paragraphs so that there is a logical flow of information, and closing). • review their written drafts so that the language and/or thoughts of another author are given proper credit.

3.12 The student will use available technology for reading and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to use available technology for reading and writing.	**All students should** • understand that reading and writing skills can be adapted for use with available technology.	**To be successful with this standard, students are expected to** • use available technology for reading and writing. • read electronic media to gather specific information, to gain knowledge, and for enjoyment. • use available technology to compose, edit and share writing as well as to interact and collaborate with others. • ask and respond to questions about material presented through various media formats.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Four



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the fourth-grade level, students will apply oral communication skills to participate in discussions about learning and take part in collaborative learning projects. In order to be contributing participants in discussions, students must apply the skills involved in effectively communicating ideas and opinions, including skills such as actively listening to others and constructively agreeing or disagreeing with them. While using grammatically correct language and specific vocabulary, students will learn how to present information succinctly and confidently in oral presentations.

4.1 The student will use effective oral communication skills in a variety of settings.

a) Present accurate directions to individuals and small groups.
b) Contribute to group discussions across content areas.
c) Seek ideas and opinions of others.
d) Use evidence to support opinions.
e) Use grammatically correct language and specific vocabulary to communicate ideas.
f) Communicate new ideas to others.
g) Demonstrate the ability to collaborate with diverse teams.
h) Demonstrate the ability to work independently.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to develop the skills needed to communicate in ~~group~~ a variety of settings. • Students will strengthen their communication skills by contributing to individual and small-group discussions, seeking the ideas and opinions of others and beginning to use evidence to support their own personal opinions. • Students will also refine the skill of conveying accurate directions to individuals or small groups in such a way that others can follow the directions. Emphasis will be on directions for doing things that have a natural sequence or organization.	**All students should** • participate effectively in discussions by: ◦ asking clarifying questions; ◦ providing explanations; when necessary; ◦ reflecting on the ideas and opinions of others; and ◦ supporting opinions with examples and details. • demonstrate an ability to work independently and in small groups.	**To be successful with this standard, students are expected to** • participate in a range of discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, in groups, teacher-led). • give accurate directions by ◦ identifying the information needed by the listener; ◦ organizing and sequencing the information in a logical way; ◦ explaining or defining any terms that might be unfamiliar to the listener; ◦ articulating the information in a clear, organized manner; and ◦ making connections to previous common knowledge of a group of listeners. • participate in a variety of partner and/or group discussions by ◦ following rules for discussions and assigned partner or group roles; ◦ offering comments that are relevant to the topic of discussion; ◦ asking appropriate questions to solicit knowledge and opinions of others; ◦ supporting opinions with appropriate examples and details; ◦ identifying reasons and evidence a speaker provides to support particular points; ◦ communicating new ideas to others; ◦ responding to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others; ◦ reviewing key ideas expressed in discussions and explaining their own

4.1 The student will use effective oral communication skills in a variety of settings.

a) Present accurate directions to individuals and small groups.
b) Contribute to group discussions across content areas.
c) Seek ideas and opinions of others.
d) Use evidence to support opinions.
e) Use grammatically correct language and specific vocabulary to communicate ideas.
f) Communicate new ideas to others.
g) Demonstrate the ability to collaborate with diverse teams.
h) Demonstrate the ability to work independently.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		ideas and understanding; ◦ distinguishing fact from opinion; ◦ avoiding hindering the progress of the discussion (learning not to interrupt); ◦ taking turns speaking during a discussion; ◦ maintaining appropriate eye contact and attentive body language while listening; and ◦ respecting the comments of others, especially if the comments express opinions that are different from one's own. • use grammatically correct language. • use specific vocabulary to enhance oral communication. • work independently and with diverse teams in a variety of settings.

4.2 The student will make and listen to oral presentations and reports.

a) Use subject-related information and vocabulary.
b) Listen to and record information.
c) Organize information for clarity.
d) Use language and style appropriate to the audience, topic, and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will make formal oral presentations. • Students will organize information to make class presentations and reports. • Students will listen and take notes from other students' presentations.	**All students should** • apply basic patterns of organization when preparing an oral presentation. • develop the skills necessary for active listening.	**To be successful with this standard, students are expected to** • make oral presentations and reports by ◦ reporting on a topic or text, telling a story, or recounting an experience in an organized manner, using specific vocabulary, appropriate facts and descriptive details to support main ideas or themes; ◦ organizing information around a central idea with supporting details and using specific vocabulary; ◦ organizing information for clarity; ◦ ~~creating a simple visual, such as a poster or technology-tool presentation, that helps listeners follow the presentation;~~ ◦ speaking clearly, using appropriate voice level and speaking rate; ◦ differentiating formal and informal language and style when appropriate to task and situation (e.g., presentations, small-group discussions); ◦ selecting words and phrases to convey precise ideas; ◦ using voice inflection for effect; and ◦ adding visual displays to presentations when appropriate to enhance development of theme and/or main ideas. • use active listening skills by ◦ looking at the speaker; ◦ thinking about the main points the speaker is making; and ◦ taking notes.

4.3 The student will learn how media messages are constructed and for what purposes.
a) Differentiate between auditory, visual, and written media messages.
b) Identify the characteristics of various media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will learn that media messages are constructed for a purpose. Students will examine the following: ◦ **Audience** (Who is the person or persons meant to see the message?) ◦ **Purpose** (Why is the message being sent – is it meant to persuade, inform, entertain, sell, or a combination of these?) • **Auditory media** can be heard (e.g., music, radio, speeches, video, etc.). • **Visual media** can be viewed (e.g., television, video, Web-based materials, etc.). • **Written media** includes text (e.g., newspapers, magazines, books, advertising, etc.).	**All students should** • ~~understand media messages are constructed and students have the ability to deconstruct messages by looking at several attributes: authorship, format, audience, content, and purpose.~~ • identify attributes of a constructed message (i.e., audience and purpose).	**To be successful with this standard, students are expected to** • access media messages and identify what types of media are used.

At the fourth-grade level, students will build on their reading and reading comprehension skills. They will continue to develop fluency as they use strategies such as word analysis, use of context clues, and the making of inferences to gain meaning from text. Students will use reading strategies before, during, and after reading to develop and demonstrate comprehension. The use of graphic organizers will facilitate students' understanding of text organization and will help them summarize and draw conclusions from fiction and nonfiction text. Students will read widely from content-area texts and nonfiction ~~trade books~~ literature. They will also collect information from a variety of resources in order to acquire additional knowledge about a topic. They will construct questions about their topic, gather information, and synthesize the information for use in their oral presentations and writings.

4.4 The student will expand vocabulary when reading.

a) Use context to clarify meanings of unfamiliar words.
b) Use knowledge of roots, affixes, synonyms, antonyms, and homophones.
c) Use word-reference materials, including the glossary, dictionary, and thesaurus.
d) Develop vocabulary by listening to and reading a variety of texts.
e) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to build vocabulary by applying their knowledge of word structure and context clues to determine the meanings of unfamiliar words. • ~~Students should read about 120 words per minute in grade level material.~~ • Students will use combined knowledge of all letter-sound correspondences, syllabication patterns, roots, and affixes to read accurately multisyllabic words. • **Affixes** are added to root words to form new words (e.g., prefixes, suffixes). • **Prefixes** are added to the front of the root (e.g., like→dislike). • **Suffixes** are added to the end of the root (e.g., short→shorten). • ~~**Homonyms** are words that are typically pronounced the same and have different meanings. Two common types of homonyms are *homophones and homographs.*~~ • **Homophones** are words that are pronounced the same and have different meanings regardless of their spelling (e.g., principle/ principal, prince/prints).	**All students should** • use the content and structure of a sentence, paragraph, or reading selection to help determine the meaning of an unfamiliar word. • use a variety of strategies and word recognition skills to ~~read fluently~~ support comprehension. • know the type of information found in word reference materials such as a glossary, dictionary, and thesaurus.	**To be successful with this standard, students are expected to** • use context as a clue to clarify the meaning of unfamiliar words or phrases (e.g., definitions, examples, or restatements of text). • use clues in the context of a sentence, paragraph, or reading selection to predict and explain the meanings of words that have more than one ~~meaning (multiple meanings of words)~~ definition. • use their knowledge of affixes (prefixes and suffixes) to read and understand the meanings of words. • use their knowledge of synonyms (words with ~~like~~ similar meanings) and antonyms (words with opposite meanings) to understand the meanings of unfamiliar words. • derive word meaning by using their knowledge of ~~homonyms/~~homophones (words that are pronounced the same but are spelled differently and have different meanings), such as *read/red*, *no/know*, *hear/here.* • use context to select the applicable definition of a ~~multiple-meaning~~ word from a glossary or dictionary. • ~~use knowledge of word origins.~~ • identify and consult the word-reference material(s), including the glossary, dictionary, and thesaurus, most likely to contain needed information to clarify word meaning. • develop vocabulary by listening to and reading a variety of texts. • determine the meaning of general academic and content-specific words or phrases in a text.

4.4 The student will expand vocabulary when reading.

a) Use context to clarify meanings of unfamiliar words.
b) Use knowledge of roots, affixes, synonyms, antonyms, and homophones.
c) Use word-reference materials, including the glossary, dictionary, and thesaurus.
d) Develop vocabulary by listening to and reading a variety of texts.
e) Use vocabulary from other content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~**Homograph**s are words that are pronounced differently and share the same spelling (e.g., *We saw the dove fly*, or *She dove into the swimming pool*).~~ • **Antonyms** are opposites (e.g., off/on, fast/slow). • **Synonyms** are words that have similar meanings (e.g., small, little, tiny). • Students will use word-reference materials to learn new words. • Students will use vocabulary from content areas.		• study word meanings across content areas. • ~~read familiar text with fluency, accuracy, and expression.~~

4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry.

a) Explain the author's purpose.
b) Describe how the choice of language, setting, characters, and information contributes to the author's purpose.
c) Identify the main idea.
d) Summarize supporting details.
e) Identify the problem and solution.
f) Describe the relationship between text and previously read materials.
g) Identify sensory words.
h) Draw conclusions/make inferences about text.
i) Make, confirm, or revise predictions.
j) Identify cause and effect relationships.
k) Use reading strategies throughout the reading process to monitor comprehension.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to read and comprehend fictional texts, narrative nonfiction texts, and poetry. • **Narrative nonfiction** is a retelling in story format about real people, animals, places or events. It contains facts and is usually in chronological order (e.g., autobiographies and biographies). • Students will also learn how authors craft their purpose and message by the choice of language, setting, characters, and specific information. • Students will demonstrate comprehension of a selection by using before-, during-, and after-reading strategies (e.g., using graphic organizers, question generation, and summarization) . • ~~Students will become able to identify and~~	**All students should** • develop a variety of comprehension strategies. • ~~understand that there are different forms of fiction (realistic, historical, and fantasy).~~ • read a variety of fictional texts, narrative nonfiction texts, and poetry. • explain events, procedures, ideas, or concepts in fictional texts, narrative nonfiction texts, and poetry, including what happened and why, based on specific information in the text.	**To be successful with this standard, students are expected to** • explain ~~why~~ the author's ~~wrote the piece (identify~~ purpose~~),~~ (e.g., to entertain, inform, or persuade). • ~~find words or sentences that help identify the author's purpose.~~ • ~~find~~ describe how the choice of language, setting, characters, details, and other information ~~that help identify~~ contribute to the author's purpose. • ~~know that fictional stories, such as fantasy, describe imaginary characters and events~~ • describe in depth a character, setting, or event drawing on specific details from the text (e.g., words, actions, or a character's thoughts). • understand that ~~historical fiction~~ narrative nonfiction is a story based on facts. • identify the facts contained in a piece of ~~historical fiction~~ narrative nonfiction. • ~~compare the use of fact and fantasy in historical fiction with the use of fact and fantasy in other forms of literature~~

4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry.

a) Explain the author's purpose.
b) Describe how the choice of language, setting, characters, and information contributes to the author's purpose.
c) Identify the main idea.
d) Summarize supporting details.
e) Identify the problem and solution.
f) Describe the relationship between text and previously read materials.
g) Identify sensory words.
h) Draw conclusions/make inferences about text.
i) Make, confirm, or revise predictions.
j) Identify cause and effect relationships.
k) Use reading strategies throughout the reading process to monitor comprehension.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
~~explain the specific elements of literature for the different forms of narrative text — realistic fiction, historical fiction, and fantasy~~. • Students will learn how to identify major events and supporting details. • Students will identify sensory words and describe the effect those particular words have on the reader. • Students will use reading strategies throughout the reading process to monitor comprehension. Strategies include: ° draw conclusions/make inferences about text; and ° make, confirm, and revise ongoing predictions. • To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ° independent level – 98-100% accuracy, or		• identify ~~major events~~ the main idea~~s~~ or theme of a text and summarize using supporting details. • identify the problem (conflict) and solution. • discuss the similarities and differences between text and previously read materials (e.g., similar themes and topics, patterns of events). • make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text. • identify sensory words that describe sights, sounds, smells, and tastes, and describe how they make the reader feel. • refer to details and examples in a text when explaining what the text says, drawing conclusions/making inferences from text. • identify cause and effect relationships. • make, confirm, or revise predictions. • read familiar text with fluency, accuracy, and ~~expression.~~prosody. • ~~know that narrative poetry tells a story through verse.~~

4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry.

a) Explain the author's purpose.
b) Describe how the choice of language, setting, characters, and information contributes to the author's purpose.
c) Identify the main idea.
d) Summarize supporting details.
e) Identify the problem and solution.
f) Describe the relationship between text and previously read materials.
g) Identify sensory words.
h) Draw conclusions/make inferences about text.
i) Make, confirm, or revise predictions.
j) Identify cause and effect relationships.
k) Use reading strategies throughout the reading process to monitor comprehension.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
about two of every 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ° instructional level – 90-97% accuracy, or three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ° frustration level – less than 90% accuracy, or more than ten of every 100 words misread; student reads with neither accuracy nor fluency, and therefore his or her comprehension will be affected. • **Prosody** refers to the rhythmic and intonational aspect of language, which should be noticeable during oral reading. Prosody contributes to reading fluency and comprehension. • The table below presents the results of research on oral reading fluency rates for students at the		• read with sufficient accuracy and fluency to support comprehension. • become aware of when they do not understand, (e.g., by reflecting upon and learning to articulate what exactly is causing difficulty).

4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry.

a) Explain the author's purpose.
b) Describe how the choice of language, setting, characters, and information contributes to the author's purpose.
c) Identify the main idea.
d) Summarize supporting details.
e) Identify the problem and solution.
f) Describe the relationship between text and previously read materials.
g) Identify sensory words.
h) Draw conclusions/make inferences about text.
i) Make, confirm, or revise predictions.
j) Identify cause and effect relationships.
k) Use reading strategies throughout the reading process to monitor comprehension.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
90th, 75th and 50th percentiles throughout the school year. These rates are reported as words correct per minute (WCPM) for fourth-grade students reading fourth-grade text:		

Percentile	Fall WCPM	Midyear WCPM	Spring WCPM
90	145	166	180
75	119	139	152
50	94	112	123

Hasbrouck, J.E., & Tindal, G.A., 2006

- When fully developed, reading *fluency* refers to a level of accuracy and rate where decoding is relatively effortless; where oral reading is smooth and accurate with correct prosody; and where attention can be allocated to comprehension.*

* Wolf, M. & Katzir-Cohen, T. (2001). Reading fluency and its intervention. *Scientific Studies of Reading*. (Special Issue on Fluency. Editors: E. Kameenui & D. Simmons). 5, p. 211-238.

4.6 The student will read and demonstrate comprehension of nonfiction texts.

a) Use text structures, such as type, headings, and graphics, to predict and categorize information in both print and digital texts.
b) Formulate questions that might be answered in the selection.
c) Explain the author's purpose.
d) Identify the main idea.
e) Summarize supporting details.
f) Draw conclusions and make simple inferences using textual information as support.
g) Distinguish between cause and effect.
h) Distinguish between fact and opinion.
i) Use prior knowledge and build additional background knowledge as context for new learning.
j) Identify new information gained from reading.
k) Use reading strategies throughout the reading process to monitor comprehension.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will read and demonstrate comprehension of nonfiction ~~print materials and trade books~~ texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics~~, in order to build vocabulary and content knowledge~~. • Students will demonstrate comprehension of a selection by using before-, during-, and after-reading strategies (e.g., using graphic organizers, question generation, and summarization). • ***Before*** reading, students ~~will become able to~~ use text ~~features~~ structures to predict and categorize information. • ***During*** reading, students ~~will~~ formulate	**All students should** • summarize key details of informational texts, connecting new information to prior knowledge. • identify and use text structures ~~features~~, such as headings, paragraphs, and format, to preview a text and make predictions in order to comprehend. • actively ask questions, visualize, make connections, and predict as they read.	**To be successful with this standard, students are expected to** • ~~read nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~ • use text ~~set in structures~~ features, such as special type styles (e.g., boldfaced, italics) and color, captions under pictures and graphics, and headings of sections and chapters, to predict and categorize information in both print and digital texts. • understand how written text and accompanying illustrations connect to convey meaning (e.g., charts, graphs, diagrams, timelines, animations). • generate questions to guide reading of text ~~through reading strategies, such as KWL (Ogle) or DRTA (Stauffer)~~. • explain ~~why~~ the ~~author wrote the piece~~ author's purpose (e.g., to entertain, persuade, inform). • identify the ~~important information~~ main idea and ~~provide~~ supporting details ~~for each important idea~~ within a selection ~~to summarize~~ summarizing the

4.6 The student will read and demonstrate comprehension of nonfiction texts.

a) Use text structures, such as type, headings, and graphics, to predict and categorize information in both print and digital texts.
b) Formulate questions that might be answered in the selection.
c) Explain the author's purpose.
d) Identify the main idea.
e) Summarize supporting details.
f) Draw conclusions and make simple inferences using textual information as support.
g) Distinguish between cause and effect.
h) Distinguish between fact and opinion.
i) Use prior knowledge and build additional background knowledge as context for new learning.
j) Identify new information gained from reading.
k) Use reading strategies throughout the reading process to monitor comprehension.
l) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
questions and make and revise ongoing predictions and inferences, using given information. • ***After*** reading, students ~~will~~ confirm or dismiss previous predictions and inferences. Students also summarize content by identifying important ideas and providing details. • Teachers should provide opportunities for s~~S~~tudents to ~~will~~ make connections between what they read in the selection and their prior knowledge.		text by using tools such as graphic organizers, outlining, and notes. • combine information from various places in the text to draw a conclusion. • make simple inferences, using information from the text. • identify cause-and-effect relationships. • distinguish between fact and opinion. • apply prior knowledge to make predictions and to describe the relationship between content and previously learned concepts. • ~~write responses that go beyond literal restatements in order to make connections to their own lives and to other selections~~ • ~~understand that nonfiction material, such as biographies and informational text, tells about real people, places, objects, and/or events~~ • identify new information learned from reading. • read familiar text with fluency, accuracy, and expression. • become aware of when they do not understand (e.g., by reflecting upon and articulating what exactly is causing difficulty).

At the fourth-grade level, students will develop and build their writing skills by writing effective narratives~~, poems,~~ and explanations. They will use the writing skills of selecting and narrowing a topic, developing a plan for writing, and organizing information into several paragraphs with a central idea and supporting details. The instructional focus will include an emphasis on written expression. Revising and editing for correct sentence formation, grammar, capitalization, punctuation, and spelling will continue to be important skills at this grade level. Students will also use available technology to write their narratives and explanations.

4.7 The student will write cohesively for a variety of purposes.

a) Identify intended audience.
b) Focus on one aspect of a topic.
c) Use a variety of pre-writing strategies.
d) Organize writing to convey a central idea.
e) Recognize different modes of writing have different patterns of organization.
f) Write a clear topic sentence focusing on the main idea.
g) Write two or more related paragraphs on the same topic.
h) Use transition words for sentence variety.
i) Utilize elements of style, including word choice and sentence variation.
j) Revise writing for clarity of content using specific vocabulary and information.
k) Include supporting details that elaborate the main idea.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will apply their knowledge of a writing process and the domains of writing to write ~~effective narratives and explanations~~ for a variety of purposes. • Two important modes for writing are: ° **Informative/explanatory** – students write informative/explanatory texts to examine a topic and convey ideas and information clearly. ° **Narrative** – students write narrative to develop real or imagined experiences or events using descriptive details, and clear event sequences. • ~~As students develop their understanding of poetry and its features, they will become more able to create and write rhymed, unrhymed, and patterned poetry~~ • The three domains of writing are ° **composing** – the structuring and elaborating a writer does to construct an effective message	**All students should** • demonstrate the capacity to generate, focus, and organize ideas for writing. • revise the language, organization, and content of a piece of writing for a specific purpose.	**To be successful with this standard, students are expected to** • apply knowledge of the writing domains of composing, written expression, and usage/mechanics. • produce clear and coherent writing in which the development and organization are appropriate to purpose and audience. • recognize different modes of writing have different patterns of organization ° informative/explanatory – clearly introduce a topic and group related information in paragraphs – use facts, definitions, opinions, quotations, details, or other examples and information to develop the topic – use specific vocabulary to inform and explain the topic; and – provide a concluding statement or section related to the topic ° narrative – organize an event sequence that unfolds naturally – use transition words and phrases for sentence variety and to manage the sequence of events – use specific vocabulary, words, and phrases to convey experiences

4.7 The student will write cohesively for a variety of purposes.

a) Identify intended audience.
b) Focus on one aspect of a topic.
c) Use a variety of pre-writing strategies.
d) Organize writing to convey a central idea.
e) Recognize different modes of writing have different patterns of organization.
f) Write a clear topic sentence focusing on the main idea.
g) Write two or more related paragraphs on the same topic.
h) Use transition words for sentence variety.
i) Utilize elements of style, including word choice and sentence variation.
j) Revise writing for clarity of content using specific vocabulary and information.
k) Include supporting details that elaborate the main idea.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
for readers (e.g., staying on topic; beginning, middle, and end); ◦ **written expression** – those features that show the writer purposefully shaping and controlling language to affect readers (e.g., specific vocabulary, descriptive words, tone/voice); and ◦ **usage/mechanics** – the features that cause written language to be acceptable and effective for standard discourse (e.g., spelling, punctuation, capitalization, grammar). • **Transition words and phrases** provide organization to student writing by improving the connections between thoughts. Categories of transitions include, but are not limited to: ◦ **example** (e.g., *that is*, *for example*, *in fact*) ◦ **sequence** (e.g., *then*, *next*, *finally*) ◦ **time or location** (e.g., *before*, *meanwhile*, *nearby*). • Students should have practice writing on demand,		and events – provide a conclusion • create a plan and organize thoughts to convey a central idea before writing. • use a variety of prewriting strategies (e.g., brainstorming, listing, free-writing, and using graphic organizers). • focus, organize, and elaborate to construct an effective cohesive message for the reader. • write a clear topic sentence focused on the main idea. • purposefully shape and control language to affect readers. • select specific information to guide readers more purposefully through the piece. • use specific vocabulary and vivid word choice. • write ~~several~~ two or more related paragraphs on a topic. • use precise language and vocabulary to explain a topic. • link ideas within paragraphs using words and phrases (e.g., another, for example, since, also). • include sentences of various lengths and beginnings to create a pleasant,

4.7 The student will write cohesively for a variety of purposes.

a) Identify intended audience.
b) Focus on one aspect of a topic.
c) Use a variety of pre-writing strategies.
d) Organize writing to convey a central idea.
e) Recognize different modes of writing have different patterns of organization.
f) Write a clear topic sentence focusing on the main idea.
g) Write two or more related paragraphs on the same topic.
h) Use transition words for sentence variety.
i) Utilize elements of style, including word choice and sentence variation.
j) Revise writing for clarity of content using specific vocabulary and information.
k) Include supporting details that elaborate the main idea.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
for shorter time frames, and over extended periods of time.		informal rhythm. • use available reference resources (e.g., dictionary and thesaurus) as aids to revising writing for clarity. • use facts and details in sentences to elaborate the main idea. • ~~know that unrhymed poetry has lines ending with words that do not rhyme~~ • ~~write rhymed, unrhymed, and patterned poetry, such as a cinquain, limerick, and haiku~~ • use available technology to gather information and to aid in writing.

4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing.

a) Use subject-verb agreement.
b) Include prepositional phrases.
c) Eliminate double negatives.
d) Use noun-pronoun agreement.
e) Use commas in series, dates, and addresses.
f) Incorporate adjectives and adverbs.
g) Use correct spelling for frequently used words, including common homophones.
h) Use singular possessives.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand and use the editing process. • Students will demonstrate command of the conventions of standard English grammar, capitalization, punctuation, and spelling in writing (e.g., correct capitalization, commas in series, correct spelling of frequently used words). • ~~Students will also identify the following parts of speech:; nouns, pronouns, verbs, adjectives, adverbs, and prepositions.~~ • ~~Students will identify the following parts of a sentence: subject, predicate, and prepositional phrase.~~	**All students should** • understand that grammatically correct language and mechanics contribute to the meaning of writing.	**To be successful with this standard, students are expected to** • apply knowledge of the writing domains of composing, written expression, and usage/mechanics. • use subject-verb agreement (singular nouns with singular verbs; plural nouns with plural verbs). • appropriately identify and use the following parts of a sentence in writing: subject, predicate, and prepositional phrase. • ~~use prepositional phrases~~ • avoid the use of double negatives. • appropriately identify and use the following parts of speech: nouns, pronouns, verbs, adjectives, adverbs, and prepositions in their writing. • use noun/pronoun agreement (pronoun agrees in number and gender with its antecedent). • use reflexive pronouns (e.g., myself, ourselves). • use commas in series, dates, and addresses. • use adjectives and adverbs (use adverbs instead of adjectives where appropriate, (e.g., "He played *really* well." instead of "He played *real* well."). • ~~use the articles, *a*, *an*, and *the* correctly~~

4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing.

a) Use subject-verb agreement.
b) Include prepositional phrases.
c) Eliminate double negatives.
d) Use noun-pronoun agreement.
e) Use commas in series, dates, and addresses.
f) Incorporate adjectives and adverbs.
g) Use correct spelling for frequently used words, including common homophones.
h) Use singular possessives.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use the correct spelling of frequently used words, including common homonyms/homophones (e.g., *threw/through*). • use singular possessives. • use a rubric to self-assess writing. • use technology, including the Internet, to produce, edit and publish writing as well as to interact and collaborate with others.

At the fourth-grade level, students will conduct short research projects based on focused questions. Students will gather relevant information from sources and integrate the information while avoiding plagiarism.

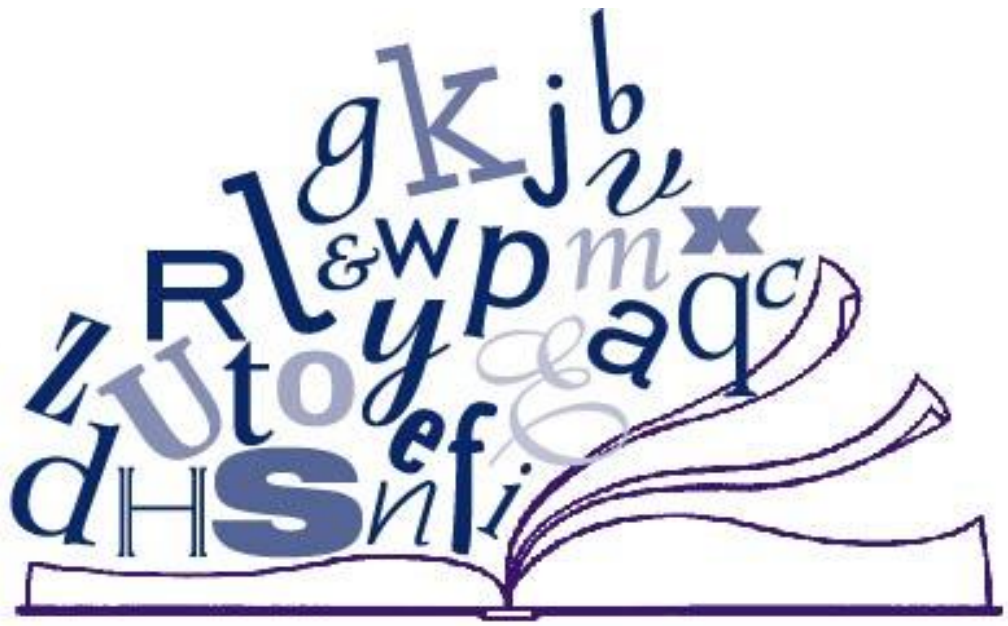
4.9 The student will demonstrate comprehension of information resources to research a topic.

a) Construct questions about a topic.
b) Collect information from multiple resources including online, print, and media.
c) Use technology as a tool to organize, evaluate, and communicate information.
d) Give credit to sources used in research.
e) Understand the difference between plagiarism and using own words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use information resources to locate information on a topic. • With assistance and support, students will collect information from multiple resources including online, print, and media. • After collecting needed information, students will learn to evaluate and synthesize the information to use in their oral reports or writings. • **Plagiarism** is using someone else's ideas or words without giving credit.	**All students should** • understand how information is to be collected, analyzed, and organized as a part of the process of writing a short report.	**To be successful with this standard, students are expected to** • formulate initial questions about a topic and seek information by identifying, locating, exploring, and effectively using a variety of sources of information. • ~~formulate research questions based on a topic.~~ • recognize, organize, and record information pertinent to the topic and blend ideas accurately. • select and use appropriate references~~, such as dictionaries,~~(e.g., atlases, almanacs, and encyclopedias)~~, and thesauruses~~, including ~~online, print, and media~~ electronic resources. • identify key terms to use in searching for information. • skim to find information related to a topic. • select information that is related to their topic. • evaluate and combine (synthesize) related information from two or more sources. • use available technology to gather, organize, evaluate, and communicate information. • give credit to sources used in research.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Five



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the fifth-grade level, students will continue to refine their oral-communication skills. They will further develop their ability as active listeners and as effective participants in large- and small-group activities. They will improve their skills in planning oral presentations and using grammatically correct language and specific vocabulary when delivering oral presentations, as well as including visual aids and appropriate ~~dramatic~~ gestures to enhance their delivery. Students will be~~come~~ able to summarize their presentations before delivery and summarize the presentations of others after listening to them.

5.1 The student will listen, draw conclusions, and share responses in subject-related group learning activities.

a) Participate in and contribute to discussions across content areas.
b) Organize information to present in reports of group activities.
c) Summarize information gathered in group activities.
d) Communicate new ideas to others.
e) Demonstrate the ability to collaborate with diverse teams.
f) Demonstrate the ability to work independently.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to develop the skills necessary to participate in large- and small-group learning activities. • Students will be active participants in discussions across content areas. They will become able to assume the role of the speaker and the role of the listener. • Students will refine their organizational skills in preparing, presenting, and summarizing information gathered in group activities. • Students will also be~~come~~ able to summarize their own material prior to delivering a presentation.	**All students should** • participate effectively in subject-related group learning activities. • use their organizational skills in preparing, presenting, and summarizing information gathered in group activities. • communicate and collaborate with diverse teams while maintaining the ability to work independently as necessary to accomplish assigned tasks.	**To be successful with this standard, students are expected to** • participate in a range of discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, in groups, teacher-led). • follow rules for discussions and assigned group roles. • participate as active listeners in group learning activities by: ◦ listening for main ideas; ◦ listening for sequence of ideas; and ◦ taking notes. • participate as informed contributors in subject-related group learning activities by: ◦ asking and answering questions at appropriate times; ◦ responding to specific questions by making comments that contribute to the discussion and elaborating on the remarks of others; ◦ communicating new ideas to others; ◦ clarifying confusing points; ◦ summarizing main ideas; ◦ organizing information from group discussion for presentation; ◦ preparing ~~an outline~~ a prewriting tool (e.g., outline, web, or graphic organizer) for presentation prior to delivery; and ◦ summarizing a presentation orally prior to delivery. • exhibit the ability to collaborate with diverse teams. • demonstrate that they can work independently on group-related tasks.

5.2 The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations.

a) Maintain eye contact with listeners.
b) Use gestures to support, accentuate, and dramatize verbal message.
c) Use facial expressions to support and dramatize verbal message.
d) Use posture appropriate for communication setting.
e) Determine appropriate content for audience.
f) Organize content sequentially around major ideas.
g) Summarize main points as they relate to main idea or supporting details.
h) Incorporate visual media to support the presentation.
i) Use language and style appropriate to the audience, topic, and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will learn to plan and deliver oral presentations. • ~~The intent of this standard is that students will continue to refine their communication skills.~~ • Students will enhance their oral presentations with appropriate body language, correct posture, and eye contact with listeners. • Students will begin to use dramatic gestures and facial expressions that are suitable to the content and the audience.	**All students should** • understand how gestures, facial expressions, posture, and body language affect delivery of the message. • select and organize information when preparing for an oral presentation. • use visual aids when preparing for an oral presentation.	**To be successful with this standard, students are expected to** • demonstrate appropriate eye contact with listeners. • use ~~dramatic~~ appropriate facial expressions and gestures to support, accentuate, or dramatize the message. • speak clearly at an understandable pace. • use acceptable posture according to the setting and the audience. • ~~use appropriate facial expressions to support, accentuate, or dramatize presentations.~~ • select information that develops the topic and is appropriate for the audience. • report on a topic or text sequencing ideas logically and using relevant facts and descriptive details to support main ideas or themes. • narrow the topic. • organize content sequentially and group together related information. • put information in order, providing an overview of the information at the beginning or a summary of the information at the end. • create and/or use visual aids ~~to illustrate information~~ in presentations when appropriate to enhance development of themes and/or main ideas (e.g., graphics, sound).

5.2 The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations.

a) Maintain eye contact with listeners.
b) Use gestures to support, accentuate, and dramatize verbal message.
c) Use facial expressions to support and dramatize verbal message.
d) Use posture appropriate for communication setting.
e) Determine appropriate content for audience.
f) Organize content sequentially around major ideas.
g) Summarize main points as they relate to main idea or supporting details.
h) Incorporate visual media to support the presentation.
i) Use language and style appropriate to the audience, topic, and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use grammatically correct language. • expand, combine, and reduce sentences for meaning, interest, and style. • use specific vocabulary and style to enhance oral presentations.

5.3 The student will learn how media messages are constructed and for what purposes.
a) Differentiate between auditory, visual, and written media messages.
b) Identify the characteristics and effectiveness of a variety of media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will learn all media messages are constructed and that to understand the whole meaning of the message they can *deconstruct* it, looking at the following attributes: ◦ **Authorship** (Who constructed the message?); ◦ **Format** (This is not just the medium being used but also how the creators used specific elements for effect, i.e., color, sound, emphasis on certain words, amateur video, children's voices.); ◦ **Audience** (Who is the person or persons meant to receive the message? How will different people *interpret* the message?); ◦ **Content** (This is not just the visible content but the *embedded* content as well which includes underlying assumptions of values or points of view; facts and opinions may be intermixed.); and ◦ **Purpose** (Why is the message being sent—is it meant to persuade, inform, entertain, sell, or a combination of these?). • **Auditory media** can be heard (e.g., music, radio shows, podcasts). • **Visual media** can be viewed (e.g., television, video, Web-based materials, print ads).	**All students should** • understand media messages are constructed and students have the ability to deconstruct messages by looking at several attributes: authorship, format, audience, content, and purpose. • understand how to evaluate the effectiveness of a media message by examining the various attributes of messages.	**To be successful with this standard, students are expected to** • access media messages and identify what types of media are used. • identify the attributes of a constructed message (i.e., authorship, format, audience, content, and purpose). • deconstruct several types of media messages by addressing the main question(s) raised by the media attributes. • create age-appropriate media messages (e.g., videos, podcasts, print advertisements) for evaluation, focusing on effectiveness of the message.

5.3 The student will learn how media messages are constructed and for what purposes.
a) Differentiate between auditory, visual, and written media messages.
b) Identify the characteristics and effectiveness of a variety of media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• **Written media** includes text (e.g., newspapers, magazines, books, blogs).		

At the fifth-grade level, students will become increasingly independent readers of a variety of literary forms. Strategies such as word analysis and the use of context clues and word references will help students increase fluency as well as comprehension. They will begin to read text critically in order to examine implied relationships and understandings, recognize how character and plot are developed, and formulate and justify opinions about the text. They will organize the information they extract from the text and represent their understandings on charts, maps, and graphs.

5.4 The student will expand vocabulary when reading.

a) Use context to clarify meaning of unfamiliar words and phrases.
b) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.
c) Use knowledge of roots, affixes, synonyms, antonyms, and homophones.
d) Identify an author's use of figurative language.
e) Use dictionary, glossary, thesaurus, and other word-reference materials.
f) Develop vocabulary by listening to and reading a variety of texts.
g) Study word meanings across content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to build vocabulary by applying their knowledge of word structure and context clues to determine the meanings of unfamiliar words. • ~~Students should read about 120 words per minute in grade level material.~~ • Students will use combined knowledge of all letter-sound correspondences, syllabication patterns, roots, and affixes to read accurately multisyllabic words in context and out. • Students will ~~continue to~~ build their knowledge of word origins by learning about Greek and Latin affixes. • Students will also use word-reference materials to learn new words. • ~~**Homonyms** are words that are typically pronounced the same and have different meanings. Two common types of homonyms are *homophones and homographs.*~~ • **Homophones** are words that are pronounced the same and have different meanings regardless of their spelling (e.g., principle/ principal, prince/prints).	**All students should** • apply knowledge of word structure and context clues to determine the meanings of unfamiliar words. • ~~read with fluency and accuracy.~~	**To be successful with this standard, students are expected to** • use context as a clue to infer the correct meanings of unfamiliar words and phrases. • use context and sentence structure to determine meanings and differentiate among multiple meanings of words. • apply knowledge of roots ~~words~~, ~~prefixes, and suffixes~~ affixes (prefixes and suffixes), synonyms, antonyms, and homophones. • ~~continue~~ begin to learn about Greek and Latin affixes. • understand that often a word can be divided into root word, prefix, and suffix in order to determine its pronunciation. • understand how a prefix changes the meaning of a root word. • identify when an author uses language figuratively. • use word references and context clues to determine which meaning is appropriate in a given situation. • identify the word-reference materials, such as a dictionary, glossary, or thesaurus, that is most likely to contain the information needed. • develop vocabulary by listening to and reading a variety of texts. • study cross-curricular vocabulary.

5.4 The student will expand vocabulary when reading.

a) Use context to clarify meaning of unfamiliar words and phrases.
b) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.
c) Use knowledge of roots, affixes, synonyms, antonyms, and homophones.
d) Identify an author's use of figurative language.
e) Use dictionary, glossary, thesaurus, and other word-reference materials.
f) Develop vocabulary by listening to and reading a variety of texts.
g) Study word meanings across content areas.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~**Homograph**s are words that are pronounced differently and share the same spelling (e.g., *We saw the dove fly*, or *She dove into the swimming pool*).~~ • An author may use a word or phrase *figuratively* for purposes of comparison, emphasis, or to provide clarity. Such language requires the reader to comprehend beyond the literal meaning of the text.		

5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry.

a) Describe the relationship between text and previously read materials.
b) Describe character development.
c) Describe the development of plot and explain the resolution of conflict(s).
d) Describe the characteristics of free verse, rhymed, and patterned poetry.
e) Describe how an author's choice of vocabulary contributes to the author's style.
f) Identify and ask questions that clarify various points of view.
g) Identify main idea.
h) Summarize supporting details from text.
i) Draw conclusions and make inferences from text.
j) Identify cause and effect relationships.
k) Make, confirm, or revise predictions.
l) Use reading strategies throughout the reading process to monitor comprehension.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to demonstrate comprehension of a selection by using before-, during-, and after-reading strategies. • Students will continue to read and comprehend fictional texts, narrative nonfiction texts, and poetry. • **Narrative nonfiction** is a retelling in story format about real people, animals, places or events. It contains facts and is usually in chronological order (e.g., autobiographies and biographies). • Students will become critical readers by analyzing point of view, word choice, plot, beginnings and endings, and character development. • Students will continue to further their knowledge	**All students should** • choose from a variety of comprehension strategies. • read a variety of fictional texts, narrative nonfiction texts, and poetry. • describe character and plot development.	**To be successful with this standard, students are expected to** • discuss the similarities and differences between a text and previously read materials (e.g., compare and contrast characters). • understand that characters are developed by: ° what is directly stated in the text; ° their speech and actions; and ° what other characters in the story say or think about them. • understand that some characters change during the story or poem and some characters stay the same. • understand that the main character has a ~~problem~~ conflict that usually gets resolved. • identify the conflict or problem of the plot. • understand that plot is developed through a series of events. • identify the events in sequence that lead to resolution of the conflict.

5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry.

a) Describe the relationship between text and previously read materials.
b) Describe character development.
c) Describe the development of plot and explain the resolution of conflict(s).
d) Describe the characteristics of free verse, rhymed, and patterned poetry.
e) Describe how an author's choice of vocabulary contributes to the author's style.
f) Identify and ask questions that clarify various points of view.
g) Identify main idea.
h) Summarize supporting details from text.
i) Draw conclusions and make inferences from text.
j) Identify cause and effect relationships.
k) Make, confirm, or revise predictions.
l) Use reading strategies throughout the reading process to monitor comprehension.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
of plot and character and their understanding of how each is developed in a literacy selection. • Students will then locate information in the text to support their predictions and conclusion. • To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ° independent level – 98-100% accuracy, or about two of every 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ° instructional level – 90-97% accuracy, or three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ° frustration level – less than 90% accuracy,		• discuss why an author might have used particular words and phrases. • identify the characteristics of free verse (poetry with neither regular meter nor rhyme scheme), rhymed poetry, and patterned poetry. • describe how an author's choice of vocabulary contributes to the author's style. • identify and ask questions that clarify various points of view. • identify main idea or theme. • summarize supporting details from text. • draw conclusions/make inferences from text. • identify cause and effect relationships. • make, confirm, or revise predictions. • become aware of when they do not understand (e.g., by reflecting upon and articulating what exactly is causing difficulty).

5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry.

a) Describe the relationship between text and previously read materials.
b) Describe character development.
c) Describe the development of plot and explain the resolution of conflict(s).
d) Describe the characteristics of free verse, rhymed, and patterned poetry.
e) Describe how an author's choice of vocabulary contributes to the author's style.
f) Identify and ask questions that clarify various points of view.
g) Identify main idea.
h) Summarize supporting details from text.
i) Draw conclusions and make inferences from text.
j) Identify cause and effect relationships.
k) Make, confirm, or revise predictions.
l) Use reading strategies throughout the reading process to monitor comprehension.
m) Read with fluency and accuracy.

<table>
<tr><th>UNDERSTANDING THE STANDARD
(Teacher Notes)</th><th>ESSENTIAL UNDERSTANDINGS</th><th>ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES</th></tr>
<tr><td>
or more than ten of every 100 words misread; student reads with neither accuracy nor fluency, and therefore his or her comprehension will be affected.
The table below presents the results of research on oral reading fluency rates for students at the 90th, 75th and 50th percentiles throughout the school year. These rates are reported as words correct per minute (WCPM) for fifth-grade students reading fifth-grade text:
<table>
<tr><th>Percentile</th><th>Fall WCPM</th><th>Midyear WCPM</th><th>Spring WCPM</th></tr>
<tr><td>90</td><td>166</td><td>182</td><td>194</td></tr>
<tr><td>75</td><td>139</td><td>156</td><td>168</td></tr>
<tr><td>50</td><td>110</td><td>127</td><td>139</td></tr>
</table>
Hasbrouck, J.E., & Tindal, G.A., 2006
When fully developed, reading fluency refers to a
</td><td></td><td>
read familiar text with fluency, accuracy, and expression to support comprehension.
recognize structural elements of poems (e.g., verse, rhythm) and drama (e.g., casts, dialogue).
</td></tr>
</table>

5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry.

a) Describe the relationship between text and previously read materials.
b) Describe character development.
c) Describe the development of plot and explain the resolution of conflict(s).
d) Describe the characteristics of free verse, rhymed, and patterned poetry.
e) Describe how an author's choice of vocabulary contributes to the author's style.
f) Identify and ask questions that clarify various points of view.
g) Identify main idea.
h) Summarize supporting details from text.
i) Draw conclusions and make inferences from text.
j) Identify cause and effect relationships.
k) Make, confirm, or revise predictions.
l) Use reading strategies throughout the reading process to monitor comprehension.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
level of accuracy and rate where decoding is relatively effortless; where oral reading is smooth and accurate with correct prosody; and where attention can be allocated to comprehension.*		

* Wolf, M. & Katzir-Cohen, T. (2001). Reading fluency and its intervention. *Scientific Studies of Reading*. (Special Issue on Fluency. Editors: E. Kameenui & D. Simmons). 5, p. 211-238.

5.6 The student will read and demonstrate comprehension of nonfiction texts.

a) Use text organizers, such as type, headings, and graphics, to predict and categorize information in both print and digital texts.
b) Use prior knowledge and build additional background knowledge as context for new learning.
c) Skim materials to develop a general overview of content and to locate specific information.
d) Identify the main idea of nonfiction texts.
e) Summarize supporting details in nonfiction texts.
f) Identify structural patterns found in nonfiction.
g) Locate information to support opinions, predictions, and conclusions.
h) Identify cause and effect relationships following transition words signaling the pattern.
i) Differentiate between fact and opinion.
j) Identify, compare, and contrast relationships.
k) Identify new information gained from reading.
l) Use reading strategies throughout the reading process to monitor comprehension.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will read and demonstrate comprehension of nonfiction ~~print materials and trade books~~ texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics~~, in order to build vocabulary and content knowledge~~. • Students will demonstrate comprehension of a selection by using before-, during-, and after-reading strategies (e.g., using graphic organizers, question generation, and summarization). • ***Before*** reading, students will ~~become able to~~ use text organizers to predict and categorize information. • ***During*** reading, students will formulate	**All students should** • preview, pose questions, and make predictions before reading. • understand how the organizational patterns make the information easier to comprehend. • make connections between what they read in the selection and their prior knowledge.	**To be successful with this standard, students are expected to** • ~~read nonfiction print materials and trade books that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics.~~ • use text ~~set in special~~ features, such as type styles (e.g., boldfaced, italics) and color, captions under pictures and graphics, and headings of sections and chapters, to predict and categorize information in both print and digital texts. • apply prior knowledge to make predictions and build additional background knowledge as context for learning. • skim material from print and digital texts to develop a general overview or to locate specific information. • determine the main idea of a text and summarize supporting key details. • identify structural and organizational patterns such as cause and effect, comparison/contrast, problem/solution, and chronological order.

5.6 The student will read and demonstrate comprehension of nonfiction texts.

a) Use text organizers, such as type, headings, and graphics, to predict and categorize information in both print and digital texts.
b) Use prior knowledge and build additional background knowledge as context for new learning.
c) Skim materials to develop a general overview of content and to locate specific information.
d) Identify the main idea of nonfiction texts.
e) Summarize supporting details in nonfiction texts.
f) Identify structural patterns found in nonfiction.
g) Locate information to support opinions, predictions, and conclusions.
h) Identify cause and effect relationships following transition words signaling the pattern.
i) Differentiate between fact and opinion.
j) Identify, compare, and contrast relationships.
k) Identify new information gained from reading.
l) Use reading strategies throughout the reading process to monitor comprehension.
m) Read with fluency and accuracy.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
questions and make and revise ongoing predictions and inferences, using given information. • ***After*** reading, students will confirm or dismiss previous predictions and inferences. Students will also summarize content, identify important ideas, provide details, ~~make inferences,~~ formulate opinions, and use writing to clarify their thinking (e.g., graphic organizers, responsive journaling). • Interactions between reader and text will become more sophisticated and deliberate as students make inferences, formulate opinions, and write ~~use writing~~ to clarify their thinking • **Prosody** refers to the rhythmic and intonational aspect of language, which should be noticeable during oral reading. Prosody contributes to reading fluency and comprehension.		• identify specific information in text that supports predictions. • form opinions and draw conclusions from the selection. • locate details to support opinions, predictions, and conclusions. • identify cause and effect relationships following transition words signaling the pattern. • distinguish between fact and opinion. • identify, compare, and contrast relationships between characters, events, and facts. • compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided. • identify new information learned from reading. • become aware of when they do not understand (e.g., by reflecting upon and articulating what exactly is causing difficulty). • read familiar text with fluency, accuracy, and ~~expression~~ prosody.

At the fifth-grade level, students will continue to grow as writers~~, experimenting with new modes and purposes~~ as they write to describe, to inform, to entertain, to explain, and to persuade. They will spend more time on revising and editing their work as they gain greater understanding of written expression. Precise and descriptive vocabulary and varied sentence structure will become important tools for creating tone and voice within a text. Students will be expected to have greater control over the conventions of writing, including sentence formation, grammar, capitalization, spelling, and punctuation.

5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade.

a) Identify intended audience.
b) Use a variety of prewriting strategies.
c) Organize information to convey a central idea.
d) Write a clear topic sentence focusing on the main idea.
e) Write multiparagraph compositions.
f) Use precise and descriptive vocabulary to create tone and voice.
g) Vary sentence structure by using transition words.
h) Revise for clarity of content using specific vocabulary and information.
i) Include supporting details that elaborate the main idea.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to write as a method of communication and as a means of expressing themselves. • Students will organize their thoughts and choose appropriate vocabulary to convey their message effectively. • There will be a continued emphasis on the students' ability to shape and control language purposefully and to master the features of the composing and written expression domains. • **Voice** shows an author's personality, awareness of audience, and passion for his or her subject. It adds liveliness and energy to writing. • The three domains of writing are ° **composing** – the structuring and elaborating a writer does to construct an effective message for readers (e.g., staying on topic; beginning, middle, and end) ° **written expression** – those features that show the writer purposefully shaping and controlling language to affect readers (e.g., specific vocabulary, descriptive words, tone/voice)	**All students should** • plan and organize information as they write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade. • use precise, descriptive vocabulary and vary sentence structure as they revise for clarity.	**To be successful with this standard, students are expected to** • apply knowledge of the writing domains of composing, written expression, and usage/mechanics. • produce a clear and coherent written piece in which the development and organization are appropriate to purpose and audience. • recognize different modes of writing have different patterns of organization ° informative/explanatory – clearly introduce a topic and group related information in paragraphs – use facts, definitions, opinions, quotations, details, or other examples and information to develop the topic – use specific vocabulary to inform and explain the topic; and – provide a concluding statement or section related to the topic ° narrative – organize an event sequence that unfolds naturally – use transition words and phrases for sentence variety and to manage the sequence of events – use specific vocabulary, words, and phrases to convey experiences and events – provide a conclusion ° persuasive

5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade.

a) Identify intended audience.
b) Use a variety of prewriting strategies.
c) Organize information to convey a central idea.
d) Write a clear topic sentence focusing on the main idea.
e) Write multiparagraph compositions.
f) Use precise and descriptive vocabulary to create tone and voice.
g) Vary sentence structure by using transition words.
h) Revise for clarity of content using specific vocabulary and information.
i) Include supporting details that elaborate the main idea.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
° **usage/mechanics** – the features that cause written language to be acceptable and effective for standard discourse (e.g., spelling, punctuation, capitalization, grammar). • **Transition words and phrases** provide organization to student writing by improving the connections between thoughts. Categories of transitions include, but are not limited to: ° **example** (e.g., *that is, for example, in fact)* ° **sequence** (e.g., *then*, *next*, *finally*) ° **time or location** (e.g., *before*, *meanwhile, nearby)*		– introduce the position – provide evidence to support the position – provide points for the opposite side and argue against them – provide a conclusion. • create a plan, and organize thoughts before writing. • use a variety of prewriting strategies (e.g., brainstorming, listing, free-writing, and using graphic organizers. • focus, organize, and elaborate to construct an effective message for the reader. • write a clear topic sentence focusing on the main idea. • purposefully shape and control language to demonstrate an awareness of the intended audience. • select specific information to guide readers more purposefully through the piece. • write multiparagraph compositions focused on a topic, grouping related information in paragraphs and sections. • choose precise descriptive vocabulary and information to create tone and voice • develop and strengthen writing as needed, in consultation with peers or adults, by prewriting, drafting, revising, editing, or rewriting.

5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade.

a) Identify intended audience.
b) Use a variety of prewriting strategies.
c) Organize information to convey a central idea.
d) Write a clear topic sentence focusing on the main idea.
e) Write multiparagraph compositions.
f) Use precise and descriptive vocabulary to create tone and voice.
g) Vary sentence structure by using transition words.
h) Revise for clarity of content using specific vocabulary and information.
i) Include supporting details that elaborate the main idea.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use narrative techniques, such as dialogue, description, and pacing, to develop experiences or characters. • use precise language and content-specific vocabulary to inform about or explain a topic, to persuade, describe or entertain. • include sentences of various lengths and beginnings to create a pleasant, informal rhythm. • vary sentence structure by using transition words and phrases. • use precise language and phrases to develop writing (e.g., consequently, specifically, especially). • clarify writing when revising. • include supporting details that elaborate the main idea. • use available technology to gather information and to aid in writing.

5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing.

a) Use plural possessives.
b) Use adjective and adverb comparisons.
c) Identify and use interjections.
d) Use apostrophes in contractions and possessives.
e) Use quotation marks with dialogue.
f) Use commas to indicate interrupters.
g) Use a hyphen to divide words at the end of a line.
h) Edit for fragments and run-on sentences.
i) Eliminate double negatives.
j) Use correct spelling of commonly used words.
k) Identify and use conjunctions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand and use the editing process. • Students will work to gain more control over the conventions of writing, including composing effective sentences with subject verb agreement, spelling, capitalization, and punctuation. • Students will ~~also identify~~ effectively use the following parts of speech: nouns, pronouns, verbs, adjectives, adverbs, prepositions, and interjections. • Teachers should begin to encourage students to incorporate variety into sentences, by appropriate use of subordinate (dependent) clauses. • Students should have practice writing on demand, for shorter time frames, and over extended periods of time.	**All students should** • understand that editing for correct sentence formation, grammar, capitalization, spelling, and punctuation makes the meaning of the writing clearer to the reader. • revise and edit drafts for improvement, using teacher assistance and peer collaboration.	**To be successful with this standard, students are expected to** • punctuate correctly ◦ apostrophes in contractions ~~such as~~ (e.g., *isn't*), and possessives ~~such as~~ (e.g., *Jan's*); ◦ commas [e.g., items in a series, to set off the words *yes* and *no*; and to indicate direct address (e.g., *Is that you, Chloe?*)]; ◦ quotation marks with dialogue; and ◦ ~~commas in the salutation and closing of a letter~~ ◦ hyphens to divide words at the end of a line. • use underlining, quotation marks, or italics to indicate titles of works. • use adverb comparisons~~, such as~~ (e.g., *fast, faster, fastest*). • use adjective comparisons~~, such as~~ (e.g., *big, bigger, biggest*). • use adverbs instead of adjectives where appropriate~~,~~ (e.g., "He played *really* well." instead of "He played *real* well."). • use a comma to separate coordinate adjectives (e.g., *It was a fascinating, enjoyable movie*). • use a comma to separate an introductory element from the rest of the sentence.

5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing.

a) Use plural possessives.
b) Use adjective and adverb comparisons.
c) Identify and use interjections.
d) Use apostrophes in contractions and possessives.
e) Use quotation marks with dialogue.
f) Use commas to indicate interrupters.
g) Use a hyphen to divide words at the end of a line.
h) Edit for fragments and run-on sentences.
i) Eliminate double negatives.
j) Use correct spelling of commonly used words.
k) Identify and use conjunctions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use plural possessives, (e.g.~~,~~ "The *books'* covers are torn."). • identify and use interjections~~, such as~~ (e.g., "*Yikes, look at the size of that bug!*"). • form and use the perfect (e.g., *I had walked; I have walked; I will have walked*) verb tenses. • use verb tense to convey various times, sequences, states, and conditions. • avoid fragments ~~(Use of clausal fragments, such as *"Although he was not supposed to go out of the house."*, is not penalized in direct writing at this level.)~~ • avoid run-ons~~,~~ (e.g., *"I opened the door, the dog went out."*). • ~~avoid excessive coordination, e.g., *"I opened the door and the dog went out and he chased the cat and then he came back inside."*~~ • eliminate double negatives. • use correct spelling of commonly used words. • identify and use conjunctions • use technology, including the Internet, to produce, edit and publish writing as well as to interact and collaborate with others.

At the fifth-grade level, students will conduct short research projects based on focused questions. Students will gather relevant information from sources and integrate the information while avoiding plagiarism.

5.9 The student will find, evaluate, and select appropriate resources for a research product.

a) Construct questions about a topic.
b) Collect information from multiple resources including online, print, and media.
c) Use technology as a tool to research, organize, evaluate, and communicate information.
d) Organize information presented on charts, maps, and graphs.
e) Develop notes that include important concepts, summaries, and identification of information sources.
f) Give credit to sources used in research.
g) Define the meaning and consequences of plagiarism.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use information resources to locate information on a topic. • Students will collect information from multiple resources including online, print, and media. • After collecting needed information, students will learn to evaluate and synthesize the information to use in their oral reports or writings. • Students will need to give credit to the author, title, and date of a resource used in research. • **Plagiarism** is using someone else's ideas or words without giving credit.	**All students should** • formulate initial questions about a topic and seek information by identifying, locating, exploring, and effectively using a variety of sources of information. • recognize, organize, and record information pertinent to the topic and blend ideas accurately. • give credit to sources used in research.	**To be successful with this standard, students are expected to** • use available technology to gather information and to aid in writing. • conduct short research projects that use sources to build knowledge on a topic. • formulate research questions based on a topic. • select and use appropriate references (e.g., atlases, almanacs, and encyclopedias) including online, print, and media resources. • use available technology and media to organize, evaluate, and communicate information (e.g., presentation software, digital media). • identify key terms to use in searching for information. • organize information presented on charts, maps, and graphs. • skim to find information related to a topic. • select information that is related to the topic at hand. • evaluate and combine (synthesize) related information from two or more sources. • develop notes that include important concepts, summaries, and identification of information sources. • summarize or paraphrase information in notes and finished work. • prevent plagiarism and its consequences by giving credit to authors when

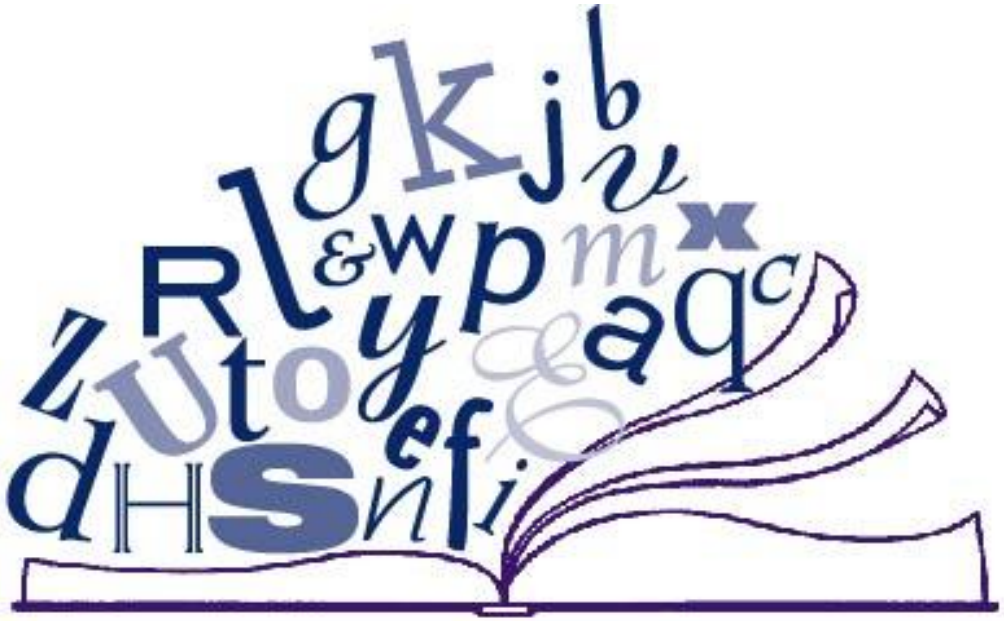
5.9 The student will find, evaluate, and select appropriate resources for a research product.

a) Construct questions about a topic.
b) Collect information from multiple resources including online, print, and media.
c) Use technology as a tool to research, organize, evaluate, and communicate information.
d) Organize information presented on charts, maps, and graphs.
e) Develop notes that include important concepts, summaries, and identification of information sources.
f) Give credit to sources used in research.
g) Define the meaning and consequences of plagiarism.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		ideas and/or words are used in research. • provide a list of sources including author, title, and date.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Six



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the sixth-grade level, students will participate in small group and classroom discussions. They will express personal opinions and come to understand not only differing points of view but also the differences between facts and opinions. Small-group analysis and self-analysis of the effectiveness of communication will be introduced. When students speak formally and informally in small groups or individual presentations, ~~grammatically correct English will be the expectation~~ they will be expected to use grammatically correct English. In addition, students will understand the basic elements of media literacy.

6.1 The student will participate in and contribute to small-group activities.

a) Communicate as leader and contributor.
b) Evaluate own contributions to discussions.
c) Summarize and evaluate group activities.
d) Analyze the effectiveness of participant interactions.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use oral language effectively. • Students will evaluate the effectiveness of the contributions of participants in a variety of roles in a discussion group.	**All students should** • interact as both group leader and member. • use verbal and nonverbal feedback from the audience to evaluate their own contributions. • process and verbalize the content and impact of each participant's contribution to a discussion.	**To be successful with this standard, students are expected to** • ensure that all group members participate in the exchange of information. • use strategies that contribute to the discussion. • receive and understand feedback from the others. • pose and respond to questions. • relate and retell information. • restate briefly and critically the main idea(s) or theme(s) discussed within a group. • use active listening to focus on what is said and what is implied. • summarize what is heard. • retain and rethink ideas based on what is heard. • infer and assimilate new ideas. • use a checklist and/or rubric to evaluate the participation of self and others.

6.2 The student will present, listen critically, and express opinions in oral presentations.

a) Distinguish between fact and opinion.
b) Compare and contrast viewpoints.
c) Present a convincing argument.
d) Paraphrase and summarize what is heard.
e) Use language and vocabulary appropriate to audience, topic, and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will refine and apply critical listening skills while participating in oral presentations as both the speaker and members of the audience. • Students will ~~put forth~~ present convincing arguments and compare and contrast viewpoints. • Students will paraphrase and summarize what they have heard, using grammatically correct language and appropriate vocabulary.	**All students should** • recognize that facts can be verified and that opinions cannot. • recognize that each member brings to the group a unique viewpoint reflective of his or her background. • paraphrase by putting into their own words what has been said by others. • paraphrase and summarize by restating the main points more succinctly than the original presentation. • organize a presentation.	**To be successful with this standard, students are expected to** • take ~~two-column~~ notes ~~when listening~~ to record facts/opinions or ~~two~~ differing viewpoints. • organize convincing arguments to include: ◦ facts; ◦ statistics; ◦ examples; and ◦ ~~expert authority~~ ◦ logical reasoning. • ~~restate~~ paraphrase or summarize what others have said. • plan and deliver an oral presentation, using the following steps: ◦ determine topic and purpose; ◦ identify the intended audience; ◦ gather information; ◦ organize the information; ~~with outlines, file cards, or graphic organizers~~ ◦ ~~create visual aids~~ use multimedia to clarify presentation information; ◦ choose vocabulary appropriate to topic, purpose, and audience; ◦ phrase with grammatically correct language; and ◦ practice delivery. • use ~~rules and~~ strategies for summarizing, such as the following: ◦ delete ~~trivia~~ trivial and ~~redundancy~~ redundant information; ◦ substitute a general term for a list; and ◦ find or create a main idea statement.

6.3 The student will understand the elements of media literacy.

a) Compare and contrast auditory, visual, and written media messages.
b) Identify the characteristics and effectiveness of a variety of media messages.
c) Craft and publish audience-specific media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will be able to identify elements of media literacy recognizing that elements of media literacy are based on audience and purpose. They will also learn all media messages are constructed and that to understand the whole meaning of the message they can *deconstruct* it, looking at the following attributes: ◦ **Authorship** (Who constructed the message?) ◦ **Format** (This is not just the medium being used but also how the creators used specific elements for effect, i.e., color, sound, emphasis on certain words, amateur video, kids' voices.) ◦ **Audience** (Who is the person or persons meant to see the message? How will different people *see* the message?) ◦ **Content** (This is not just the visible content but the *embedded* content as well which includes underlying assumptions of values or points of view; facts and opinions may be intermixed.) ◦ **Purpose** (Why is the message being sent—is it meant to persuade, inform, entertain, sell, or a combination of these?) • **Auditory media** can be heard (e.g., music, radio shows, podcasts).	**All students should** • recognize that a public service announcement (PSA) is an advertisement for the benefit of the public. The purpose of a public service announcement can be to raise awareness. (e.g., advertisements targeting tobacco cessation). • compare and contrast reading to, listening, or viewing an audio, video, or live version of the same text. • understand the effectiveness of any media message is determined by the results on the intended audience. For example, the *Don't Drink and Drive* campaign has been an effective campaign because the number of traffic accidents due to drunk driving has been reduced.	**To be successful with this standard, students are expected to** • deconstruct and compare/contrast several types of media messages ~~by addressing questions raised by media attributes.~~ • recognize production elements in media are composed based on audience and purpose. • create media messages, such as public service announcements aimed at a variety of audiences with different purposes. • integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue. • identify the elements of a variety of media including layout, pictures, and text features in print media; camera shots, ~~angles~~, lighting, editing, and sound in TV, radio, and film. • access media message to compare and contrast information presented in different media and/or formats. • understand that three most common camera angles or shots are the close-up, long shot, and medium shot.

6.3 The student will understand the elements of media literacy.

a) Compare and contrast auditory, visual, and written media messages.
b) Identify the characteristics and effectiveness of a variety of media messages.
c) Craft and publish audience-specific media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• **Visual media** can be viewed (e.g., television, video, Web-based materials, print ads). • **Written media** includes text (e.g., newspapers, magazines, books, blogs). • There are a variety of camera angles, which can add perspective or point of view to what is being pictured. Sometimes the camera angle can greatly influence the audience. A close-up only shows part of a subject usually in great detail; a long shot often establishes the scene (car driving up to a hotel or an overview of a city); a medium shot shows the whole subject (a person, car etc.).		

At the sixth-grade level, students will expand the study of roots and affixes as well as the use of context to develop independence in vocabulary acquisition. ~~Analogies and f~~-Figurative language will be introduced. Students will read independently and in groups for appreciation and comprehension of a variety of fiction, narrative nonfiction, nonfiction, and poetry. Both classic and recent works will be included. Students will apply critical reading and reasoning skills across the content areas, including history and social science, science, and mathematics.
When selecting text, teachers will consider appropriateness of subject and theme, as well as text complexity.

6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic texts.

a) Identify word origins and derivations.
b) Use roots, cognates, affixes, synonyms, and antonyms to expand vocabulary.
c) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.
d) Identify and analyze figurative language.
e) Use word-reference materials.
f) Extend general and specialized vocabulary through speaking, listening, reading, and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will become independent learners of vocabulary. Teachers should choose vocabulary from context. • Students will be exposed to prefixes, suffixes, roots, derivations, and inflections of polysyllabic words and understand that words with similar parts may be related to each other in meaning and origin. • Teachers should use a study of cognates, words from the same linguistic family, to enhance vocabulary instruction Cognates can occur within the same language or across languages— *night* (English), *nuit* (French), *Nacht* (German), *nacht* (Dutch), *nicht* (Scots), *natt* (Swedish, Norwegian), *nat* (Danish), *raat* (Urdu), *nátt* (Faroese), *nótt* (Icelandic), *noc* (Czech, Slovak, Polish). • Figurative language ~~and analogies~~ will be introduced and, students will continue the use of context to help determine the meaning of unfamiliar words ~~will be continued~~. • Students will be introduced to word relationships and nuances in word meanings. • Determine the meaning of words and phrases	**All students should** • use word structure to analyze and show relationships among words. • use common, grade-appropriate Greek or Latin affixes and roots as clues to determine meanings of common English words. • ~~identify internal and external inflections which may alter meaning and pronunciation~~. • ~~recognize the relationships commonly used to create analogies.~~ • recognize that many words have multiple meanings and that context and dictionaries are both supportive in determining which meaning is most appropriate. • recognize that figurative language enriches text.	**To be successful with this standard, students are expected to** • use common Greek or Latin affixes and roots as clues to the meaning of a word (e.g., aud – hearing, listening, or sound *audience*, *auditory*, *audible*. • identify Latin and Greek roots of common English words as clues to the meaning. • separate and recombine known word parts to predict the meaning of unfamiliar words, such as separating *poly* from *polygon* and *phone* from *telephone* to predict the meaning of *polyphony.* • recognize common antonyms and synonyms. • notice relationships among inflected words, such as *proceed* and *procession* or *internal* and *internalization.* • use context (e.g., the overall meaning of a sentence or paragraph; a word's function in a sentence) as a clue to the meaning. • recognize word relationships ~~common to analogy construction~~, such as: ° synonyms – small: little; ° antonyms – up: down; ° object/action – ear: hear; ° source/product – tree: lumber; ° part/whole – paw: dog; and ° animal/habitat – bee: hive. • use context clues to determine meanings of unfamiliar words in text, such as:

6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic texts.

a) Identify word origins and derivations.
b) Use roots, cognates, affixes, synonyms, and antonyms to expand vocabulary.
c) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.
d) Identify and analyze figurative language.
e) Use word-reference materials.
f) Extend general and specialized vocabulary through speaking, listening, reading, and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
as they are used as figurative language. • Students will develop independence with reference books to determine meaning, pronunciation, and origin of words.		◦ examples; ◦ restatements; and ◦ contrast. • identify figurative language in text, including: ◦ **simile** – figures of speech that use the words *like* or *as* to make ◦ comparisons; ◦ **hyperbole** – intentionally exaggerated figures of speech; and ◦ **metaphor** – a comparison equating two or more unlike things ◦ without using "like" or "as." • consult ~~use~~ word reference materials (e.g., dictionaries, glossaries, thesauruses, both print and online) to find the pronunciation of a word or determine or clarify its meaning. ~~including~~ ◦ ~~dictionaries~~ ◦ ~~thesauruses~~ ◦ ~~glossaries~~ ◦ ~~online sources~~ • determine or clarify the meaning of unknown and multiple-meaning words and phrases based on reading and content.

6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Identify the elements of narrative structure, including setting, character, plot, conflict, and theme.
b) Make, confirm, and revise predictions.
c) Describe how word choice and imagery contribute to the meaning of a text.
d) Describe cause and effect relationships and their impact on plot.
e) Use prior and background knowledge as context for new learning.
f) Use information in the text to draw conclusions and make inferences.
g) Explain how character and plot development are used in a selection to support a central conflict or story line.
h) Identify the main idea.
i) Identify and summarize supporting details.
j) Identify and analyze the author's use of figurative language.
k) Identify transitional words and phrases that signal an author's organizational pattern.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will read at and beyond the literal level in a variety of genres, including fiction, narrative nonfiction, and poetry, and understand the structures and characteristics of stories and poems. • Teachers will model higher-order thinking processes with materials at the students' instructional reading level and move students gradually to collaborative and independent comprehension of age-appropriate materials at the independent reading level. • Students will become independent readers of age-appropriate text and will activate background knowledge and summarize or paraphrase text to demonstrate understanding. • **Imagery** is the use of words to recreate sensory impressions. Verbal imagery is most often visual, but imagery may also be words that recreate sound, smell, taste, or touch	**All students should** • recognize an author's choice of words and images. • describe how the author uses keywords and images to craft a message and create characters. • analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes). • analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons or	**To be successful with this standard, students are expected to** • understand setting as time~~,~~ and place~~, and duration in a story~~. • understand plot as: ° the development of the central conflict and resolution; ° the sequence of events in the story; and ° the writer's map for what happens, how it happens, to whom it happens, and when it happens. • understand that character traits are revealed by: ° what a character says; ° what a character thinks; ° what a character does; and ° how other characters respond to the character. • determine a central idea or theme of a fictional text and how it is developed through specific details. • understand internal and external conflicts in stories, including: ° internal conflicts within characters; ° external conflicts between characters; and ° changes in characters as a result of conflicts and resolutions in the plot.

6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Identify the elements of narrative structure, including setting, character, plot, conflict, and theme.
b) Make, confirm, and revise predictions.
c) Describe how word choice and imagery contribute to the meaning of a text.
d) Describe cause and effect relationships and their impact on plot.
e) Use prior and background knowledge as context for new learning.
f) Use information in the text to draw conclusions and make inferences.
g) Explain how character and plot development are used in a selection to support a central conflict or story line.
h) Identify the main idea.
i) Identify and summarize supporting details.
j) Identify and analyze the author's use of figurative language.
k) Identify transitional words and phrases that signal an author's organizational pattern.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
impressions. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.	categories). • identify and define the elements of narrative structure. • understand that fiction includes a variety of genres, including short story, novel, ~~folk literature,~~ and drama. • understand that narrative nonfiction includes biography, autobiography, and personal essay. • understand that poetry can be rhymed, unrhymed, and/or patterned. • differentiate between narrative and poetic forms. • understand that imagery and	• describe how a fictional plot is often episodic, and how characters develop as the plot moves toward a resolution. • notice an author's craft, including use of : ◦ language patterns; ◦ sentence variety; ◦ vocabulary; ◦ imagery; and ◦ figurative language. • recognize an author's use of: ◦ **simile** – figures of speech that use the words *like* or *as* to make comparisons; ◦ **hyperbole** – intentionally exaggerated figures of speech; and ◦ **metaphor** – a figure of speech that makes a comparison equating two or more unlike things. ~~without using "like" or "as."~~ • recognize poetic forms, including: ◦ **haiku** – a 17-syllable, delicate, unrhymed Japanese verse, usually about nature; ◦ **limerick** – a 5-line, rhymed, rhythmic verse, usually humorous; ◦ **ballad** – a songlike narrative poem, usually featuring rhyme, rhythm,

6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Identify the elements of narrative structure, including setting, character, plot, conflict, and theme.
b) Make, confirm, and revise predictions.
c) Describe how word choice and imagery contribute to the meaning of a text.
d) Describe cause and effect relationships and their impact on plot.
e) Use prior and background knowledge as context for new learning.
f) Use information in the text to draw conclusions and make inferences.
g) Explain how character and plot development are used in a selection to support a central conflict or story line.
h) Identify the main idea.
i) Identify and summarize supporting details.
j) Identify and analyze the author's use of figurative language.
k) Identify transitional words and phrases that signal an author's organizational pattern.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
	figurative language enrich texts. • recognize an author's craft as the purposeful choice of vocabulary, sentence formation, voice, and tone. • recognize an author's theme(s). • recognize that prior or background knowledge assists in making connections to the text.	and refrain; and ◦ **free verse –** poetry with neither regular meter nor rhyme scheme. • recognize poetic elements in prose and poetry, including: ◦ **rhyme** – recurring identical or similar final word sounds within or at the ends of lines of verse, e.g., *farm/harm*; ◦ **rhythm** – the recurring pattern of strong and weak syllabic stresses; ◦ **repetition** – repeated use of sounds, words, or ideas for effect and emphasis; ◦ **alliteration** – repetition of initial sounds, e.g., *picked a peck of pickled peppers*; and ◦ **onomatopoeia** – the use of a word whose sound suggests its meaning, e.g., *buzz*. • recognize an author's tone including serious, humorous, objective, and personal. • use strategies for summarizing, such as graphic organizers. ◦ ~~story maps~~ ◦ ~~Somebody…Wanted…But…So~~ • use graphic organizers~~, such as flow charts or story maps,~~ to record plot elements that illustrate cause and effect relationships and plot development.

6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Identify the elements of narrative structure, including setting, character, plot, conflict, and theme.
b) Make, confirm, and revise predictions.
c) Describe how word choice and imagery contribute to the meaning of a text.
d) Describe cause and effect relationships and their impact on plot.
e) Use prior and background knowledge as context for new learning.
f) Use information in the text to draw conclusions and make inferences.
g) Explain how character and plot development are used in a selection to support a central conflict or story line.
h) Identify the main idea.
i) Identify and summarize supporting details.
j) Identify and analyze the author's use of figurative language.
k) Identify transitional words and phrases that signal an author's organizational pattern.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use graphic organizers~~, such as two-column notes and Venn diagrams,~~ to record changes in characters as a result of incidents in the plot. • use graphic organizers~~, such as "It says…I say,"~~ to record clues in the text and inferences or conclusions made by the reader as a result of those clues. • analyze author's use of figurative language. • identify how transitional words signal an author's organization such as words indicating time, cause and effect, or indicating more information.

6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Use text structures such as type, headings, and graphics to predict and categorize information in both print and digital texts.
b) Use prior knowledge and build additional background knowledge as context for new learning.
c) Identify questions to be answered.
d) Make, confirm, or revise predictions.
e) Draw conclusions and make inferences based on explicit and implied information.
f) Differentiate between fact and opinion.
g) Identify main idea.
h) Summarize supporting details.
i) Compare and contrast information about one topic, which may be contained in different selections.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will read and comprehend at and beyond the literal level in a variety of ~~informational~~ nonfiction texts. • Teachers will model higher-order thinking processes with materials at ~~or below~~ the students' instructional reading level and move students gradually to collaborative and independent comprehension of age-appropriate materials at the independent reading level. • Students will become independent and knowledgeable about the use of libraries and technology for doing research. • Teachers will collaborate to help students apply reading skills in a variety of content texts. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.	**All students should** • activate prior knowledge before reading. • be strategic before, during, and after reading. • recognize an author's patterns of organization. • recognize an author's use and clarification of technical vocabulary. • use graphic organizers to organize and summarize text. • read beyond the printed text to understand the message stated or implied by an author. • select appropriate sources of information based on the purpose for reading.	**To be successful with this standard, students are expected to** • activate prior knowledge before reading by use of, but not limited to: ◦ small-group or whole-class discussion; ◦ anticipation guides; and ◦ preview of key vocabulary~~; and~~ ◦ ~~use of probable passage, preview guides~~. • pose questions prior to and during the reading process based on text ~~features~~ structures, such as: ◦ boldface and/or italics type; ◦ type set in color; ◦ vocabulary; ◦ graphics or photographs; and ◦ headings and subheadings. • use specific and helpful clues in the context, including: ◦ **definitions** – which define words within the text; ◦ **signal words** – which alert readers that explanations or examples follow; ◦ **direct explanations** – which explain terms as they are introduced; ◦ **synonyms** – which provide a more commonly used term;

6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Use text structures such as type, headings, and graphics to predict and categorize information in both print and digital texts.
b) Use prior knowledge and build additional background knowledge as context for new learning.
c) Identify questions to be answered.
d) Make, confirm, or revise predictions.
e) Draw conclusions and make inferences based on explicit and implied information.
f) Differentiate between fact and opinion.
g) Identify main idea.
h) Summarize supporting details.
i) Compare and contrast information about one topic, which may be contained in different selections.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
	• use a variety of strategies, including context, structural analysis, and reference sources, for determining the meaning of unfamiliar and technical vocabulary. • read in order to gather, organize, and ~~restate~~ synthesize information for written and oral presentations. • recognize an author's purpose, including: ◦ to entertain; ◦ to inform; and ◦ to persuade.	◦ **antonyms** – which contrast words with their opposites; and ◦ **inferences** – which imply meaning and help readers deduce meaning. • give evidence from the text to support conclusions. • ~~recognize~~ identify common patterns of organizing text including: ◦ chronological or sequential; ◦ comparison/contrast; ◦ cause and effect; ◦ problem-solution; and ◦ generalization or principle. • predict and then read to validate or revise the prediction(s). • identify clue words and phrases that help unlock meaning of unfamiliar and technical terms. • comprehend~~, and remember~~ and record details and/or facts in order to arrive at a conclusion, inference, or generalization. • recognize that a fact is something that can be proven, while an opinion is a personal feeling. • determine a central idea of a text and recognize how details support that

6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Use text structures such as type, headings, and graphics to predict and categorize information in both print and digital texts.
b) Use prior knowledge and build additional background knowledge as context for new learning.
c) Identify questions to be answered.
d) Make, confirm, or revise predictions.
e) Draw conclusions and make inferences based on explicit and implied information.
f) Differentiate between fact and opinion.
g) Identify main idea.
h) Summarize supporting details.
i) Compare and contrast information about one topic, which may be contained in different selections.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		idea. • use graphic organizers to show similarities and differences in the information found in several sources about the same topic. • use strategies and rules for summarizing, such as the following: ° delete trivia and redundancy; ° substitute a general term for a list; and ° find or create a main idea statement. • summarize the text without providing a personal opinion. • compare and contrast similar information across several texts.

At the sixth-grade level, students will plan, draft, revise, and edit narrative~~s~~, descriptive, ~~descriptions,~~ ~~and explanations~~ expository, and persuasive writing with attention to composition and written expression as well as sentence formation, usage, and mechanics. They will use writing as a tool for learning academic concepts as well as for expressive purposes. They will use technology as available and appropriate.

6.7 The student will write narration, description, exposition, and persuasion.

a) Identify audience and purpose.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement if appropriate.
f) Write multiparagraph compositions with elaboration and unity.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Revise sentences for clarity of content including specific vocabulary and information.
j) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will demonstrate an awareness of audience and use a process for writing as they produce narrative, descriptive, ~~and explanatory~~ expository, and persuasive pieces. • Teachers will focus direct instruction on all three domains of writing: ◦ **composing** – the structuring and elaborating a writer does to construct an effective message for readers; ◦ **written expression** – those features that show the writer purposefully shaping and controlling language to affect readers; and ◦ **usage/mechanics** – the features that cause written language to be acceptable and effective for standard discourse. • Students will apply a process for writing, including planning, drafting, revising, proofreading, editing, and publishing. • Good writing includes elaboration, i.e., use of descriptive details and examples, within	**All students should** • use prewriting strategies to select and narrow topics. • compose with attention to: ◦ central idea; ◦ unity; ◦ elaboration; and ◦ organization. • craft writing purposefully with attention to: ◦ deliberate word choice; ◦ precise information and vocabulary; ◦ sentence variety; and ◦ tone and voice. • elaborate writing to continue the flow from idea to idea without interruption. • use appropriate transitions to clarify	**To be successful with this standard, students are expected to** • develop real or imagined experiences or events using effective techniques, relevant descriptive details, and well-structured event sequences when writing narratives. • engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. • use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. • write informative/explanatory texts to examine a topic and convey ideas, concepts, and information. • write using strategies such as definition, classification comparison/contrast, and cause/effect. • include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when appropriate. • develop the topic using relevant facts, definitions, details,

6.7 The student will write narration, description, exposition, and persuasion.

a) Identify audience and purpose.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement if appropriate.
f) Write multiparagraph compositions with elaboration and unity.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Revise sentences for clarity of content including specific vocabulary and information.
j) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
sentences to give detail and depth to an idea and across paragraphs to continue the flow of an idea throughout a piece. • **Voice** shows an author's personality, awareness of audience, and passion for his or her subject. It adds liveliness and energy to writing. • **Tone** is used to express an author's attitude toward the topic. • ~~A~~The writing process is nonlinear: returning to prewriting strategies or drafting at any point in the process may help the writer clarify and elaborate a drafted piece. • Students should have practice writing on demand, for shorter time frames, and over extended periods of time.	the relationships among ideas and concepts. • select vocabulary and tone with awareness of audience and purpose. • revise drafts for improvement, using teacher assistance, peer collaboration, and growing independence. • recognize that a thesis statement is not an announcement of the subject, but rather a unified, and specific statement.	quotations, and/or examples. • use transitional words or phrases to connect parts of sentences in order to: ° show relationships between ideas; ° signal a shift or change in the writer's thoughts; ° signal levels of importance; ° suggest a pattern of organization; and ° make sentences clearer. • establish and maintain a formal style of writing when appropriate. • provide an appropriate conclusion for the purpose and mode of writing. • identify audience and purpose for any piece of writing. • use selected prewriting techniques, such as: ° brainstorming; ° webbing; ° mapping; ° clustering; ° listing; ° organizing graphically;

6.7 The student will write narration, description, exposition, and persuasion.

a) Identify audience and purpose.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement if appropriate.
f) Write multiparagraph compositions with elaboration and unity.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Revise sentences for clarity of content including specific vocabulary and information.
j) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ questioning; and ◦ outlining. • write using descriptive details. • elaborate to: ◦ give detail; ◦ add depth; and ◦ continue the flow of an idea. • write an effective thesis statement focusing, limiting, or narrowing the topic. • differentiate between a thesis statement and a topic sentence. • write more than one paragraph on any central theme or topic demonstrating elaboration, coherence, and unity. • incorporate variety into sentences, using appropriate: ◦ **modifier** – an adjective, an adverb, or a phrase or clause acting as an adjective or adverb; ◦ **coordination** – joining words, phrases, clauses, or sentences by using appropriate coordinating conjunctions; and ◦ **subordination** – establishing the relationship between an

6.7 The student will write narration, description, exposition, and persuasion.

a) Identify audience and purpose.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement if appropriate.
f) Write multiparagraph compositions with elaboration and unity.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Revise sentences for clarity of content including specific vocabulary and information.
j) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		independent and a dependent clause by using appropriate subordinate conjunctions. • understand that revising to improve a draft includes: ◦ rereading; ◦ reflecting; ◦ rethinking; and ◦ rewriting. • use available computer technology to enhance the writing process.

6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
b) Use subject-verb agreement with intervening phrases and clauses.
c) Use pronoun-antecedent agreement to include indefinite pronouns.
d) Maintain consistent verb tense across paragraphs.
e) Eliminate double negatives.
f) Use quotation marks with dialogue.
g) Choose adverbs to describe verbs, adjectives, and other adverbs.
h) Use correct spelling for frequently used words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand and apply all the conventions of language learned at the elementary school level. • Students will maintain correct use of language to enhance writing and to avoid confusing or distracting the reader. • Students will understand that the conventions of correct language are an integral part of the writing process and their proper use is a courtesy to the reader. • **Indefinite pronouns** refer to a person(s) or thing(s) not specifically named and include *all, any, anyone, both, each, either, everybody, many, none, nothing*. • A diagram of a sentence is a tool used to increase the understanding of the structure of a sentence.	**All students should** • proofread and edit drafts with teacher assistance, peer collaboration, and growing independence. • differentiate between subjects and objects when choosing pronouns. • understand that pronouns need to have recognizable antecedents that agree in number and gender. • use reference sources to differentiate among homophones and easily confused words,(e.g., *a lot/allot, effect/affect, bored/board*). • replace colloquial expressions with correct usage (e.g., *I could of rode my bike* becomes *I could have ridden my bike.)*.	**To be successful with this standard, students are expected to** • use complete sentences with appropriate punctuation. • avoid comma splices and fused sentences. • avoid using coordinating conjunctions at the beginning of a sentence (e.g., *and, so*). • diagram ~~simple~~ sentences with ~~prepositional~~ phrases and clauses. • use singular verbs with singular subjects and plural verbs with plural subjects (e.g., *The driver of the bus ~~full~~ aware of children* drives *very carefully. The students in the class* discuss *many topics*). • use reference sources to select the correct spelling and usage of ~~such~~ words such as *their, there*, and *they're*. • use first person pronouns appropriately in compound subjects and objects (e.g., *John and I went to the store. Mother gave presents to Jim and me.*). • recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents). • choose adjectives and adverbs appropriately (e.g., *He is a good student. He does really well in all his studies*). • capitalize language classes or classes followed by a number (e.g., *French, Algebra II*).

6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
b) Use subject-verb agreement with intervening phrases and clauses.
c) Use pronoun-antecedent agreement to include indefinite pronouns.
d) Maintain consistent verb tense across paragraphs.
e) Eliminate double negatives.
f) Use quotation marks with dialogue.
g) Choose adverbs to describe verbs, adjectives, and other adverbs.
h) Use correct spelling for frequently used words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• capitalize *mom* and *dad* only when those titles replace names or are used as proper nouns (e.g., *My mom told me to go to bed, and I replied, "No,* • *Mom, I don't want to."*). • punctuate and format dialogue. • ~~hyphenate words between syllables when they must be split at the ends of lines.~~ • ~~understand the use of~~ correctly use the apostrophe for contractions and possessives. • maintain a consistent verb tense within sentences and throughout and across paragraphs. • eliminate double negatives. • correctly use quotation marks in dialogue.

At the sixth-grade level, students will find, evaluate, and select appropriate resources for a research product. They will evaluate the validity and authenticity of texts, and they will use technology to research, organize, evaluate, and communicate information. In addition, they will learn to cite sources, define the meaning and consequences of plagiarism, and follow ethical and legal guidelines for gathering and using information.

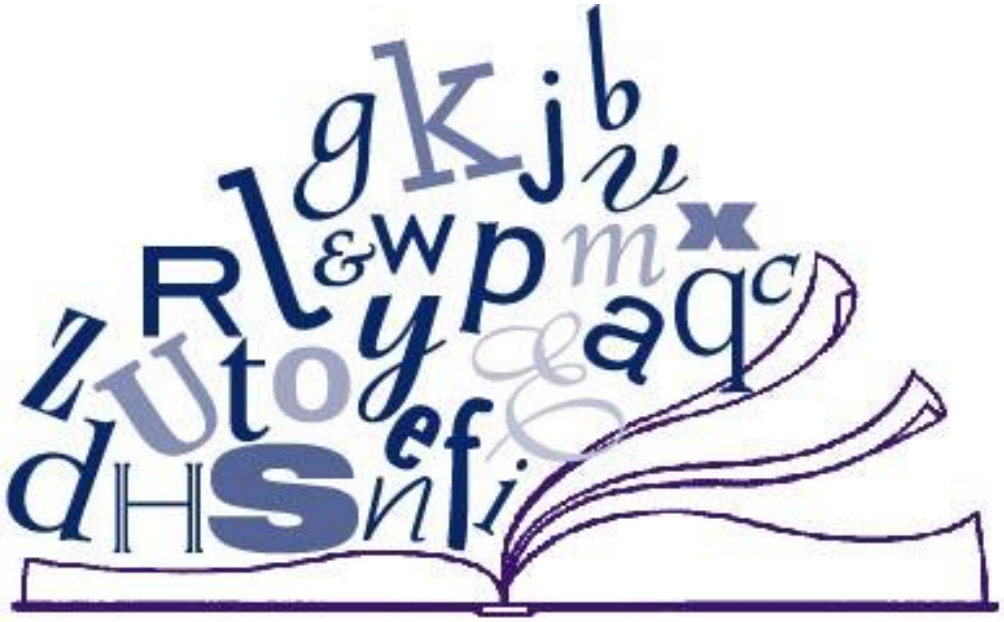
6.9 The student will find, evaluate, and select appropriate resources for a research product.

a) Collect information from multiple sources including online, print, and media.
b) Evaluate the validity and authenticity of texts.
c) Use technology as a tool to research, organize, evaluate, and communicate information.
d) Cite primary and secondary sources.
e) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students must realize in order to avoid plagiarism, credit must be given when using: another person's idea, opinion, or theory; facts, statistics, graphs, drawings, etc., quotations of another person's actual spoken or written words; or paraphrase of another person's spoken or written words. • Teachers should assist students in determining the authenticity and validity of sources. • Teachers should make students aware of possible consequences of plagiarism. • Students will have the opportunity to practice writing over shorter time frames as well as for extended ones.	**All students should** • understand that a **primary source** is an original document or a firsthand or eyewitness account of an event. • understand that a **secondary source** discusses information originally presented somewhere else. Secondary sources provide analysis, interpretation, or evaluation of the original information.	**To be successful with this standard, students are expected to** • understand and use the online, print, and media references available in the classroom, school, and public libraries, including: ◦ general and specialized dictionaries; ◦ thesauruses and glossaries; ◦ ~~atlases and globes~~ ◦ general and specialized encyclopedias; ◦ directories; ◦ general and specialized (or subject-specific) databases; and ◦ Internet resources, as appropriate for school use. • evaluate the validity and authenticity of texts, using questions, such as: ◦ Does the source appear in a reputable publication? ◦ Is the source free from bias? ◦ Does the writer have something to gain from his opinion? ◦ Does the information contain facts for support? ◦ Is the same information found in more than one source? • prevent plagiarism and its consequences by giving credit to authors when idea and/or words are used in research. • differentiate between a primary and secondary source. • provide a list of sources using a standard form for documenting primary and secondary sources.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Seven



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the seventh-grade level, students will continue to develop oral communication skills and will become more aware of the effects of verbal and nonverbal behaviors in oral communications. ~~Knowledge of the media and its impact on public opinion will be introduced.~~ Students will also demonstrate knowledge and understanding of persuasive/informative techniques used in media messages, including viewpoints expressed in nonprint media.

7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations.

a) Communicate ideas and information orally in an organized and succinct manner.
b) Ask probing questions to seek elaboration and clarification of ideas.
c) Make statements to communicate agreement or tactful disagreement with others' ideas.
d) Use language and style appropriate to audience, topic, and purpose.
e) Use a variety of strategies to listen actively.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will participate effectively in formal and informal classroom conversations and understand the requirements and uses of standard social conventions in conversations and presentations. • Students will express opinions forthrightly yet respectfully, demonstrating interest in and respect for the opinions of others. • Students will use grammatically correct language. • Teachers should model active listening strategies.	**All students should** • understand and demonstrate appropriate audience behavior. • prepare and deliver oral presentations. • participate effectively in group discussions and presentations. • show awareness of audience, topic, and purpose.	**To be successful with this standard, students are expected to** • contribute relevant ideas, opinions, and feelings in large and small diverse groups. • offer and seek summary statements of their own ideas and the ideas of others. • select vocabulary, tone, and style with audience and purpose in mind. • state points clearly and directly. • include multimedia in presentations. • maintain a focused discussion. • ask clarifying questions and respond appropriately to others' questions in order to encourage discussion, foster understanding, and bring the discussion back to the topic when needed. • provide feedback to other group members, acknowledge new insights expressed by others, and when justified, modify their own views. • use a variety of strategies to actively listen, including: ° give speaker undivided attention; ° use body language and gestures to show they are listening; ° provide feedback or paraphrase; ° allow the speaker to finish without interruptions; and ° respond appropriately.

7.2 The student will identify and demonstrate the relationship between a speaker's verbal and nonverbal messages.

a) Use verbal communication skills, such as word choice, pitch, feeling, tone, and voice appropriate for the intended audience.

b) Use nonverbal communication skills, such as eye contact, posture, and gestures to enhance verbal communication skills.

c) Compare/contrast a speaker's verbal and nonverbal messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use verbal and nonverbal communication to contribute to discussions. • Students will support other members of the group in making contributions in order to facilitate group interaction.	**All students should** • exhibit confidence when speaking. • exhibit courtesy when listening. • use appropriate facial expressions, posture, and gestures to indicate active listening.	**To be successful with this standard, students are expected to** • match vocabulary, tone, and volume to the audience, purpose, and topic of the message. • use proper posture and stance when speaking. • identify whether or not a nonverbal message complements the spoken message. • use appropriate facial expressions and gestures or motions to add to what is being said.

7.3 The student will understand the elements of media literacy.

a) Identify persuasive/informative techniques used in nonprint media including television, radio, video, and Internet.
b) Distinguish between fact and opinion, and between evidence and inference.
c) Describe how word choice and visual images convey a viewpoint.
d) Compare and contrast the techniques in auditory, visual, and written media messages.
e) Craft and publish audience-specific media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will identify and evaluate a variety of media elements and persuasive techniques used in the media. They will recognize that all media messages are constructed and that to understand the whole meaning of the message they can *deconstruct* it, looking at the following attributes: ◦ **Authorship** (Who constructed the message?) ◦ **Format** (This is not just the medium being used but also how the creators used specific elements for effect, i.e., color, sound, emphasis on certain words, amateur video, kids' voices.) ◦ **Audience** (Who is the person or persons meant to receive the message? How will different people receive the message?) ◦ **Content** (This is not just the visible content but the embedded content as well, which includes underlying assumptions of values or points of view; facts and opinions may be intermixed.) ◦ **Purpose** (Why is the message being sent—is it meant to persuade, inform, entertain,	**All students should** • understand that facts can be verified and opinions cannot. • distinguish fact from opinion. • identify the effect of persuasive messages on the audience. • notice use of persuasive language and connotations to convey viewpoint. • recognize that each medium creates meaning differently using visual or verbal techniques. For example, a dissolving picture indicates the passing of time, as do transitional words and phrases in verbal presentations. • analyze a media text considering what techniques have been used and their purpose.	**To be successful with this standard, students are expected to** • deconstruct and analyze the elements of a variety of media including layout, pictures, and text features in print media, and camera shots, ~~angles~~, lighting, editing and sound in TV, radio, and film. • recognize that production elements in media are composed based on audience and purpose to create specific effects. • identify persuasive techniques in the media including: ◦ **name calling** or **innuendo** – creating a negative attitude; hinting or implying; using loaded, emotional, or slanted language; ◦ **glittering generalities** or **card stacking** – telling only part of the truth; generalizing from a shred of evidence; ◦ **bandwagon** – creating a desire to join a large group satisfied with the idea; making one feel left out if not with the crowd; ◦ **testimonials** – using the declaration of a famous person or authoritative expert to give heightened credibility; ◦ **appeal to prestige, snobbery**, or **plain folks** – using a spokesperson who appeals to the audience: a well-known or appealing person the audience wants to emulate, a person like the audience members with whom they can identify, a person whose lifestyle appeals to the audience; and ◦ **appeal to emotions** – connecting with emotions: loyalty, pity, or fear; love of family, peace, or justice. • ~~recognize three most common camera angles/ shots are:~~ ◦ ~~the **close-up** shows part of a subject usually in great detail;~~ ◦ ~~the **long shot** often establishes the scene (car driving up to a hotel or~~

7.3 The student will understand the elements of media literacy.

a) Identify persuasive/informative techniques used in nonprint media including television, radio, video, and Internet.
b) Distinguish between fact and opinion, and between evidence and inference.
c) Describe how word choice and visual images convey a viewpoint.
d) Compare and contrast the techniques in auditory, visual, and written media messages.
e) Craft and publish audience-specific media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
sell, or a combination of these?) • **Auditory media** can be heard (e.g., music, radio shows, podcasts). • **Visual media** can be viewed (e.g., television, video, Web-based materials, print ads). • **Written media** includes text (e.g., newspapers, magazines, books, blogs). • ~~There are a variety of camera angles, which can add perspective or point of view of what is being pictured. Sometimes the camera angle can greatly influence the audience.~~ • Students should recognize that media messages vary depending on the medium. A strictly auditory message is more dependent on sound than a visual message. Each message uses a variety of techniques.		~~an overview of a city) ;and~~ ○ ~~the **medium shot** shows the whole subject (a person, car etc.).~~ • recognize and identify opinions in the media. • recognize and identify facts in the media. • recognize that evidence is fact and a valid inference is the interpretation of fact. • recognize that the effectiveness of any media message is determined by the impact on the intended audience. For example, the *Don't Drink and Drive* campaign has been an effective campaign because the number of traffic accidents due to drunk driving has been reduced. • describe the effect on the audience of persuasive messages in the media. • identify effective word choice in the media. • identify and analyze a variety of viewpoints expressed in the media. • create and publish age-appropriate media messages, such as public service announcements aimed at a variety of audiences with different purposes; include multimedia components in presentations to emphasize points.

At the seventh-grade level, students will continue the study of roots and affixes for vocabulary development and ~~begin~~ continue to ~~a~~ study ~~of~~ figurative language. Connotations ~~and analogies~~ will be introduced. They will read and understand information from various sources including a variety of fiction, nonfiction, and poetry. They will continue to read for appreciation and comprehension in both classic and recent works. Students will apply critical reading and reasoning skills across the content areas, including history and social science, science, and mathematics. When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.

7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts.

a) Identify word origins and derivations.
b) Use roots, cognates, affixes, synonyms, and antonyms to expand vocabulary.
c) Identify and analyze figurative language.
d) Identify connotations.
e) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.
f) Extend general and specialized vocabulary through speaking, listening, reading, and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

• The intent of this standard is that students will become independent learners of vocabulary by choosing from a variety of strategies to determine or clarify the meaning of unknown and multiple-meaning words.
 	
• Students come to understand affixes, including prefixes and suffixes, roots, derivations, and inflections of polysyllabic words and understand that words with similar parts may be related to each other in meaning and origin.
 	
• Teachers should use a study of cognates, words from the same linguistic family, to enhance vocabulary instruction. Cognates can occur within the same language or across languages, e.g., *night* (English), *nuit* (French), *Nacht* (German), *nacht* (Dutch), *nicht* (Scots), *natt* (Swedish, Norwegian), *nat* (Danish), *raat* (Urdu), *nátt* (Faroese), *nótt* (Icelandic), *noc* (Czech, Slovak, Polish).
 	
• Students will continue ~~begin~~ the study of figurative language ~~and analogies,~~ and ~~continue to~~ use ~~the~~ context to help determine the meaning of words.
 	
• Students will begin to notice connotations of
	All students should
	
	• use word structure to analyze and find relationships among words.
	
	• ~~recognize internal and external inflections that change meaning and pronunciation.~~
	
	• ~~recognize relationships used to create analogies.~~
	
	• recognize that figurative language and analogy enrich text.
		To be successful with this standard, students are expected to
		
		• use common Greek or Latin affixes and roots to predict the meaning of unfamiliar words and make connections with word families (e.g. –phobia, and –ology).
		
		• separate and recombine known word parts to predict the meaning of unfamiliar words, such as separating *dent* from *dentist* and *fric* from *friction* to predict the meaning of *dentifrice.*
		
		• use synonyms and antonyms to determine the meaning of unfamiliar words.
		
		• use the relationship between particular words (e.g., synonym/antonym, cause/effect, degree, etc.) to better understand words.
		
		• recognize that words have nuances of meaning (figurative, connotative, and technical), which help determine the appropriate meaning.
		
		• ~~recognize and apply relationships common to analogy construction~~
		  ° ~~purpose – chair: sit~~
		  ° ~~cause/effect – sun: burn~~
		  ° ~~sequence – day: week~~
		  ° ~~characteristic – snow: cold~~
		  ° ~~product – tree: lumber~~
		  ° ~~degree – warm: hot~~
		
		• recognize, understand, and use figurative language ~~figures of speech~~, including:

7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts.

a) Identify word origins and derivations.
b) Use roots, cognates, affixes, synonyms, and antonyms to expand vocabulary.
c) Identify and analyze figurative language.
d) Identify connotations.
e) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.
f) Extend general and specialized vocabulary through speaking, listening, reading, and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
words and use reference books and context to determine the nuances of connotative language.		◦ **simile** – figure of speech that uses the words *like* or *as* to make comparisons; ◦ **metaphor** – figure of speech that makes a comparison equating two or more unlike things. ~~without using *like* or *as*;~~ ◦ **personification** – figure of speech that applies human characteristics to nonhuman objects; and ◦ **hyperbole** – intentionally exaggerated figure of speech. • distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined*, *respectful*, *polite*, *diplomatic*, *condescending*), recognizing that some words have technical meanings based on context such as *stern*. • recognize that synonyms may have connotations (e.g., *elderly* and *mature*; *youthful* and *juvenile*). • use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • consult ~~general and specialized~~ word reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital to find the pronunciation of a word or determine/clarify meanings.

7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Describe the elements of narrative structure including setting, character development, plot structure, theme, and conflict.
b) Compare and contrast various forms and genres of fictional text.
c) Identify conventional elements and characteristics of a variety of genres.
d) Describe the impact of word choice, imagery, and literary devices including figurative language.
e) Make, confirm, and revise predictions.
f) Use prior and background knowledge as a context for new learning.
g) Make inferences and draw conclusions based on the text.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will begin to analyze text including fiction, narrative nonfiction, and poetry. • Students will understand the interrelationship of setting, plot, theme, style, and form and recognize how an author's craft makes an impact on readers. • Students will compare and contrast narrative and poetic forms and recognize poetic devices in prose and poetry. • Students will read at and beyond the literal level, including **making inferences** – making judgments or drawing conclusions based on what an author has implied. • The **initiating event** is the incident that introduces the central conflict in a story; it may have occurred before the opening of the story.	**All students should** • recognize that authors make deliberate choices to create ~~stories~~ literary works. • understand that language has an impact on readers. • make inferences and draw conclusions based on information supplied by an author combined with the reader's own background knowledge. • use strategies and graphic organizers to summarize and analyze text. • analyze how a text makes	**To be successful with this standard, students are expected to** • ~~understand~~ recognize the elements of ~~story,~~ narrative structure including: ° setting – time, place, and duration; ° character(s); ° external conflicts, such as - individual vs. individual - individual vs. nature - individual vs. society - individual vs. supernatural - individual vs. technology ° internal conflict – individual vs. self; ° plot – development of the central conflict, including - initiating event - rising action - climax - falling action - resolution ° theme.

7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Describe the elements of narrative structure including setting, character development, plot structure, theme, and conflict.
b) Compare and contrast various forms and genres of fictional text.
c) Identify conventional elements and characteristics of a variety of genres.
d) Describe the impact of word choice, imagery, and literary devices including figurative language.
e) Make, confirm, and revise predictions.
f) Use prior and background knowledge as a context for new learning.
g) Make inferences and draw conclusions based on the text.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• **Voice** shows an author's personality, awareness of audience, and passion for his or her subject. It adds liveliness and energy to writing. • **Mood** refers to the emotional atmosphere produced by an author's use of language. • **Tone** refers to an attitude a writer takes toward a subject. • Students will understand how authors use keywords and images to craft a message and establish tone. • Teachers will model higher-order thinking processes with materials at the students' instructional reading level and move students gradually to collaborative and independent comprehension of age-appropriate materials at the independent reading level. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR	connections among and distinctions between individuals, ideas, or events (e.g., through comparisons or categories).	• ~~identify~~ distinguish between narrative prose and poetic forms, including: ◦ **haiku** – a 17-syllable, delicate, unrhymed Japanese verse, usually about nature; ◦ **limerick** – a 5-line, rhymed, rhythmic verse, usually humorous; ◦ **ballad** – a songlike narrative poem, usually featuring rhyme, rhythm, and refrain; ◦ **free verse –** poetry with neither regular meter nor rhyme scheme ◦ **couplet** – a pair of rhyming lines; and ◦ **quatrain** – a stanza containing four lines. • read, understand, ~~and differentiate,~~ and compare/contrast the characteristics and narrative structures of: ◦ short stories; ◦ novels (including historical fiction, ~~biographies, and autobiographies~~); ◦ folk literature; - tales - myths - legends - fables

7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Describe the elements of narrative structure including setting, character development, plot structure, theme, and conflict.
b) Compare and contrast various forms and genres of fictional text.
c) Identify conventional elements and characteristics of a variety of genres.
d) Describe the impact of word choice, imagery, and literary devices including figurative language.
e) Make, confirm, and revise predictions.
f) Use prior and background knowledge as a context for new learning.
g) Make inferences and draw conclusions based on the text.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
(Question-Answer Relationship), thinking aloud, etc.		◦ plays; ◦ narrative nonfiction (including personal essays, biographies, and autobiographies); and ◦ biographies and autobiographies. • use graphic organizers~~, such as "It says…I say,"~~ to record ~~clues in the text and inferences or~~ important details for summarizing and drawing conclusions. • ~~understand~~ identify **characterization** as the way an author presents a character and reveals character traits by: ◦ what a character says; ◦ what a character thinks; ◦ what a character does; and ◦ how other characters respond to the character. • determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text. • ~~understand~~ analyze an author's choice and use of literary devices, including: ◦ **foreshadowing** – the use of clues to hint at coming events in a story;

7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Describe the elements of narrative structure including setting, character development, plot structure, theme, and conflict.
b) Compare and contrast various forms and genres of fictional text.
c) Identify conventional elements and characteristics of a variety of genres.
d) Describe the impact of word choice, imagery, and literary devices including figurative language.
e) Make, confirm, and revise predictions.
f) Use prior and background knowledge as a context for new learning.
g) Make inferences and draw conclusions based on the text.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		and ◦ **irony –** the contrast between expectation and reality; between what is said and what is meant; between what appears to be true and what really is true. • ~~understand and~~ analyze elements of an author's style, including: ◦ word choice; ◦ sentence structure and language patterns; ◦ imagery – the use of words to create sensory impressions — most often visual impressions but may be sound, smell, taste, or touch impressions; ◦ contrasting points of view; and ◦ figurative language – text enriched by word images and figures of speech. • define an author's tone including, but not limited to: serious, sarcastic, objective, humorous, disapproving, solemn, enthusiastic, and hostile. • ~~use strategies for summarizing, such as~~ ◦ ~~story maps~~ ◦ ~~Somebody…Wanted…But…So~~ • recognize and analyze the impact of an author's choice of poetic devices,

7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Describe the elements of narrative structure including setting, character development, plot structure, theme, and conflict.
b) Compare and contrast various forms and genres of fictional text.
c) Identify conventional elements and characteristics of a variety of genres.
d) Describe the impact of word choice, imagery, and literary devices including figurative language.
e) Make, confirm, and revise predictions.
f) Use prior and background knowledge as a context for new learning.
g) Make inferences and draw conclusions based on the text.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		including: ◦ **rhyme** – recurring identical or similar final word sounds within or at the ends of lines of verse; ◦ **rhythm** – the recurring pattern of strong and weak syllabic stresses; ◦ **meter** – a fixed pattern of accented and unaccented syllables in lines of fixed length to create rhythm; ◦ **repetition** – repeated use of sounds, words, or ideas for effect and emphasis; ◦ **alliteration** – repetition of initial sounds, e.g., *picked a peck of pickled peppers*; and ◦ ~~**assonance** – repetition of vowel sounds, e.g., *mad hatter*~~ ◦ ~~**consonance** – repetition of final consonant sounds, e.g., *east/west*~~ ◦ **onomatopoeia** – the use of a word whose sound suggests its meaning, e.g., *clatter*. • explain how poetic devices of form, rhyme, rhythm, repetition, line structure, and punctuation convey the mood and meaning of a poem. • make predictions before, during, and after reading texts.

7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

a) Describe the elements of narrative structure including setting, character development, plot structure, theme, and conflict.
b) Compare and contrast various forms and genres of fictional text.
c) Identify conventional elements and characteristics of a variety of genres.
d) Describe the impact of word choice, imagery, and literary devices including figurative language.
e) Make, confirm, and revise predictions.
f) Use prior and background knowledge as a context for new learning.
g) Make inferences and draw conclusions based on the text.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify the author's organizational pattern.
k) Identify cause and effect relationships.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• connect to prior knowledge of a subject. • visualize, and question a text while reading. • draw inferences. • synthesize information.

7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Use prior and background knowledge as a context for new learning.
b) Use text structures to aid comprehension.
c) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
d) Draw conclusions and make inferences on explicit and implied information.
e) Differentiate between fact and opinion.
f) Identify the source, viewpoint, and purpose of texts.
g) Describe how word choice and language structure convey an author's viewpoint.
h) Identify the main idea.
i) Summarize text identifying supporting details.
j) Identify cause and effect relationships.
k) Organize and synthesize information for use in written formats.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will read and comprehend at and beyond the literal level in a variety of ~~informational sources~~ nonfiction texts. • Students will use and understand the internal and external text structures common to textbooks and other ~~informational~~ nonfiction text. • An author's **viewpoint** refers to his or her bias or subjectivity toward the subject. In general, a viewpoint can be positive or negative. • Teachers will model the higher-order thinking processes with materials ~~below~~ at the ~~independent reading level of~~ students' instructional reading level and move students gradually to collaborative and independent comprehension of age-appropriate materials at the independent reading level.	**All students should** • ~~activate prior knowledge before reading~~ • ~~make predictions prior to and during the reading process~~ • use the reading process to activate prior knowledge, predict, question, clarify, infer, organize, compare, summarize, and synthesize. • choose graphic organizers based on the internal text structure most prevalent in the text in order to track key points and summarize the text.	**To be successful with this standard, students are expected to** • activate prior knowledge before reading by use of, but not limited to: ◦ small-group or whole-class discussion; ◦ anticipation guides; and ◦ preview of key vocabulary. • use ~~external~~ textual ~~aids~~ features to make predictions and enhance comprehension, including: ◦ boldface and/or italics type; ◦ type set in color; ◦ underlining; ◦ indentation; ◦ sidebars; ◦ illustrations, graphics, and photographs; ◦ headings and subheadings; and ◦ footnotes and annotations. • recognize ~~internal text structures~~ organizational pattern to enhance

7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Use prior and background knowledge as a context for new learning.
b) Use text structures to aid comprehension.
c) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
d) Draw conclusions and make inferences on explicit and implied information.
e) Differentiate between fact and opinion.
f) Identify the source, viewpoint, and purpose of texts.
g) Describe how word choice and language structure convey an author's viewpoint.
h) Identify the main idea.
i) Summarize text identifying supporting details.
j) Identify cause and effect relationships.
k) Organize and synthesize information for use in written formats.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will work collaboratively and with teacher support to move toward higher-order thinking with instructional level materials. • **Synthesis** involves higher-order thinking and is a result of forming either a concrete or abstract whole from the logical relation of parts. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.	• recognize an author's purpose: ◦ to entertain; ◦ to inform; and ◦ to persuade. • notice use of connotations and persuasive language to convey viewpoint. • make inferences, which imply meaning, and draw conclusions based on both explicit and implied information. • ~~use graphic organizers and other strategies to organize and summarize text~~ • distinguish between a fact, which can be verified, and an opinion, which cannot.	comprehension, including: ◦ cause and effect; ◦ comparison/contrast; ◦ enumeration or listing; ◦ sequential or chronological; ◦ concept/definition; ◦ generalization; and ◦ process. • recognize ~~the~~ transitional words and phrases authors use to signal organizational patterns, including, but not limited to: ◦ *as a result of, consequently* for cause and effect; ◦ *similarly, on the other hand* for comparison/contrast; ◦ *first, three* for enumeration or listing; ◦ *today, meanwhile* for sequential or chronological; ◦ *refers to, thus* for concept/definition; ◦ *always, in fact* for generalization; and ◦ *begins with, in order to* for process. • determine two or more central ideas in a text and analyze their development over the course of the text.

7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

a) Use prior and background knowledge as a context for new learning.
b) Use text structures to aid comprehension.
c) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
d) Draw conclusions and make inferences on explicit and implied information.
e) Differentiate between fact and opinion.
f) Identify the source, viewpoint, and purpose of texts.
g) Describe how word choice and language structure convey an author's viewpoint.
h) Identify the main idea.
i) Summarize text identifying supporting details.
j) Identify cause and effect relationships.
k) Organize and synthesize information for use in written formats.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• provide an objective summary of the text by recording the development of the central ideas. • analyze how two or more authors writing about the same topic shape their presentations or viewpoints of key information using facts, opinions, and reasoning.

At the seventh-grade level, students will plan, draft, revise, and edit ~~narratives~~ expository as well as ~~persuasive~~ narrative and ~~expository~~ persuasive pieces with attention to composition and written expression. Students will ~~begin the process of becoming independent~~ achieve greater independence with sentence formation, usage, and mechanics and understand that the conventions of language help convey the message from the writer to the reader. Students will use writing for expressive purposes and as a tool for learning academic concepts. They will use available and appropriate technology ~~as available and appropriate~~.

7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

a) Identify intended audience.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement.
f) Write multiparagraph compositions with unity elaborating the central idea.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Use clauses and phrases for sentence variety.
j) Revise sentences for clarity of content including specific vocabulary and information.
k) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will become independent and proficient in composing a variety of types of writing. • Teachers will focus direct instruction on all three domains of writing: ◦ **composing** – the structuring and elaborating a writer does to construct an effective message for readers; ◦ **written expression** – those features that show the writer purposefully shaping and controlling language to affect readers; and ◦ **usage/mechanics** – the features that cause written language to be acceptable and effective for standard discourse. • Students will gradually assume responsibility for revising, proofreading, and editing their own writing.	**All students should** • use a process for writing, including: ◦ planning; ◦ drafting; ◦ revising; ◦ proofreading; ◦ editing; and ◦ publishing. • understand that good writing ~~has been elaborated horizontally and vertically~~ includes elaboration. • recognize that a thesis statement is not an announcement of the subject, but rather a unified, and specific statement. • understand that good writing has	**To be successful with this standard, students are expected to** • identify intended audience and purpose. • use a variety of prewriting strategies including: ◦ brainstorming; ◦ webbing; ◦ mapping; ◦ outlining; ◦ clustering; ◦ listing; and ◦ using graphic organizers. • explain, analyze, or summarize a topic. • write an effective thesis statement focusing, limiting, or narrowing the topic. • differentiate between a thesis statement and a topic sentence. • choose an appropriate strategy for organizing ideas such as

7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

a) Identify intended audience.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement.
f) Write multiparagraph compositions with unity elaborating the central idea.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Use clauses and phrases for sentence variety.
j) Revise sentences for clarity of content including specific vocabulary and information.
k) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• **Elaboration** can occur by using descriptive details and examples ~~*horizontally*~~ within a sentence to give detail and depth to an idea, or ~~*vertically*~~ from paragraph to paragraph. • **Voice** shows an author's personality, awareness of audience, and passion for his or her subject. It adds liveliness and energy to writing. Voice is the imprint of the writer — the capacity to elicit a response from the reader. • **Tone** expresses an author's attitude toward the subject. • A writing process is nonlinear: returning to prewriting or drafting at any point in the process may help the writer clarify and elaborate the drafted piece. • Students should have practice writing on demand, for shorter time frames, and over	been improved through revision. • ~~use peer and individual revising and editing~~. • understand and apply the elements of composing: ◦ central idea; ◦ elaboration; ◦ unity; and ◦ organization. • ~~apply word processing skills to the writing process.~~	comparison/contrast, personal narrative, cause/effect, etc., and provide transitions between ideas. • develop real or imagined experiences or events using effective techniques, relevant descriptive details, and well-structured event sequences when writing narratives. • engage and orient the reader by establishing a context and introducing a narrator and/or characters. • organize an event sequence that unfolds naturally and logically. • use narrative techniques, such as dialogue, pacing, and description to develop experiences, events, and/or characters. • create multiparagraph compositions focusing on a central idea and using elaborating details, reasons, or examples as appropriate for audience and purpose. • include an appropriate introduction and satisfying conclusion. • sustain a formal style. • use written expression to draft and revise compositions with attention to:

7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

a) Identify intended audience.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement.
f) Write multiparagraph compositions with unity elaborating the central idea.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Use clauses and phrases for sentence variety.
j) Revise sentences for clarity of content including specific vocabulary and information.
k) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
extended periods of time.		◦ voice; ◦ tone; ◦ selection of information; ◦ embedded phrases and clauses that clarify meaning; ◦ vivid and precise vocabulary; ◦ figurative language; and ◦ sentence variety. • recognize terms illustrative of tone, such as, but not limited to: ◦ serious; ◦ sarcastic; ◦ objective; ◦ enthusiastic; ◦ solemn; ◦ humorous; ◦ hostile; ◦ personal; and ◦ impersonal. • apply revising procedures in peer and self-review, including: ◦ rereading;

7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

a) Identify intended audience.
b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
c) Organize writing structure to fit mode or topic.
d) Establish a central idea and organization.
e) Compose a topic sentence or thesis statement.
f) Write multiparagraph compositions with unity elaborating the central idea.
g) Select vocabulary and information to enhance the central idea, tone, and voice.
h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
i) Use clauses and phrases for sentence variety.
j) Revise sentences for clarity of content including specific vocabulary and information.
k) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		° reflecting; ° rethinking; and ° rewriting. • vary sentence structure by using coordinating conjunctions: *for, and, nor, but, or, yet,* and *so.* • use subordinating conjunctions to form complex sentences: *after, although, as, as if, because, before, even if, even though, if, if only, rather than, since, that, though, unless, until, when, where, whereas, wherever, whether, which,* and *while*. • incorporate variety into sentences using simple, compound, and compound-complex sentences, including, but not limited to: ° **coordination** – joining words, phrases, clauses, or sentences by using appropriate coordinating conjunctions; ° **subordination** – establishing the relationship between an independent and a dependent clause by using appropriate subordinate conjunctions; and ° **modifier** – an adjective, an adverb, or a phrase or clause acting as an adjective or adverb. • use available computer technology to assist throughout the writing

7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

- **a) Identify intended audience.**
- **b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.**
- **c) Organize writing structure to fit mode or topic.**
- **d) Establish a central idea and organization.**
- **e) Compose a topic sentence or thesis statement.**
- **f) Write multiparagraph compositions with unity elaborating the central idea.**
- **g) Select vocabulary and information to enhance the central idea, tone, and voice.**
- **h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.**
- **i) Use clauses and phrases for sentence variety.**
- **j) Revise sentences for clarity of content including specific vocabulary and information.**
- **k) Use computer technology to plan, draft, revise, edit, and publish writing.**

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		process.

7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
b) Choose appropriate adjectives and adverbs to enhance writing.
c) Use pronoun-antecedent agreement to include indefinite pronouns.
d) Use subject-verb agreement with intervening phrases and clauses.
e) Edit for verb tense consistency and point of view.
f) Demonstrate understanding of sentence formation by identifying the eight parts of speech and their functions in sentences.
g) Use quotation marks with dialogue.
h) Use correct spelling for commonly used words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

• The intent of this standard is that students will understand and apply all the conventions of language learned at the elementary school level with increasing independence.
• Students will maintain correct use of language to enhance writing and to avoid confusing or distracting the reader.
• Students will understand that the conventions of correct language are an integral part of the writing process.
• A diagram of a sentence is a tool to increase understanding of its structure.
	All students should
	• proofread and edit drafts with teacher assistance, peer collaboration, and growing independence.
	• understand that pronouns need to agree with antecedents.
	• understand that verbs must agree with subjects.
	• become independent in checking spelling, using dictionaries and/or electronic tools.
	• examine sentences to identify eight parts of speech with the intent of improving sentence structure and variety, including:
	  ◦ noun;
	  ◦ verb;
		To be successful with this standard, students are expected to
		• use complete sentences with appropriate punctuation, including the punctuation of dialogue.
		• use a singular verb with a singular subject and a plural verb with a plural subject (e.g., *The students in the classroom* discuss *many topics. The driver of the bus full of children* drives *with extreme caution.*).
		• use a singular pronoun to refer to a singular antecedent and a plural pronoun to refer to a plural antecedent (e.g., *All students should bring* their *notebooks to class. Each student must provide* his *own pen.*)
		• diagram ~~compound sentences and simple~~ sentences with ~~compound elements~~ phrases and clauses.
		• use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.
		• maintain verb tense (present, past, future) throughout an entire piece of writing.
		• maintain consistent point of view through a piece of writing.
		• use quotation marks to represent the exact language (either spoken or written) of another.

7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
b) Choose appropriate adjectives and adverbs to enhance writing.
c) Use pronoun-antecedent agreement to include indefinite pronouns.
d) Use subject-verb agreement with intervening phrases and clauses.
e) Edit for verb tense consistency and point of view.
f) Demonstrate understanding of sentence formation by identifying the eight parts of speech and their functions in sentences.
g) Use quotation marks with dialogue.
h) Use correct spelling for commonly used words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
	◦ pronoun; ◦ adjective; ◦ adverb; ◦ preposition; ◦ conjunction; and ◦ interjection.	

At the seventh-grade level, students will apply knowledge of appropriate reference material to produce a research product including the collection and organization of information from multiple online, print, and media sources. They will extend skills in the evaluation of sources and the use of technology to research, organize, evaluate, and communicate information. In addition, they will continue to cite sources skillfully and thereby avoid plagiarism.

7.9 The student will apply knowledge of appropriate reference materials to produce a research product.

a) Collect and organize information from multiple sources including online, print and media.
b) Evaluate the validity and authenticity of sources.
c) Use technology as a tool to research, organize, evaluate, and communicate information.
d) Cite primary and secondary sources.
e) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use both print and electronic sources to find, read, and organize information for presentations and papers. • Students will synthesize information from a variety of sources and will document sources, using a standard format. • Students will realize in order to avoid plagiarism, credit must be given when using: another person's idea, opinion, or theory; facts, statistics, graphs, drawings, etc. , quotations of another person's actual spoken or written words; or paraphrase of another person's spoken or written words. • Teachers should assist students in determining the authenticity and validity of sources. • Teachers should make students aware of possible consequences of plagiarism. • Teachers will collaborate with library media specialists to assist students as the students learn to become independent with research. • Students will have the opportunity to practice writing over shorter time frames as well as for	**All students should** • ~~use research tools available in school media centers and public libraries.~~ • ~~choose and use appropriate graphic organizers~~ • understand that research tools are available in school media centers and libraries. • understand that **a primary source** is an original document or a firsthand or eyewitness account of an event. • understand that a **secondary source** discusses information originally presented somewhere else. Secondary sources provide analysis, interpretation, or evaluation of the original information.	**To be successful with this standard, students are expected to** • ~~understand~~ use ~~the characteristics of~~ available resource tools, including: ◦ educational online resources; ◦ reference books; ◦ scholarly journals; ◦ magazines; ◦ the Internet, as appropriate for school use; and ◦ general and specialized (or subject-specific) databases. • organize and synthesize information with tools, including: ◦ ~~file cards~~ ◦ graphic organizers; ◦ ~~flow charts;~~ ◦ ~~Venn diagrams;~~ ◦ outlines; ◦ spreadsheets; ◦ databases; and ◦ presentation software. • create a "Works Cited" page using MLA format for oral and written presentations. • differentiate between a primary and a secondary source. • gather relevant information from multiple print and digital sources; assess the credibility and validity of each source;

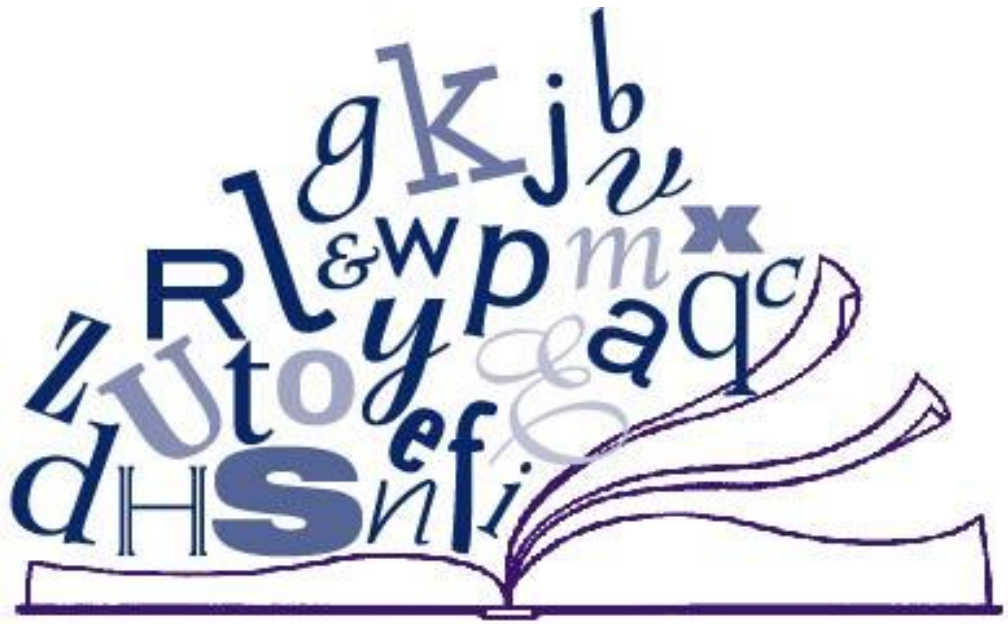
7.9 The student will apply knowledge of appropriate reference materials to produce a research product.

a) Collect and organize information from multiple sources including online, print and media.
b) Evaluate the validity and authenticity of sources.
c) Use technology as a tool to research, organize, evaluate, and communicate information.
d) Cite primary and secondary sources.
e) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
extended ones.		• prevent plagiarism and its consequences by giving credit to authors when ideas and/or words are used in direct quotation or paraphrases. • evaluate the validity and authenticity of texts, using questions, such as: ° Does the source appear in a reputable publication? ° Is the source free from bias? ° Does the writer have something to gain from his opinion? ° Does the information contain facts for support? ° Is the same information found in more than one source? • summarize and cite specific evidence from the text to support conclusions.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Eight



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the eighth-grade level, students will learn to apply interviewing techniques. Preparation for and evaluation of the process of interviewing will be a part of student ~~the~~ learning. Interviewing skills will be added to the students' repertoire of oral language skills. In addition, students will analyze, develop, and produce creative and informational media messages.

8.1 The student will use interviewing techniques to gain information.

a) Prepare and ask relevant questions for the interview.
b) Make notes of responses.
c) Compile, accurately report, and publish responses.
d) Evaluate the effectiveness of the interview.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will use an interviewing process as a strategy for learning. • **Synthesis** involves higher-order thinking and is a result of forming either a concrete or abstract whole from the logical relation of parts.	**All students should** • synthesize information gathered in an interview. • organize information for written and oral presentations. • present findings in written and oral form.	**To be successful with this standard, students are expected to** • determine the purpose of the interview. • select a subject for the interview. • create and record questions that will elicit relevant responses. • apply effective note-taking strategies.~~, including the use of~~ ◦ ~~abbreviations~~ ◦ ~~graphic organizers~~ ◦ ~~key words~~ ◦ ~~file cards~~ ◦ ~~recording devices~~ • evaluate the effectiveness of their own and/or peer interviews, using rubrics or checklists.

8.2 The student will develop and deliver oral presentations in groups and individually.

a) Choose topic and purpose appropriate to the audience.
b) Choose vocabulary and tone appropriate to the audience, topic, and purpose.
c) Use appropriate verbal and nonverbal presentation skills.
d) Respond to audience questions and comments.
e) Differentiate between standard English and informal language.
f) Critique oral presentations.
g) Assume shared responsibility for collaborative work.
h) Use a variety of strategies to listen actively.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

• The intent of this standard is that students will prepare and deliver oral presentations ~~on a regular basis~~ effectively.
• Students will deliver both group presentations and individual presentations to classmates and other audiences.
	All students should
	• rehearse presentations.
	• interact with poise with an audience.
	• evaluate presentations.
	• use grammatically correct language.
		To be successful with this standard, students are expected to
		• ~~understand~~ articulate the purpose of the presentation.
		• select and narrow the topic with attention to time limits and audience.
		• prepare the presentation, using strategies including, but not limited to:
		  ° note cards;
		  ° outlines;
		  ° formal written report; and
		  ° questions and answers.
		• select and use appropriate vocabulary for audience and purpose.
		• define technical terms.
		• include multimedia to clarify presentation information.
		• rehearse both alone and with a coach.
		• use a rubric or checklist to evaluate presentations.
		• answer questions and respond to comments politely and succinctly with relevant evidence, observations, and ideas.
		• work effectively with diverse groups.
		• exercise flexibility and work as a constructive team member to accomplish a common goal or reach consensus.

8.3 The student will analyze, develop, and produce creative or informational media messages.

a) Evaluate the persuasive/informational technique being used in nonprint media including television, radio, video, and Internet.

b) Examine how values and viewpoints are included or excluded and how the media can influence beliefs, behaviors, and interpretations.

c) Use media and visual literacy skills to create products that express new understandings.

d) Evaluate sources for relationships between intent and factual content.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will identify and analyze persuasive techniques used in the media. Students will also be able to identify elements of media literacy recognizing that elements of media literacy are based on audience and purpose. • Students will recognize that all media messages are constructed and that to understand the whole meaning of the message they can *deconstruct* it, looking at the following attributes: ◦ **Authorship** (Who constructed the message?) ◦ **Format** (This is not just the medium being used but also how the creators used specific elements for effect, i.e., color, sound, emphasis on certain words, amateur video, kids' voices.) ◦ **Audience** (Who is the person or persons meant to receive the message? How will different people receive the message?) ◦ **Content** (This is not just the visible content but the embedded content as well which includes underlying assumptions of values or points of view; facts and opinions may be intermixed.)	**All students should** • ~~identify~~ understand the effects of persuasive messages on the audience. • understand that facts can be verified and opinions cannot. • distinguish fact from opinion. • identify the effect of persuasive messages on the audience. • examine use of persuasive language and connotations to convey viewpoint. • recognize that each medium creates meaning differently using visual or verbal techniques. For example, a dissolving picture indicates the passing of time, as do transitional words and phrases in verbal presentations. • analyze a media text by considering what techniques have been used and their purpose.	**To be successful with this standard, students are expected to** • deconstruct and analyze the elements of a variety of media including layout, pictures, and text features in print media, and camera shots, ~~angles,~~ lighting, editing and sound in TV, radio, and film. • identify and analyze persuasive techniques used in the media, including: ◦ **name calling** or **innuendo –** creating a negative attitude; hinting or implying; using loaded, emotional, or slanted language; ◦ **glittering generalities** or **card stacking** – telling only part of the truth; generalizing from a shred of evidence; ◦ **bandwagon** – creating a desire to join a large group satisfied with the idea; making one feel left out if not with the crowd; ◦ **testimonials** – using the declaration of a famous person or authoritative expert to give heightened credibility; ◦ **appeal to prestige, snobbery,** or **plain folks** – using a spokesperson who appeals to the audience: a well-known or appealing person the audience wants to emulate, a person like the audience members with whom they can identify, a person whose lifestyle appeals to the audience; and ◦ **appeal to emotions** – connecting with emotions: loyalty, pity, or fear; love of family, peace, or justice. • describe the effect of persuasive messages in the media on the audience. • identify and evaluate effective word choice in the media. • identify and analyze choice of information in the media. • identify and analyze various viewpoints in the media.

8.3 The student will analyze, develop, and produce creative or informational media messages.

a) Evaluate the persuasive/informational technique being used in nonprint media including television, radio, video, and Internet.

b) Examine how values and viewpoints are included or excluded and how the media can influence beliefs, behaviors, and interpretations.

c) Use media and visual literacy skills to create products that express new understandings.

d) Evaluate sources for relationships between intent and factual content.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
◦ **Purpose** (Why is the message being sent—is it meant to persuade, inform, entertain, sell, or a combination of these?) • **Auditory media** can be heard (e.g., music, radio shows, podcasts). • **Visual media** can be viewed (e.g., television, video, Web-based materials, print ads). • **Written media** includes text (e.g., newspapers, magazines, books, blogs). • An author's **viewpoint** refers to his or her bias or subjectivity toward the subject. In general, a viewpoint can be positive or negative.	• recognize that a public service announcement (PSA) is an advertisement for the benefit of the public. The purpose of a public service announcement can be to raise awareness (e.g., advertisements targeting tobacco cessation).	• identify public opinion trends and possible causes. • identify the sources and viewpoint of publications. • identify the elements of a variety of media including layout, pictures, and text features in print media. Camera shots, ~~angles,~~ lighting, editing and sound in TV, radio, and film. ~~The three most common camera angles/ shots are:~~ ◦ ~~the **close-up** shows part of a subject usually in great detail;~~ ◦ ~~the **long shot** often establishes the scene (car driving up to a hotel or an overview of a city) ;and~~ ◦ ~~the **medium shot** shows the whole subject (a person, car, etc.).~~ • recognize that production elements in media are composed based on audience and purpose to create specific effects. • analyze the use of opinions in the media. • analyze the use of facts in the media. • describe the effect on the audience of persuasive messages in the media. • identify effective word choice and images in the media. • create and publish media messages, such as public service announcements aimed at a variety of audiences with different purposes. • evaluate the advantages and disadvantages of using different media (e.g., print or digital text, video, multimedia) to express new understandings. • identify and analyze the motives (social, commercial, political, etc.) and factual content of media messages including print and nonprint resources.

At the eighth-grade level, students will apply knowledge of word origins, analogies, and figurative language to understand unfamiliar or new words encountered in authentic texts. They will continue to develop appreciation of literature through the study of literary elements in classic and contemporary selections. They will describe themes and inferred main ideas, interpret cause-effect relationships, and draw conclusions from a variety of literary and informational selections. Students will build on the foundations for literacy developed in the previous grades. When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity. Students will apply critical reading and reasoning skills across the content areas, including history and social science, science, and mathematics.

8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts.

a) Identify and analyze an author's use of figurative language.
b) Use context, structure, and connotations to determine meaning and differentiate among multiple meanings of words and phrases.
c) Use roots, affixes, cognates, synonyms, and antonyms to determine the meaning of unfamiliar words and technical vocabulary.
d) Use dictionaries, thesauruses, and glossaries to determine definition, pronunciation, etymology, spelling, and usage of words.
e) Discriminate between connotative and denotative meanings and interpret the connotation.
f) Extend general and specialized vocabulary through speaking, listening, reading, and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will become independent learners of vocabulary by choosing from a variety of strategies to determine or clarify the meaning of unknown and multiple-meaning words. • Students will be exposed to affixes, including prefixes and suffixes, roots, derivations, and inflections of polysyllabic words and understand that words with similar parts may be related to each other in meaning and origin. • Teachers should use a study of cognates, words from the same linguistic family, to enhance vocabulary instruction. Cognates can occur within the same language or across languages, e.g., *night* (English), *nuit* (French), *Nacht* (German), *nacht* (Dutch), *nicht* (Scots), *natt* (Swedish, Norwegian), *nat* (Danish), *raat* (Urdu), *nátt* (Faroese), *nótt* (Icelandic), *noc* (Czech, Slovak, Polish). • Students will evaluate the use of figurative language and analogies in text. • Students will use context and connotations to help determine the meaning of ~~nearly~~	**All students should** • use word structure to analyze and relate words. • ~~recognize internal and external inflections that change meaning and pronunciation.~~ • recognize that words have nuances of meaning ~~and that understanding the connotations may be necessary to~~ (figurative, connotative, and technical), which help determine the appropriate meaning. • determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; • analyze the impact of specific word choices on meaning and tone, including analogies to	**To be successful with this standard, students are expected to** • use common roots to determine the meaning of unfamiliar words and make connections with word families (e.g.,-phobia~~,~~ and -ology). • recognize the relationships among words related by structure and derivation, such as *polygraph* and *graffiti* ~~or *carnival* and *valedictorian*~~. • distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic, condescending*), recognizing that some words have technical meanings based on context such as *stern.* • understand, evaluate, and use figurative language, including: ◦ **simile** – figure of speech that uses the words *like* or *as* to make comparisons; ◦ **metaphor** – figure of speech that *implies* comparisons; ◦ **personification** – figure of speech that applies human characteristics to nonhuman objects; ◦ **hyperbole** – intentionally exaggerated figure of speech; and ◦ **symbol** – word or object that represents something else ~~stands for another word or object~~. ~~The object or word is visible.~~ For example, a dove stands for peace.

8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts.

a) Identify and analyze an author's use of figurative language.
b) Use context, structure, and connotations to determine meaning and differentiate among multiple meanings of words and phrases.
c) Use roots, affixes, cognates, synonyms, and antonyms to determine the meaning of unfamiliar words and technical vocabulary.
d) Use dictionaries, thesauruses, and glossaries to determine definition, pronunciation, etymology, spelling, and usage of words.
e) Discriminate between connotative and denotative meanings and interpret the connotation.
f) Extend general and specialized vocabulary through speaking, listening, reading, and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
synonymous words and appreciate an author's choices of words and images.	other texts. • recognize that figurative language and analogies enrich text.	**To be successful with this standard, students are expected to** • ~~apply and~~ analyze relationships common to analogy construction, including: ◦ type or example – cinnamon: spice; ◦ characteristics – glass: breakable; ◦ association – bow: arrow; ◦ operator – car: driver; ◦ degree – pleased: ecstatic; ◦ mathematical – three: six; ◦ number – louse: lice; ◦ synonyms and antonyms – hot:-cold; ◦ purpose – chair: sit; ◦ cause/effect – sun: burn; ◦ sequence – day: week; ◦ characteristic – snow: cold; ◦ product – tree: lumber; and ◦ degree – warm: hot. • consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine/clarify meaning. • recognize that synonyms may have connotations, e.g., *elderly* and *mature*; *youthful* and *juvenile* and describe the impact on text. • use context (e.g., the overall meaning of a sentence or paragraph; a word's

8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts.

a) Identify and analyze an author's use of figurative language.
b) Use context, structure, and connotations to determine meaning and differentiate among multiple meanings of words and phrases.
c) Use roots, affixes, cognates, synonyms, and antonyms to determine the meaning of unfamiliar words and technical vocabulary.
d) Use dictionaries, thesauruses, and glossaries to determine definition, pronunciation, etymology, spelling, and usage of words.
e) Discriminate between connotative and denotative meanings and interpret the connotation.
f) Extend general and specialized vocabulary through speaking, listening, reading, and writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		position or function in a sentence) as a clue to the meaning of a word or phrase. • use both context and reference skills independently to determine the nuances and connotations of words.

8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry.

a) Explain the use of symbols and figurative language.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
d) Understand the author's use of conventional elements and characteristics within a variety of genres.
e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts.
f) Compare and contrast authors' styles.
g) Identify and ask questions that clarify various viewpoints.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
k) Identify cause and effect relationships.
l) Use prior and background knowledge as a context for new learning.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will continue to develop an understanding of each literary form and its characteristics. • Students will understand that some literary characteristics are common to more than one form. • Students will read at and beyond the literal level, including making **inferences**, i.e., making judgments or drawing conclusions based on what an author has implied. • The **initiating event** is the incident that introduces the central conflict in a story; it may have occurred before the story opens. • **Tone** is used to express a writer's attitude toward the subject. • **Voice** shows an author's personality, awareness of audience, and passion for his or her subject. It adds liveliness and energy to writing. Voice	**All students should** • ~~analyze~~ understand that an author's ~~craft and style~~ voice and tone stem from the stylized use of literary devices. • compare and contrast the characteristics of literary forms, including: ◦ novel; ◦ short story; ◦ biography; ◦ essay; ◦ speech; ◦ poetry; and ◦ memoir. • understand **characterization** as the way that an author presents a character and	**To be successful with this standard, students are expected to** • ~~understand~~ identify the elements of ~~story~~ narrative structure, including: ◦ setting – time~~,~~ and place~~, and duration in a story;~~ ◦ character(s), either: - **static –** remaining the same during the course of the story, or - **dynamic** – changing during the course of and as a result of the story ◦ external conflicts, such as: - individual vs. individual - individual vs. nature - individual vs. society - individual vs. supernatural - individual vs. technology ◦ internal conflict – individual vs. self ◦ plot - initiating event - rising action - climax - falling action - resolution

8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry.

a) Explain the use of symbols and figurative language.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
d) Understand the author's use of conventional elements and characteristics within a variety of genres.
e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts.
f) Compare and contrast authors' styles.
g) Identify and ask questions that clarify various viewpoints.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
k) Identify cause and effect relationships.
l) Use prior and background knowledge as a context for new learning.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
is the imprint of the writer — the capacity to elicit a response from the reader. • **Mood** refers to the emotional atmosphere produced by an author's use of language. • **Point of view** is the way an author reveals events and ideas in a story. With an omniscient or "all knowing" point of view, a narrator sees all, hears all, and knows all. By contrast, a limited point of view depicts only what one character or narrator sees, hears, and feels. The point of view may be first person, narrated by someone outside the story or a character within the story. The point of view may also be third person, limited or omniscient, depending on what is known of the story. • A **symbol** is anything that represents something else, often by indirect association or by the convention of an emblem, token, or word. In both prose and poetry, concrete objects used as	reveals character traits. • analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot. • analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events). • analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. • understand that poetic devices	◦ theme • recognize different plot patterns including subplots. • understand and analyze elements of an author's style, including: ◦ dialogue; ◦ sentence structure; ◦ language patterns; ◦ tone, including - serious - solemn - sarcastic - objective - enthusiastic - humorous - hostile - disapproving - personal - impersonal ◦ voice. • differentiate among points of view in stories, including:

8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry.

a) Explain the use of symbols and figurative language.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
d) Understand the author's use of conventional elements and characteristics within a variety of genres.
e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts.
f) Compare and contrast authors' styles.
g) Identify and ask questions that clarify various viewpoints.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
k) Identify cause and effect relationships.
l) Use prior and background knowledge as a context for new learning.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
symbols stand for larger ideas or feelings. The general characteristic of poetry, i.e., its suggestiveness, makes possible the expression of complex feelings and experiences in a few words. Symbolism, like metaphor, imagery, and allusion, is a powerful instrument for the expression of large worlds of meaning in a few words. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.	are used in prose and poetry. • identify author's voice. • make inferences, draw conclusions, and point to an author's implications in the text. • understand the relationship between causes and effects. • understand that a cause may have multiple effects. • understand that an effect may have multiple causes. • understand and use the reading process to facilitate comprehension. • read several texts on a similar topic and synthesize what is	◦ first person; ◦ third person limited to a character or narrator; and ◦ third person omniscient. • analyze how differences in points of view can create such effects as suspense or humor. • ~~understand~~ analyze an author's use of literary devices, including: ◦ **foreshadowing** – the giving of clues to hint at coming events in a story; ◦ **irony –** the implication, through plot or character, that the actual situation is quite different from that presented; ◦ **flashback –** a return to an earlier time in the course of a narrative to introduce prior information; and ◦ **symbolism –** the use of concrete and recognizable things to represent ideas. • analyze poetic devices in prose and poetry, including: ◦ word choice; ◦ figurative language; ◦ symbolism; ◦ imagery;

8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry.

a) Explain the use of symbols and figurative language.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
d) Understand the author's use of conventional elements and characteristics within a variety of genres.
e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts.
f) Compare and contrast authors' styles.
g) Identify and ask questions that clarify various viewpoints.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
k) Identify cause and effect relationships.
l) Use prior and background knowledge as a context for new learning.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
	read ~~in writing to be presented orally~~. • analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).	° rhyme; ° rhythm; ° repetition; and ° sound elements. ° ~~pun~~ ° ~~oxymoron~~ • evaluate an author's choice of words and images. • identify poetic forms, including: ° **haiku** – a 17-syllable, delicate, unrhymed Japanese verse, usually about nature; ° **limerick** – a 5-line, rhymed, rhythmic verse, usually humorous; ° **ballad** – a songlike narrative poem, usually featuring rhyme, rhythm, and refrain; ° **free verse –** poetry with neither regular meter nor rhyme scheme; ° **couplet** – a pair of rhyming lines; and ° **quatrain** – a stanza containing four lines. • compare and contrast an author's choice of sound elements in prose and poetry, including: ° **rhyme** – recurring identical or similar final word sounds within or at

8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry.

a) Explain the use of symbols and figurative language.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
d) Understand the author's use of conventional elements and characteristics within a variety of genres.
e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts.
f) Compare and contrast authors' styles.
g) Identify and ask questions that clarify various viewpoints.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
k) Identify cause and effect relationships.
l) Use prior and background knowledge as a context for new learning.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		the ends of lines of verse; ◦ **rhythm** – the recurring pattern of strong and weak syllabic stresses; ◦ **meter** – a fixed pattern of accented and unaccented syllables in lines of fixed length to create rhythm; ◦ **repetition –** repeated use of sounds, words, or ideas for effect and emphasis; ◦ **alliteration** – repetition of initial sounds, e.g., *picked a peck of pickled peppers*; and ◦ ~~**assonance** – repetition of vowel sounds, e.g., *mad hatter*~~ ◦ ~~**consonance** – repetition of final consonant sounds, e.g., *east/west*~~ ◦ **onomatopoeia** – the use of a word whose sound suggests its meaning (e.g., *buzz*.). • determine a theme of a text and analyze its development over the course of the text. • determine an author's point of view or purpose in a text. • analyze how differences in points of view can create such effects as suspense or humor. • use graphic organizers ~~and/or rules~~ to analyze and summarize text.

8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry.

a) Explain the use of symbols and figurative language.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
d) Understand the author's use of conventional elements and characteristics within a variety of genres.
e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts.
f) Compare and contrast authors' styles.
g) Identify and ask questions that clarify various viewpoints.
h) Identify the main idea.
i) Summarize text relating supporting details.
j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
k) Identify cause and effect relationships.
l) Use prior and background knowledge as a context for new learning.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• recognize an author's use of connotations and persuasive language, ~~and craftsmanship~~ to convey a viewpoint.

8.6 The student will read, comprehend, and analyze a variety of nonfiction texts.

a) Draw on background knowledge and knowledge of text structure to understand selections.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Analyze the author's qualifications, viewpoint, and impact.
d) Analyze the author's use of text structure and word choice.
e) Analyze details for relevance and accuracy.
f) Differentiate between fact and opinion.
g) Identify the main idea.
h) Summarize the text identifying supporting details.
i) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
j) Identify cause and effect relationships.
k) Evaluate, organize, and synthesize information for use in written and oral formats.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will analyze a variety of ~~informational~~ nonfiction sources and teachers will model the higher-order thinking processes with materials ~~below~~ at the students' independent reading level and move students gradually to collaborative and independent comprehension of age-appropriate materials at the independent reading level. • Teachers will collaborate with students to help ~~students~~ them apply reading skills in a variety of content texts. • ~~Students will use internal and external text structures as an aid to comprehension.~~ • Students will read at and beyond the literal level, using the reading process to predict, question, clarify, infer, organize, compare, summarize, and synthesize. • An author's **viewpoint** refers to his or her bias or subjectivity toward the subject.	**All students should** • activate prior knowledge before reading. • make predictions prior to and during the reading process. • recognize an author's viewpoint and use of persuasive language. • read and analyze writing critically. • choose graphic organizers based on the internal text structure most prevalent in the text. • use graphic organizers and/or rules to analyze and summarize text. • read several texts on a similar	**To be successful with this standard, students are expected to** • activate prior knowledge before reading by use of: ° small-group or whole-class discussion; ° anticipation guides; and ° preview of key vocabulary. • recognize an author's use of connotations and persuasive language, ~~and craftsmanship~~ to convey a viewpoint. • determine an author's point of view or purpose in a text. • analyze how the author acknowledges and responds to conflicting evidence or viewpoints. • analyze and record information, using ~~internal~~ text structures (organizational patterns), including: ° cause-and-effect; ° comparison/contrast; ° enumeration or listing; ° sequential or chronological; ° concept/definition; ° generalization; and

8.6 The student will read, comprehend, and analyze a variety of nonfiction texts.

a) Draw on background knowledge and knowledge of text structure to understand selections.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Analyze the author's qualifications, viewpoint, and impact.
d) Analyze the author's use of text structure and word choice.
e) Analyze details for relevance and accuracy.
f) Differentiate between fact and opinion.
g) Identify the main idea.
h) Summarize the text identifying supporting details.
i) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
j) Identify cause and effect relationships.
k) Evaluate, organize, and synthesize information for use in written and oral formats.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will work collaboratively and with teacher support to move toward higher-order thinking, using instructional-level reading materials. • **Synthesis** involves higher-order thinking and is a result of forming either a concrete or abstract whole from the logical relation of parts. • Students will use evaluation and conclusion to make reasonable inferences about what has been read by combining new information with what was known prior to reading. • Students will understand that an author's credentials and experiences contribute to his/her viewpoint. • To **critique** text requires that a critical (but not necessarily negative) judgment be made. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking	topic and synthesize what is read ~~in writing to be presented orally~~. • evaluate an author's choice of words and images. • recognize an author's use of connotations~~,~~ and persuasive language~~, and craftsmanship~~ to convey viewpoint. • understand that the writer **implies** and the reader **infers.**	◦ process. • analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas. • use ~~rules and~~ strategies for summarizing, such as the following: ◦ delete trivia and redundancy; ◦ substitute a general term for a list; and ◦ find or create a main idea statement. • read and follow directions.~~, including:~~ ◦ ~~constructing a structure~~ ◦ ~~completing a recipe~~ ◦ ~~assembling a model~~ ◦ ~~participating in a game~~ ◦ ~~arriving at a destination~~ ◦ ~~completing a form~~ ◦ ~~programming an electronic device~~ • use ~~external~~ text structures such as the following to enhance comprehension and note taking: ◦ boldface and/or italics type;

8.6 The student will read, comprehend, and analyze a variety of nonfiction texts.

a) Draw on background knowledge and knowledge of text structure to understand selections.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Analyze the author's qualifications, viewpoint, and impact.
d) Analyze the author's use of text structure and word choice.
e) Analyze details for relevance and accuracy.
f) Differentiate between fact and opinion.
g) Identify the main idea.
h) Summarize the text identifying supporting details.
i) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
j) Identify cause and effect relationships.
k) Evaluate, organize, and synthesize information for use in written and oral formats.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
aloud, etc.		◦ type set in color; ◦ underlining; ◦ indentation; ◦ sidebars; ◦ illustrations, graphics, and photographs; ◦ headings and subheadings; and ◦ footnotes and annotations. • analyze an author's choice of details by examining: ◦ accuracy; ◦ placement; ◦ thoroughness; ◦ relevance; and ◦ effectiveness. • analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. • analyze two or more texts with conflicting information on the same topic and identify how the texts disagree. • distinguish between subjective and objective writing.

8.6 The student will read, comprehend, and analyze a variety of nonfiction texts.

a) Draw on background knowledge and knowledge of text structure to understand selections.
b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
c) Analyze the author's qualifications, viewpoint, and impact.
d) Analyze the author's use of text structure and word choice.
e) Analyze details for relevance and accuracy.
f) Differentiate between fact and opinion.
g) Identify the main idea.
h) Summarize the text identifying supporting details.
i) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
j) Identify cause and effect relationships.
k) Evaluate, organize, and synthesize information for use in written and oral formats.
l) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use graphic organizers~~, such as "It says…I say,"~~ to record clues in the text and inferences or conclusions made by the reader as a result of those clues.

At the eighth-grade level, students will plan, draft, revise, and edit narratives as well as ~~informational~~ expository, persuasive, and ~~expository~~ informational pieces with attention to composition and written expression. Students will continue the process of becoming independent with sentence formation, usage, and mechanics and understand that the conventions of language help convey the message from the writer to the reader. Students will use writing for expressive purposes and as a tool for learning academic concepts. They will use available and appropriate technology ~~as available and appropriate~~.

8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational.

a) Identify intended audience.
b) Use prewriting strategies to generate and organize ideas.
c) Distinguish between a thesis statement and a topic sentence.
d) Organize details to elaborate the central idea and provide unity.
e) Select specific vocabulary and information for audience and purpose.
f) Use interview quotations as evidence.
g) Revise writing for clarity of content, word choice, sentence variety, and transitions among paragraphs.
h) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will become independent and proficient in composing a variety of types of writing. • Teachers will focus direct instruction on all three domains of writing: ◦ **composing** – the structuring and elaborating a writer does to construct an effective message for readers; ◦ **written expression** – those features that show the writer purposefully shaping and controlling language to affect readers; and ◦ **usage/mechanics** – the features that cause written language to be acceptable and effective for standard discourse. • **Elaboration** can occur by using descriptive details and examples ~~*horizontally*~~ within a sentence to give detail and depth to an idea, or ~~*vertically*~~ from paragraph to paragraph chronologically. • **Voice** shows an author's personality, awareness of audience, and passion for his or her subject. It adds liveliness and energy to writing and allows the reader to know the writer's ideas. Voice is the imprint of the writer — the capacity to elicit a response from the reader.	**All students should** • use a process for writing, including: ◦ planning; ◦ drafting; ◦ revising; ◦ proofreading; ◦ editing; and ◦ publishing. • understand that good writing has been elaborated ~~horizontally and vertically~~. • use peer and individual revising and editing. • understand that good writing has been improved through revision. • use ~~word processing tools~~ keyboarding, including spell checkers and grammar checkers when available. • understand and apply the elements of composing:	**To be successful with this standard, students are expected to** • write in a variety of forms, including: ◦ **narrative –** writing to tell a story; ◦ **expository –** writing to explain and build a body of well-organized and understandable information; ◦ **persuasive –** writing to influence the reader or listener to believe or do as the author or speaker suggests;and ◦ **informational –** writing to put forth information, frequently used in textbooks and the news media. • use a variety of prewriting strategies, ~~including~~ for example: ◦ brainstorming; ◦ webbing; ◦ mapping; ◦ outlining; ◦ clustering; ◦ listing; and ◦ using graphic organizers. • use written expression to ~~draft and revise compositions~~ explain, analyze, or summarize a topic with attention to: ◦ purpose and audience; ◦ a central or controlling idea; ◦ voice; ◦ tone (such as serious, sarcastic, objective, enthusiastic, solemn,

8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational.

a) Identify intended audience.
b) Use prewriting strategies to generate and organize ideas.
c) Distinguish between a thesis statement and a topic sentence.
d) Organize details to elaborate the central idea and provide unity.
e) Select specific vocabulary and information for audience and purpose.
f) Use interview quotations as evidence.
g) Revise writing for clarity of content, word choice, sentence variety, and transitions among paragraphs.
h) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• **Tone** expresses an author's attitude toward the subject. • **Coherence** means that each part of the writing appears to be 'connected' and heading towards a single conclusion or theme in the text. • ~~A~~ The writing process is nonlinear; returning to prewriting or drafting at any point in the process may help the writer clarify and elaborate the drafted piece. • Students will begin to assume responsibility for revising, proofreading, and editing their own writing. • Students should have practice writing on demand, for shorter time frames, and over extended periods of time.	◦ central idea; ◦ elaboration; ◦ unity; and ◦ organization. • use narrative techniques, such as dialogue, description, and pacing, to develop experiences or characters. • understand that a topic sentence supports an essay's thesis statement; it unifies a paragraph and directs the order of the sentences.	humorous, hostile, personal, impersonal); ◦ coherent selection of information and details; ◦ embedded phrases and clauses that clarify meaning and increase variety; ◦ vivid and precise vocabulary; ◦ figurative language; ◦ sentence variety; and ◦ transitional words and phrases. • develop real or imagined experiences or events using effective techniques, relevant descriptive details, and well-structured event sequences when writing narratives. • engage and orient the reader by establishing a context and introducing a narrator and/or characters. • organize an event sequence that unfolds naturally and logically. • use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. • apply revising procedures, including: ◦ rereading; ◦ reflecting; ◦ rethinking; ◦ rewriting; ◦ including vivid vocabulary; ◦ combining sentences for variety and rhythm; and

8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational.

a) Identify intended audience.
b) Use prewriting strategies to generate and organize ideas.
c) Distinguish between a thesis statement and a topic sentence.
d) Organize details to elaborate the central idea and provide unity.
e) Select specific vocabulary and information for audience and purpose.
f) Use interview quotations as evidence.
g) Revise writing for clarity of content, word choice, sentence variety, and transitions among paragraphs.
h) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		° providing transitions between ideas and paragraphs. • create a thesis statement that focuses the essay, expresses the writer's position in an argument, or explains the purpose of the essay, and is usually found in the first paragraph. • elaborate the central idea, providing sustained unity throughout the writing. • choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy. • use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. • sustain a formal style. • develop a conclusion.

8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
b) Use and punctuate correctly varied sentence structures to include conjunctions and transition words.
c) Choose the correct case and number for pronouns in prepositional phrases with compound objects.
d) Maintain consistent verb tense across paragraphs.
e) Use comparative and superlative degrees in adverbs and adjectives.
f) Use quotation marks with dialogue and direct quotations.
g) Use correct spelling for frequently used words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will understand and apply all the conventions of language learned at the elementary and middle school levels. • Students will maintain correct use of language to enhance writing and to avoid confusing or distracting the reader. • The conventions of correct language are an integral part of the writing process. • ~~A d~~Diagramming ~~of a~~ sentences is a ~~tool~~ strategy to increase understanding of ~~its~~ their structure. • Teachers will explain the function of verbals (gerunds, participles, and infinitives) and how they are used to provide sentence variety in writing.	**All students should** • proofread and edit drafts with teacher assistance, peer collaboration, and growing independence. • understand that pronouns need to agree with antecedents in gender, number, and person. • understand that verbs must agree with subjects. • use verbs in the indicative, imperative, interrogative, conditional, and subjunctive form. • recognize and correct inappropriate shifts in verb forms.	**To be successful with this standard, students are expected to** • use complete sentences with appropriate punctuation, including the punctuation of dialogue and the punctuation between dependent and independent clauses. • use punctuation (comma, ellipsis, dash) to indicate a pause or break. • use an ellipsis to indicate an omission. • diagram ~~complex~~ sentences with phrases and clauses. • use a singular verb with a singular subject and a plural verb with a plural subject. ~~, e.g., *John* buys *lunch, but most of his friends* bring *lunches from home.*~~ • use a singular pronoun to refer to a singular antecedent and a plural pronoun to refer to a plural antecedent. ~~, e.g., *All students should bring* their *notebooks to class. Each student must provide* his *own pen.*~~ • use objective pronouns in prepositional phrases with compound objects. ~~, e.g., *Grandma gave cookies to Peter and* me.~~ • choose and maintain tense (present, past, future) ~~and~~ throughout an entire paragraph or text. • use comparative and superlative adjectives. ~~, e.g., *Jim was the* brightest *student in the middle school. He was even* brighter *than some of the students in the*~~

8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.
b) Use and punctuate correctly varied sentence structures to include conjunctions and transition words.
c) Choose the correct case and number for pronouns in prepositional phrases with compound objects.
d) Maintain consistent verb tense across paragraphs.
e) Use comparative and superlative degrees in adverbs and adjectives.
f) Use quotation marks with dialogue and direct quotations.
g) Use correct spelling for frequently used words.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		~~*high school.*~~ • use comparative and superlative adverbs. ~~, e.g., The second time she read aloud, she read more fluently than the first time. After much practice, she read most fluently of all her classmates.~~ • use and correctly punctuate transitional words, such as *furthermore, however, since*, and *next*. • use ~~and~~ correct~~ly punctuate~~ conjunctions, such as *either/or* and *neither/nor*. • embed quotations from other sources with skill and accuracy. • use quotation marks correctly with dialogue.

At the eighth-grade level, students will apply knowledge of appropriate reference material to produce a research product including the collection and organization of information from multiple online, print, and media sources. They will extend skills in the evaluation of sources and the use of technology to research, organize, evaluate, and communicate information. In addition, they will continue to cite sources and avoid plagiarism by using Modern Language Association (MLA) or American Psychological Association (APA) style guidelines.

8.9 The student will apply knowledge of appropriate reference materials to produce a research product.

a) Collect and synthesize information from multiple sources including online, print and media.
b) Evaluate the validity and authenticity of texts.
c) Use technology as a tool to research, organize, evaluate, and communicate information.
d) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
e) Cite primary and secondary sources using Modern Language Association (MLA) or American Psychological Association (APA) style.
f) Publish findings and respond to feedback.
g) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will collect resources, evaluate their usefulness, conduct research, and appropriately cite reliable sources of information. • Students will evaluate the accuracy and authenticity of multiple sources. • Students will evaluate the intent of the author, which may include misinformation, bias, and unsupported assertions.	**All students should** • determine if a source is trustworthy and accurate. • understand that using multiple sources of information produces a more complete understanding of a topic.	**To be successful with this standard, students are expected to** • understand that a **primary source** is an original document or a firsthand or eyewitness account of an event. • understand that a **secondary source** discusses information originally presented somewhere else. Secondary sources provide analysis, interpretation, or evaluation of the original information. • use a variety of strategies to generate notes, and determine the central ideas of a primary or secondary source, synthesize information, and provide an accurate summary. • embed quotations from other sources with skill and accuracy. • evaluate the validity and authenticity of texts, using questions such as: ° Does the source appear in a reputable publication? ° Is the source free from bias? Does the writer have something to gain from his opinion? ° Does the information contain facts for support? ° Is the same information found in more than one source? • conduct short research projects to answer a question drawing on several sources and generating questions.

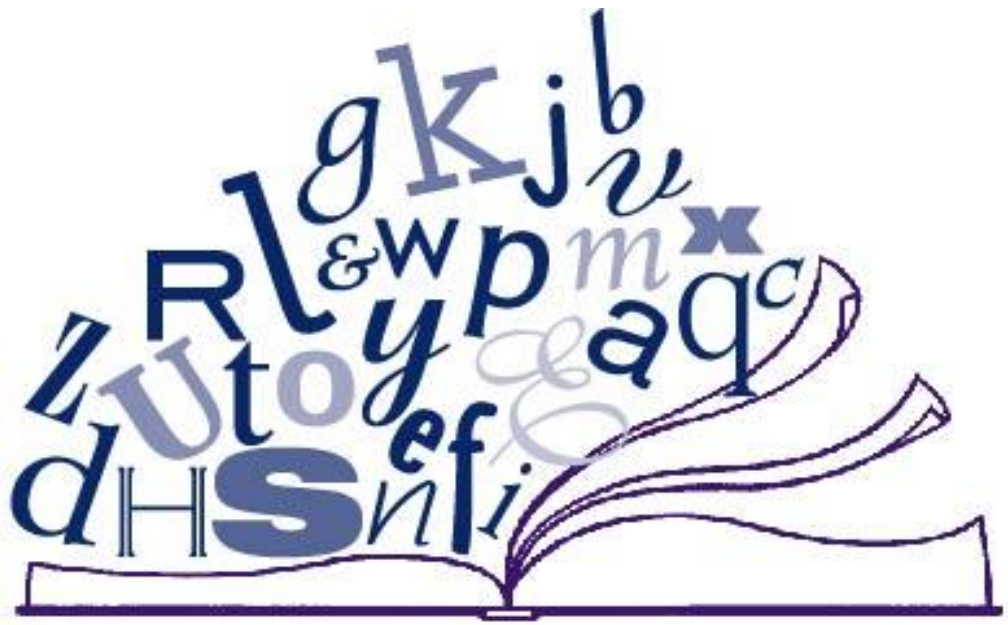
8.9 The student will apply knowledge of appropriate reference materials to produce a research product.

a) Collect and synthesize information from multiple sources including online, print and media.
b) Evaluate the validity and authenticity of texts.
c) Use technology as a tool to research, organize, evaluate, and communicate information.
d) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
e) Cite primary and secondary sources using Modern Language Association (MLA) or American Psychological Association (APA) style.
f) Publish findings and respond to feedback.
g) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• use computer technology to research, organize, evaluate, and communicate information. • document using a standard form such as MLA or APA. • avoid plagiarism, give credit whenever using another person's idea or opinion, facts, statistics, graphs, drawings, quotations, or paraphrases of another person's words.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Nine



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the ninth-grade level, students will develop interpersonal communication skills as well as those skills required for more formal public speaking opportunities. They ~~will present and critique dramatic readings of literary selections and~~ will continue to develop proficiency in making planned oral presentations independently and in small groups. ~~Students will apply grammatical conventions in writing and speaking~~ They will continue to develop media literacy by producing, analyzing, and evaluating auditory, visual, and written media messages.

9.1 The student will make planned oral presentations independently and in small groups.

a) Include definitions to increase clarity.
b) Use relevant details to support main ideas.
c) Illustrate main ideas through anecdotes and examples.
d) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
e) Use verbal and nonverbal techniques for presentation.
f) Evaluate impact and purpose of presentation.
g) Credit information sources.
h) Give impromptu responses to questions about presentation.
i) Give and follow spoken directions to perform specific tasks, answer questions, or solve problems.
j) Use a variety of strategies to listen actively.
k) Summarize and evaluate information presented orally by others.
l) Assume shared responsibility for collaborative work.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~Students should select, plan, make, and critique dramatic readings of literary selections.~~ • ~~Students may develop characters by using appropriate dialects.~~ • ~~Students may use costumes and props to enhance dramatic scenes.~~	**All students should**	**To be successful with this standard, students are expected to** • ~~choose and participate in dialogue scenes from plays, dramatic readings from short stories and/or novels, and interpreted performances of poetry~~ • ~~adapt presentation techniques to fit a literary form~~

9.1 The student will make planned oral presentations independently and in small groups.

a) Include definitions to increase clarity.
b) Use relevant details to support main ideas.
c) Illustrate main ideas through anecdotes and examples.
d) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
e) Use verbal and nonverbal techniques for presentation.
f) Evaluate impact and purpose of presentation.
g) Credit information sources.
h) Give impromptu responses to questions about presentation.
i) Give and follow spoken directions to perform specific tasks, answer questions, or solve problems.
j) Use a variety of strategies to listen actively.
k) Summarize and evaluate information presented orally by others.
l) Assume shared responsibility for collaborative work.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will make planned oral presentations ~~that are three to five minutes in duration~~. • Students should cite sources according to proper MLA or APA format.	**All students should** • ~~define~~ understand that technical and specialized language ~~to~~ helps the audience ~~understand~~ comprehend the content of ~~their~~ oral presentations. • understand that verbal techniques ~~include but are not limited to appropriate tone, diction, articulation, clarity, type and rate of delivery, and the use of pauses for emphasis~~ are important for effective communication. • ~~understand that nonverbal techniques include but are not limited to eye contact, facial expressions, gestures, and stance~~	**To be successful with this standard, students are expected to** • define technical and specialized language ~~include definitions~~ to increase clarity of their oral presentations. • incorporate ~~include~~ details, such as facts, statistics, quotations, information from interviews and surveys, and pertinent information discovered during research, to support the main ideas of their oral presentations. • organize presentation in a structure appropriate to the audience, topic, and purpose (problem-solution, comparison-contrast, cause-effect, etc.). • use examples from their knowledge and experience to support the main ideas of their oral presentation. • use grammar and vocabulary appropriate for situation, audience, topic, and purpose. • demonstrate ~~use~~ nonverbal techniques including, but not limited, to eye contact, facial expressions, gestures, and stance. • use verbal techniques including, but not limited to, appropriate tone, diction, articulation, clarity, type, and rate. • keep eye contact with audience, adjust volume, tone, and rate, be aware of postures and gestures, use natural tone.

9.1 The student will make planned oral presentations independently and in small groups.

a) Include definitions to increase clarity.
b) Use relevant details to support main ideas.
c) Illustrate main ideas through anecdotes and examples.
d) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
e) Use verbal and nonverbal techniques for presentation.
f) Evaluate impact and purpose of presentation.
g) Credit information sources.
h) Give impromptu responses to questions about presentation.
i) Give and follow spoken directions to perform specific tasks, answer questions, or solve problems.
j) Use a variety of strategies to listen actively.
k) Summarize and evaluate information presented orally by others.
l) Assume shared responsibility for collaborative work.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

	• ~~cite information sources~~
	• understand that crediting sources is important to prevent plagiarism and establish credibility.
	• ~~respond clearly and informatively with poise to the audience's questions about their oral presentations~~
	• demonstrate the ability to work effectively with diverse groups, including:
	  ◦ exercising flexibility in making necessary compromises to accomplish a common goal.
	  ◦ defining a team goal and working toward its mastery.
	  ◦ ~~understanding the purpose for working as a team and~~
		• analyze and critique the relationship among purpose, audience, and content of presentations.
		• assess ~~evaluate~~ the impact of presentations, including the effectiveness of verbal and nonverbal techniques using a rubric or checklist.
		• give credit in their oral presentations to authors, researchers, and interviewers by citing titles of articles, magazines, newspapers, books, documents, and other reference materials used in the presentations.
		• respond to questions about their oral presentations.
		• collaborate ~~work~~ with peers to set rules for group presentations and discussions, set clear goals and deadlines, and define individual roles as needed.
		• ~~move conversations ahead by asking and responding to questions actively, and involving others in the discussion~~.
		• engage others in a conversation by posing and responding to questions in a group situation.
		• demonstrate ~~use~~ active listening skills by looking at the speaker, using body language to indicate attentiveness, and give appropriate feedback.
		• summarize or paraphrase what others have said to show attentiveness: "It sounds like you were saying. . ." and provide an evaluation of others'

9.1 The student will make planned oral presentations independently and in small groups.

a) Include definitions to increase clarity.
b) Use relevant details to support main ideas.
c) Illustrate main ideas through anecdotes and examples.
d) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
e) Use verbal and nonverbal techniques for presentation.
f) Evaluate impact and purpose of presentation.
g) Credit information sources.
h) Give impromptu responses to questions about presentation.
i) Give and follow spoken directions to perform specific tasks, answer questions, or solve problems.
j) Use a variety of strategies to listen actively.
k) Summarize and evaluate information presented orally by others.
l) Assume shared responsibility for collaborative work.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
	~~working toward that purpose.~~ ◦ maintaining collaboration by ensuring that all ideas are treated respectfully and acknowledged. ◦ demonstrating respect for others' ideas by acknowledging differing points of view. ◦ coming to agreement by seeking consensus.	information. • ~~use verbal and nonverbal techniques~~ • analyze and critique the effectiveness of a speaker's or group's demeanor, voice, language, gestures, clarity of thought, organization of evidence, relevance of information, and delivery. • analyze and critique the relationship among purpose, audience, and content of presentations.

9.2 The student will produce, analyze, and evaluate auditory, visual, and written media messages.

a) Analyze and interpret special effects used in media messages including television, film, and Internet.
b) Determine the purpose of the media message and its effect on the audience.
c) Describe possible cause and effect relationships between mass media coverage and public opinion trends.
d) Evaluate sources including advertisements, editorial, and feature stories for relationships between intent and factual content.
e) Monitor, analyze, and use multiple streams of simultaneous information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will develop media literacy by studying various media components and messages. • Students will also recognize that all media messages are constructed and that to understand the whole meaning of the message they can *deconstruct* it, looking at the following attributes: ◦ **Authorship** (Who constructed the message?) ◦ **Format** (This is not just the medium being used but also how the creators used specific elements for effect, i.e., color, sound, emphasis on certain words, amateur video, kids' voices.) ◦ **Audience** (Who is the person or persons meant to see the message? How will different people *see* the message?) ◦ **Content** (This is not just the visible content but the embedded content as well which includes underlying assumptions of values or points of view; facts and opinions may be intermixed.) ◦ **Purpose** (Why is the message being sent—is it meant to persuade, inform, entertain, sell, or a combination of these?)	**All students should** • ~~understand that an awareness of special effects and persuasive techniques aids in the interpretation of media messages.~~ • evaluate how special effects are employed in a multimedia message to persuade the viewer. • comprehend ~~understand~~ persuasive language and word connotations to convey viewpoint and bias.	**To be successful with this standard, students are expected to** • create and publish media messages, such as public service announcements aimed at a variety of audiences and with different purposes. • recognize that persuasive techniques are used to convince viewers to make decisions, change their minds, take a stand on an issue, or predict a certain outcome, such as: ◦ ad hominem – means "to the man" does not argue the issue, instead it argues the person; ◦ red herring – is a deliberate attempt to divert attention; ◦ straw man – creates the illusion of having refuted a proposition by substituting a similar yet weaker proposition (the "straw man"); ◦ begging the question – assumes the conclusion is true without proving it; circular argument; ◦ testimonial – uses famous people to endorse the product or idea; ◦ ethical appeal – establishes the writer as knowledgeable; ◦ emotional appeal – appeals strictly to emotions often used with strong visuals; and ◦ logical appeal – is the strategic use of logic, claims, and evidence. • identify and evaluate word choice in the media. • investigate the use of bias and viewpoints in media. • describe the effect of persuasive messages in the media on the audience. • identify public opinion trends and possible causes. • identify and analyze choice of information in the media and distinguish between fact and opinion.

9.2 The student will produce, analyze, and evaluate auditory, visual, and written media messages.

a) Analyze and interpret special effects used in media messages including television, film, and Internet.
b) Determine the purpose of the media message and its effect on the audience.
c) Describe possible cause and effect relationships between mass media coverage and public opinion trends.
d) Evaluate sources including advertisements, editorial, and feature stories for relationships between intent and factual content.
e) Monitor, analyze, and use multiple streams of simultaneous information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

		identify and analyze sources and viewpoints in the media.
		
		analyze information from many different print and electronic sources.
		
		• identify basic principles of media literacy:
		  ◦ media messages are constructed;
		  ◦ messages are representations of reality with values and viewpoints;
		  ◦ each form of media uses a unique set of rules to construct messages;
		  ◦ individuals interpret based on personal experience; and
		  ◦ media are driven to gain profit or power.
		
		• identify key questions of media literacy:
		  ◦ Who created the message?
		  ◦ What techniques are used to attract attention?
		  ◦ How might different people react differently to this message?
		  ◦ What values, lifestyles and points of view are represented in, or omitted from, this message?
		  ◦ What is the purpose of this message?

At the ninth-grade level, students will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. They will be introduced to literary works from a variety of cultures and eras, and they will apply knowledge of literary terms and forms to their reading and writing and to analyses of literature and other printed materials. Students will continue to develop their reading comprehension skills through utilizing strategies to identify formats, text structures, and main ideas. They will apply these skills across the content areas, including history and social science, science, and mathematics. When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.

9.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms.
e) Identify literary and classical allusions and figurative language in text.
f) Extend general and specialized vocabulary through speaking, reading, and writing.
g) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will increase their independence as learners of vocabulary. • Students will use prefixes, suffixes, roots, derivations, and inflections of polysyllabic words to determine meaning and relationships among related words. • Teachers should use a study of cognates (words from the same linguistic family) to enhance vocabulary instruction. Cognates can occur within the same language or across languages, e.g., *night* (English), *nuit* (French), *Nacht* (German), *nacht* (Dutch), *nicht* (Scots), *natt* (Swedish, Norwegian), *nat* (Danish), *raat* (Urdu), *nátt* (Faroese), *nótt* (Icelandic), *noc* (Czech, Slovak, Polish). • Students will evaluate the use of figurative language ~~and analogies~~ in text. • Students will use context and connotations to help determine the meaning of ~~nearly~~ synonymous words and appreciate an author's choices of words and images.	**All students should** • ~~recognize internal and external inflections that change meaning and pronunciation.~~ • recognize that figurative language enriches text. • understand that word structure aids comprehension of unfamiliar and complex words.	**To be successful with this standard, students are expected to** • use word structure to analyze and relate words. • use roots or affixes to determine or clarify the meaning of words. • recognize that words have nuances of meaning and that understanding the connotations may be necessary to determine the appropriate meaning. • demonstrate an understanding of idioms. • use prior reading knowledge and other study to identify the meaning of literary and classical allusions. • interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text. • analyze connotations of words with similar denotations. • use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception, conceivable*). • consult general and specialized reference materials (e.g., dictionaries, thesaurus). • demonstrate understanding of figurative language, word relationships, and

9.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms.
e) Identify literary and classical allusions and figurative language in text.
f) Extend general and specialized vocabulary through speaking, reading, and writing.
g) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• **Connotation** is subjective, cultural and emotional. A stubborn person may be described as being either *strong-willed* or *pig-headed*. They have the same literal meaning (i.e., *stubborn*), *strong-willed* connotes admiration for the level of someone's will, while *pig-headed* **connotes** frustration in dealing with someone. • **Denotation** is a dictionary definition of a word. • **Idiom** is an expression peculiar to a particular language or group of people that means something different from the dictionary definition. ~~relates to a natural way of using language: the way of using a language that comes naturally to its native speakers~~ (e.g., blessing in disguise, chip on your shoulder). • An **allusion** is an indirect reference to a person, place, event or thing-- real or fictional. J.D. Salinger's "The Catcher in the Rye" is an allusion to a poem by Robert Burns. Stephen Vincent Benet's story "By the Waters of Babylon" alludes to Psalm 137 in the Bible.		connotations in word meanings.

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Strategies for reading should be used to develop reading comprehension skills. Students will apply a process for reading as they analyze a variety of literature. They will study classical and contemporary selections that represent literary forms. • Students will enhance their understanding of the characteristics of various literary forms through the reading and analysis of a variety of genres, such as poetry, prose, essays, short stories, historical fiction, and narrative nonfiction. • Students will understand that literary texts can fulfill a social or cultural function depending on the time, location, and purpose of the author. For example, *The Grapes of Wrath*, which	**All students should** • ~~understand the relationships between and among the elements of literature and the ways these elements work together to create effective literary selections.~~ • understand the relationship between an author's style and literary effect. • understand an author's use of figurative language to create images, sounds, and effects. • understand an author's use of structuring techniques to	**To be successful with this standard, students are expected to** • identify main idea, purpose, and supporting details. • provide a summary of the text. • identify the differing characteristics that distinguish the literary forms ~~of~~, including: ◦ narrative – short story, anecdote, character sketch, fable, legend, myth, tall tale, allegory, novel; ~~, biography, autobiography;~~ ◦ poetry – epic, ballad, sonnet, lyric, elegy, ode; ◦ drama – comedy, tragedy; ◦ essay – editorial, journal/diary entry, informative/explanatory essay, analytical essay, speech; and ◦ narrative nonfiction – biographies, autobiographies, personal essays. • identify ~~the components of scripting~~ and analyze elements of dramatic literature :

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
focuses on the plight of migrant farmers, affected the conscience of a nation and helped laws to change. • Students will understand that parallel plots are plots in which each main character has a separate but related story line that merges together (e.g., *A Tale of Two Cities*). • Students will read and analyze one-act and full-length plays. • ~~Students will analyze various dramatic works.~~ • ~~Students will understand how stage directions enhance the impact of dramatic works in reading and in performance.~~ • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR	present literary content. • understand the techniques an author uses to convey information about a character. • understand character types. • understand a character's development throughout a text. • understand how authors are often influenced either consciously or unconsciously by the ideas, ~~and~~ values, and location ~~of the times~~ in which they live. • understand that an author draws on and transforms	◦ dramatic structure: exposition/initiating event, rising action, complication/conflict, climax, falling action, resolution/denouement (conclusion/resolution); ◦ monologue; ◦ soliloquy; ◦ dialogue; ◦ aside; ◦ dialect; and ◦ stage directions. • describe how stage directions help the reader understand a play's setting, mood, characters, plot, and theme. • compare and contrast the representation of a subject or a key scene in two different media and analyze what is emphasized in each. • explain the relationships ~~between and~~ among the elements of literature, such as:

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
(Question-, Answer Relationships), thinking aloud, etc.	source material in a specific work (e.g. how a later author draws on a play by Shakespeare). • understand that in dramatic works, setting, mood, characters, plot, and theme are often revealed through staging as well as through narration and dialogue~~, which are used in short stories and novels to create these elements~~.	° protagonist and other characters; ° plot; ° setting; ° tone; ° point of view – first person, third person limited, third person omniscient; ° theme; ° speaker; and ° narrator. • analyze the techniques used by an author to convey information about a character.~~, such as:~~ ° ~~direct exposition – what is said about the character;~~ ° ~~character's actions – what the character does; and~~ ° ~~character's thoughts – what the character thinks.~~ • analyze character types, including: ° dynamic/round character;

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		° static/flat character; and ° stereotype and caricature. • analyze how authors create multilayered characters through the use of literary devices: indirect and direct methods of characterization, character's actions, interactions with other characters, dialogue, physical appearance, and thoughts. • analyze how characters with multiple or conflicting motivations develop over the course of a text, interact with other characters, and advance the plot or develop theme. • analyze how the plot structures (conflict, resolution, climax, and subplots) advance the action in literature, • determine a theme of a text and analyze its development over the course of the text. • compare and contrast ~~identify~~ types of figurative language and other literary

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		devices, ~~including images and sounds,~~ such as: ◦ simile; ◦ metaphor; ◦ personification; ◦ analogy; ◦ symbolism; ◦ apostrophe; ◦ allusion; ◦ imagery; ◦ paradox; and ◦ oxymoron. • identify sound devices, including: ◦ rhyme (approximate, end, slant) ◦ rhythm; ◦ repetition; ◦ alliteration;

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ assonance; ◦ consonance; ◦ onomatopoeia; and ◦ parallelism. • identify and analyze an author's presentation of literary content by the use of structuring techniques, such as: ◦ dialogue; ◦ foreshadowing; ◦ parallel plots; ◦ subplots and multiple story lines; ◦ flashback; ◦ soliloquy; ◦ verse; ◦ refrain; and ◦ stanza forms - couplet

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		- quatrain - sestet - octet (octave). • identify and analyze an author's use of diction (word choice) <u>and syntax</u> to convey ideas and content, including: ° rhetorical question; ° cliché; ° connotation; ° denotation; ° hyperbole; ° understatement; ° irony; - dramatic - situational - verbal ° dialect; and

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ pun. • ~~identify the components of staging:~~ ◦ ~~lighting design and cues~~ ◦ ~~costume design~~ ◦ ~~set design~~ ◦ ~~set decoration: props~~ ◦ ~~stage movement (blocking)~~ ◦ ~~voice: tone, pitch, inflection, emotion~~ ◦ ~~facial expressions~~ ◦ ~~make-up~~ ◦ ~~curtain cues~~ ◦ ~~music/sound effects~~ • ~~identify the components of scripting:~~ ◦ ~~dramatic structure: exposition/initiating event, rising action, complication/conflict, climax, falling action, resolution/denouement (conclusion/resolution)~~

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ ~~monologue~~ ◦ ~~soliloquy~~ ◦ ~~dialogue~~ ◦ ~~aside~~ ◦ ~~dialect~~ • ~~compare and contrast the elements of character, setting, and plot in or among one-act plays and full-length plays~~ • ~~identify the components of staging:~~ ◦ ~~lighting design and cues~~ ◦ ~~costume design~~ ◦ ~~set design~~ ◦ ~~set decoration: props~~ ◦ ~~stage movement (blocking)~~ ◦ ~~voice: tone, pitch, inflection, emotion~~ ◦ ~~facial expressions~~

9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.

a) Identify author's main idea and purpose.
b) Summarize text relating the supporting details.
c) Identify the characteristics that distinguish literary forms.
d) Use literary terms in describing and analyzing selections.
e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotion.
g) Analyze the cultural or social function of a literary text.
h) Explain the relationship between the author's style and literary effect.
i) Explain the influence of historical context on the form, style, and point of view of a written work.
j) Compare and contrast author's use of literary elements within a variety of genres.
k) Analyze how an author's specific word choices and syntax achieve special effects and support the author's purpose.
l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ ~~make-up~~ ◦ ~~curtain cues~~ ◦ ~~music/sound effects~~ • ~~compare and contrast the elements of character, setting, and plot in or among one-act plays and full-length plays~~

9.5 The student will read and analyze a variety of nonfiction texts.

a) Recognize an author's intended purpose for writing and identify the main idea.
b) Summarize text relating supporting details.
c) Understand the purpose of text structures and use those features to locate information and gain meaning from texts.
d) Identify characteristics of expository, technical, and persuasive texts.
e) Identify a position/argument to be confirmed, disproved, or modified.
f) Evaluate clarity and accuracy of information.
g) Analyze and synthesize information in order to solve problems, answer questions, or complete a task.
h) Draw conclusions and make inferences on explicit and implied information using textual support as evidence.
i) Differentiate between fact and opinion.
j) Organize and synthesize information from sources for use in written and oral presentations.
k) Use the reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~This standard encourages the implementation and use of activities that support a process for reading.~~ • The intent of this standard is that students will read and analyze a variety of nonfiction, i.e., informational/factual prose materials. • Students will understand the purpose of text structures and use those features to locate information, such as: problem-solution, cause and effect, ordered sequence, definition or description with a list. • Students will understand before-, during-, and after-reading strategies. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.	**All students should** • ~~employ activities that support the reading process~~ • understand that specialized vocabulary is vocabulary that is unique to a specific content, topic, or discipline.	**To be successful with this standard, students are expected to** • ~~use before, during , and after reading strategies~~ • identify and infer the main idea from a variety of complex informational text. • explain author's purpose in informational text. • identify and summarize essential details that support the main idea of informational text. • analyze two or more texts with conflicting information on the same topic and identify how the texts disagree. • demonstrate the ~~understand and~~ use of text features to locate information, such as: ◦ title page; ◦ bolded or highlighted words; ◦ index; ◦ graphics; ◦ charts; and ◦ headings. • analyze text structures (organizational pattern), including:

9.5 The student will read and analyze a variety of nonfiction texts.

a) Recognize an author's intended purpose for writing and identify the main idea.
b) Summarize text relating supporting details.
c) Understand the purpose of text structures and use those features to locate information and gain meaning from texts.
d) Identify characteristics of expository, technical, and persuasive texts.
e) Identify a position/argument to be confirmed, disproved, or modified.
f) Evaluate clarity and accuracy of information.
g) Analyze and synthesize information in order to solve problems, answer questions, or complete a task.
h) Draw conclusions and make inferences on explicit and implied information using textual support as evidence.
i) Differentiate between fact and opinion.
j) Organize and synthesize information from sources for use in written and oral presentations.
k) Use the reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ cause and effect; ◦ comparison/contrast; ◦ enumeration or listing; ◦ sequential or chronological; ◦ concept/definition; ◦ generalization; and ◦ process. • identify an author's position/argument within informational text. • evaluate the clarity and accuracy of information found in informational texts, such as manuals, textbooks, business letters, newspapers, etc. ◦ ~~manuals~~ ◦ ~~textbooks~~ ◦ ~~business letters~~ ◦ ~~newspapers~~ ◦ ~~brochures~~ ◦ ~~reports~~ ◦ ~~catalogs~~ ◦ ~~journals~~ ◦ ~~essays~~ ◦ ~~speeches~~ ◦ ~~biographies~~

9.5 The student will read and analyze a variety of nonfiction texts.

a) Recognize an author's intended purpose for writing and identify the main idea.
b) Summarize text relating supporting details.
c) Understand the purpose of text structures and use those features to locate information and gain meaning from texts.
d) Identify characteristics of expository, technical, and persuasive texts.
e) Identify a position/argument to be confirmed, disproved, or modified.
f) Evaluate clarity and accuracy of information.
g) Analyze and synthesize information in order to solve problems, answer questions, or complete a task.
h) Draw conclusions and make inferences on explicit and implied information using textual support as evidence.
i) Differentiate between fact and opinion.
j) Organize and synthesize information from sources for use in written and oral presentations.
k) Use the reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		° ~~autobiographies~~ • ~~apply information gained from sources to complete an assigned task.~~ • make inferences and draw conclusions from complex informational text. • ~~increase general and specialized vocabulary~~ • examine text structures to aid comprehension and analysis of complex, informational texts. • use a variety of reading strategies to self-monitor the reading process. • ~~identify information not answered by a selected text~~

At the ninth-grade level, students will write narrative, ~~literary,~~ expository, and ~~informational~~ persuasive forms with an emphasis on analysis. As in every grade, daily writing experiences are essential for all ninth-grade students, and they will demonstrate their understanding through written products. They will develop as writers by participating in a process for writing, including prewriting, organizing, composing, revising, editing, and publishing. Students will edit writings for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes.

a) Generate, gather, and organize ideas for writing.
b) Plan and organize writing to address a specific audience and purpose.
c) Communicate clearly the purpose of the writing using a thesis statement where appropriate.
d) Write clear, varied sentences using specific vocabulary and information.
e) Elaborate ideas clearly through word choice and vivid description.
f) Arrange paragraphs into a logical progression.
g) Use transitions between paragraphs and ideas.
h) Revise writing for clarity of content, accuracy and depth of information.
i) Use computer technology to plan, draft, revise, edit, and publish writing

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will plan, compose, revise, and edit writing in a variety of forms and for a variety of audiences and purposes. • Writing will encompass narrative, expository, persuasive, and ~~informational~~ analytical forms. • Students develop as writers by participating in a process for writing — prewriting, organizing, composing, revising, editing, and publishing. • Students should have practice writing for shorter time frames as well as extended time frames.	**All students should** • understand ~~a~~ that writing is a process. • understand the importance of audience, ~~and~~ purpose and point of view when writing. • recognize the importance of maintaining a formal style and objective tone in academic writing. • understand that the function of a thesis statement is to focus on the purpose of writing.	**To be successful with this standard, students are expected to** • use prewriting strategies and organize ~~their~~ writing. • plan and develop organized and focused written products that demonstrate their understanding of composing, written expression, and usage/mechanics and that reflect an appropriate audience and purpose. • ~~communicate~~ demonstrate the purpose of ~~their~~ writing as narrative, persuasive, expository, or analytical. • apply narrative techniques, such as dialogue, description, and pacing to develop experiences or characters. • write using a clear, focused thesis that addresses the purpose for writing. • provide an engaging introduction and a clear thesis statement that introduces the information presented. • write clear, varied sentences, and increase the use of embedded clauses. • use specific vocabulary and information. • use precise language to convey a vivid picture. • develop the topic with appropriate information, details, and examples. • arrange paragraphs into a logical progression using appropriate words or phrases to signal organizational pattern and transitions between ideas.

9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes.

a) Generate, gather, and organize ideas for writing.
b) Plan and organize writing to address a specific audience and purpose.
c) Communicate clearly the purpose of the writing using a thesis statement where appropriate.
d) Write clear, varied sentences using specific vocabulary and information.
e) Elaborate ideas clearly through word choice and vivid description.
f) Arrange paragraphs into a logical progression.
g) Use transitions between paragraphs and ideas.
h) Revise writing for clarity of content, accuracy and depth of information.
i) Use computer technology to plan, draft, revise, edit, and publish writing

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• revise ~~their~~ writing for clarity, content, depth of information, and intended audience and purpose. • ~~proofread materials for intended audience and purpose~~ • use computer technology to assist in the writing process.

9.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use and apply rules for the parts of a sentence, including subject/verb, direct/indirect object, and predicate nominative/predicate adjective, and coordinating conjunctions.
b) Use parallel structures across sentences and paragraphs.
c) Use appositives, main clauses, and subordinate clauses.
d) Use commas and semicolons to distinguish and divide main and subordinate clauses.
e) Distinguish between active and passive voice.
f) Proofread and edit writing for intended audience and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will focus on editing and the application of grammatical conventions in writing. • Students will understand that parallel structure means using the same grammatical form to express equal or parallel ideas. • Students will understand that a **main clause** is an **independent clause** that expresses a complete thought and can stand alone as a sentence. • Students will understand that a **subordinate clause** is a **dependent clause** and does not express a complete thought. • Students will understand rules for commas and semicolons when dividing main and subordinate clauses. • Students will differentiate between active and passive voice, knowing when it is appropriate to use each in their writing. • Students will use verbs in the conditional and subjunctive form to achieve particular effects.	**All students should** • ~~know the rules for the parts of a sentence.~~ • understand that grammatical and syntactical choices convey a writer's message. • recognize ~~understand~~ that active voice means that the subject of a verb *performs* the action and passive voice means that the subject of a verb *receives* the action. • write using various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or presentations. • demonstrate an understanding of dependent clauses,	**To be successful with this standard, students are expected to** • apply rules for sentence development, including: ° subject/verb; ° direct object; ° indirect object; ° predicate nominative; and ° predicate adjective. • identify and appropriately use coordinating conjunctions: for, and, nor, but, or, yet, and so (FANBOYS). • use parallel structure when: ° linking coordinate ideas; ° comparing or contrasting ideas; and ° linking ideas with correlative conjunctions: - *both…and* - *either…or* - *neither…nor* - *not only…but also*. • use appositives. • distinguish and divide main and subordinate clauses, using commas and semicolons. • use a semicolon, or a conjunctive adverb to link two or more closely related independent clauses.

9.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use and apply rules for the parts of a sentence, including subject/verb, direct/indirect object, and predicate nominative/predicate adjective, and coordinating conjunctions.
b) Use parallel structures across sentences and paragraphs.
c) Use appositives, main clauses, and subordinate clauses.
d) Use commas and semicolons to distinguish and divide main and subordinate clauses.
e) Distinguish between active and passive voice.
f) Proofread and edit writing for intended audience and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
	independent clauses, and a variety of phrases to show sentence variety.	• differentiate between active and passive voice to create a desired effect. • proofread and edit writing.

At the ninth-grade level, students will develop skills in using print, electronic databases, ~~and~~ online resources, and other media to access information and create a research product. Students will verify the validity of all information and follow ethical and legal guidelines for using and gathering information. ~~Students~~ They will ~~also~~ use a standard style method to credit sources of ideas used ~~in research writing~~. ~~Students~~ and will demonstrate clear understanding of grammatical conventions through the application of rules for correct use of language, spelling, and mechanics.

9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product.

a) Use technology as a tool for research to organize, evaluate, and communicate information.
b) Narrow the focus of a search.
c) Find, evaluate, and select appropriate sources to access information and answer questions.
d) Verify the validity and accuracy of all information.
e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
f) Credit the sources of quoted, paraphrased, and summarized ideas.
g) Cite sources of information using a standard method of documentation such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
h) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~Students will recognize that Internet resources and electronic databases complement books and the traditional library as key avenues for accessing, organizing, and presenting information.~~ • Students will acquire skills in evaluating ~~resources, both print and electronic~~ both print and electronic resources. • Students will become adept at embedding information accessed electronically in a research document. • Students will differentiate their original thoughts and ideas from the thoughts and ideas of others. • Students will distinguish common knowledge from information that is unique to a source or author. • Students will use a standard style method, such as that of the Modern Language Association	**All students should** • ~~understand the definition of plagiarism.~~ • ~~understand the consequences of plagiarism.~~ • understand the format for citing sources of information. • understand that using a standard form of documentation legally protects the intellectual property of writers.	**To be successful with this standard, students are expected to** • use Internet resources, electronic databases, and other technology to access, organize, and present information. • focus the ~~search~~ topic by : ◦ identifying audience; ◦ identifying purpose; ◦ identifying useful search terms; and ◦ combining search terms effectively. • ~~identify and use key terms, such as~~ ◦ ~~electronic database~~ ◦ ~~search engine~~ ◦ ~~electronic mail~~ ◦ ~~World Wide Web~~ ◦ ~~Web browser~~ ◦ ~~online services~~ ◦ ~~hotlinks~~ • scan research information and select resources based upon reliability, accuracy, and relevance to the purpose of the research.

9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product.

a) Use technology as a tool for research to organize, evaluate, and communicate information.
b) Narrow the focus of a search.
c) Find, evaluate, and select appropriate sources to access information and answer questions.
d) Verify the validity and accuracy of all information.
e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
f) Credit the sources of quoted, paraphrased, and summarized ideas.
g) Cite sources of information using a standard method of documentation such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
h) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
(MLA) or the American Psychological Association (APA), to cite sources.		• ~~evaluate resources, both print and electronic, differentiating between Internet sources that are questionable and those that are reliable~~ • ~~apply the rules for responsible use of technology.~~ • differentiate between reliable and unreliable resources. • question the validity and accuracy of information: ° Who is the author or sponsor of the page? ° Are there obvious reasons for bias? ° Is contact information provided? ° Is there a copyright symbol on the page? ° What is the purpose of the page? ° Is the information on the page *primary* or *secondary*? ° Is the information current? ° Can the information on the Web page be verified? • avoid plagiarism by: ° understanding that *plagiarism* is ~~an~~ the act of presenting someone else's ideas as one's own; ° recognizing that one must correctly cite sources to give credit to the author of an original work; ° recognizing that sources of information must be cited even when the

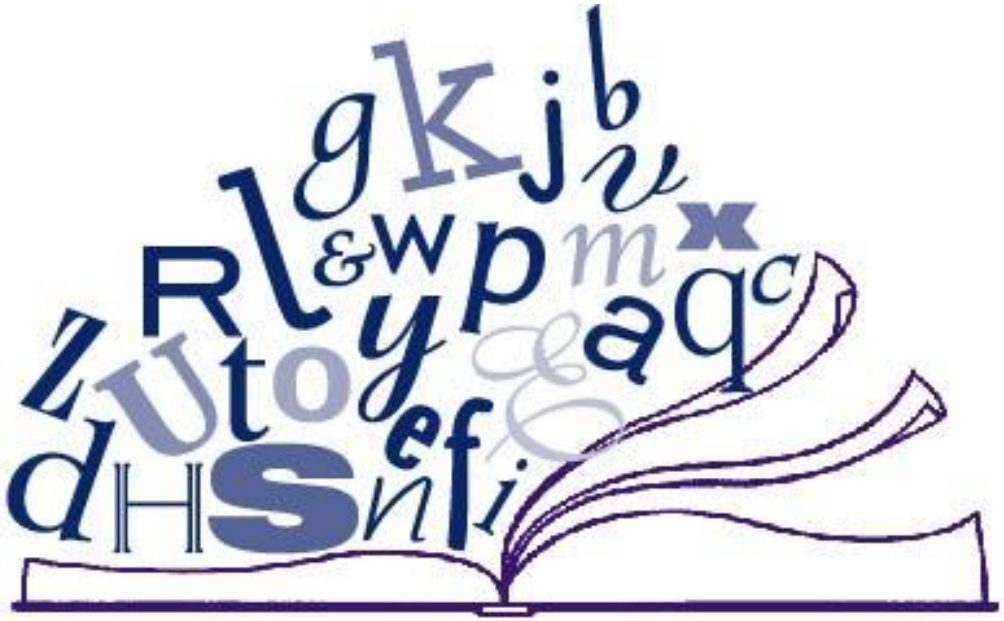
9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product.

a) Use technology as a tool for research to organize, evaluate, and communicate information.
b) Narrow the focus of a search.
c) Find, evaluate, and select appropriate sources to access information and answer questions.
d) Verify the validity and accuracy of all information.
e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
f) Credit the sources of quoted, paraphrased, and summarized ideas.
g) Cite sources of information using a standard method of documentation such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
h) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		information has been paraphrased; and ° using quotation marks when someone else's exact words are quoted. • distinguish one's own ideas from information created or discovered by others. • use a style sheet, such as MLA or APA, to cite sources.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Ten



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the tenth-grade level, students will become skilled communicators in small-group learning activities. ~~They will assume and evaluate individual roles in presenting oral reports.~~ Students will participate in, collaborate in, and report on small-group learning activities. They will also examine and critique the overall effectiveness of the group process. They will use grammatically correct language that is appropriate to the topic, audience, and purpose. In addition, students will analyze, produce, and examine similarities and differences between visual and verbal media messages.

10.1 The student will participate in, collaborate in, and report on small-group learning activities.

a) Assume responsibility for specific group tasks.
b) Collaborate in the preparation or summary of the group activity.
c) Include all group members in oral presentation.
d) Choose vocabulary, language, and tone appropriate to the topic, audience, and purpose.
e) Demonstrate the ability to work effectively with diverse teams to accomplish a common goal.
f) Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.
g) Access, critically evaluate, and use information accurately to solve problems.
h) Evaluate one's own role in preparation and delivery of oral reports.
i) Use a variety of strategies to listen actively.
j) Analyze and interpret other's presentations.
k) Evaluate effectiveness of group process in preparation and delivery of oral reports.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Individual students will actively contribute to group activities and participate in small-group oral presentations. • Students will evaluate their strengths and weaknesses when participating in small-group oral presentations. • Students will examine their preparation, interaction, and performances as group members. In addition, students will evaluate the overall effectiveness of their group's preparation and presentation.	**All students should** • ~~assume responsibility for specific tasks~~ • ~~make an effort to include all group members in the discussions and presentations~~ • ~~periodically reflect on their own role during the process and at the conclusion of the activity~~ • understand that small group collaboration exists beyond the classroom and their ability to effectively participate is an essential skill.	**To be successful with this standard, students are expected to** • assume shared responsibility for collaborative work. • ~~participate in the preparation of an outline or summary of the group activity, including the preparation of their individual roles in the group presentation~~ • ~~assume responsibility for and participate in small-group learning activities by contributing ideas and respectfully listening to and considering the views of the other group members~~. • collaborate ~~work~~ with peers to set rules for group presentations and discussions, set clear goals and deadlines, and define individual roles as needed. • respond thoughtfully by summarizing points of agreement and disagreement, qualifying views and understanding. • demonstrate ~~use~~ active listening through use of appropriate facial expressions, posture, and gestures ~~to indicate active listening~~. • engage others in a conversation by posing and responding to questions in a group situation • ~~move conversations ahead by posing and responding to questions, actively~~

10.1 The student will participate in, collaborate in, and report on small-group learning activities.

a) Assume responsibility for specific group tasks.
b) Collaborate in the preparation or summary of the group activity.
c) Include all group members in oral presentation.
d) Choose vocabulary, language, and tone appropriate to the topic, audience, and purpose.
e) Demonstrate the ability to work effectively with diverse teams to accomplish a common goal.
f) Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.
g) Access, critically evaluate, and use information accurately to solve problems.
h) Evaluate one's own role in preparation and delivery of oral reports.
i) Use a variety of strategies to listen actively.
j) Analyze and interpret other's presentations.
k) Evaluate effectiveness of group process in preparation and delivery of oral reports.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		~~involve others in the discussion, and challenge ideas.~~ • exercise flexibility and willingness in making compromises to accomplish a common goal. • use grammatically correct language. • ~~evaluate their own roles in the preparation and delivery of oral reports~~ • ~~evaluate the effectiveness of the group process in preparation and delivery of oral reports~~ • ~~critique and offer suggestions for improving their own group's presentations and their classmates' group presentations~~ • ~~define a specific role as a group member~~ • ~~access and organize information as part of a group project~~ • ~~evaluate their own roles in the preparation and delivery of oral reports~~ • ~~evaluate the effectiveness of the group process in preparation and delivery of oral reports~~ • ~~critique and offer suggestions for improving their own group's presentations and their classmates' group presentations~~

10.2 The student will analyze, produce, and examine similarities and differences between visual and verbal media messages.

a) Use media, visual literacy, and technology skills to create products.

b) Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion.

c) Determine the author's purpose and intended effect on the audience for media messages.

d) Identify the tools and techniques used to achieve the intended focus.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will continue to develop media literacy by comparing and contrasting visual and verbal media messages. • Students will continue to create products that reflect their expanding knowledge of media and visual literacy.	**All students should** • recognize that media messages express a viewpoint and contain values. • understand that there is a relationship between the author's intent, the factual content, and opinion expressed in media messages. • understand the purposeful use of persuasive language and word connotations convey viewpoint and bias.	**To be successful with this standard, students are expected to** • identify and analyze the sources and viewpoint of publications. • analyze, compare, and contrast visual and verbal media messages for content (word choice and choice of information), intent (persuasive techniques), impact (public opinion trends), and effectiveness (effect on the audience). • determine author's purpose, factual content, opinion, and/or possible bias as presented in media messages.

At the tenth-grade level, students will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. They will read, comprehend, critique, and analyze a variety of literary works from various cultures and eras. They will interpret ~~a variety of~~ nonfiction ~~informational~~ materials~~, such as labels, manuals, warranties, directions, applications, technical descriptions, contracts, and forms to complete specific tasks~~. Students ~~They~~ will learn to apply critical reading skills across the content areas, including history and social science, science, and mathematics. When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.

10.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms.
e) Identify literary and classical allusions and figurative language in text.
f) Extend general and specialized vocabulary through speaking, reading, and writing.
g) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will increase their independence as learners of vocabulary. • Students will use prefixes, suffixes, roots, derivations, and inflections of polysyllabic words to determine meaning and relationships among related words. • Teachers should use a study of cognates, words from the same linguistic family, to enhance vocabulary instruction. Cognates can occur within the same language or across languages *night* (English), *nuit* (French), *Nacht* (German), *nacht* (Dutch), *nicht* (Scots), *natt* (Swedish, Norwegian), *nat* (Danish), *raat* (Urdu), *nátt* (Faroese), *nótt* (Icelandic), *noc* (Czech, Slovak, Polish). • Students will evaluate the use of figurative language ~~and analogies~~ in text. • Students will use context and connotations to help determine the meaning of ~~nearly~~ synonymous words and appreciate an author's choices of words and images.	**All students should** • use word structure to analyze and relate words. • ~~recognize internal and external inflections that change meaning and pronunciation.~~ • recognize that words have nuances of meaning and that understanding the connotations may be necessary to determine the appropriate meaning. • recognize that figurative language enriches text.	**To be successful with this standard, students are expected to** • use roots or affixes to determine or clarify the meaning of words. • demonstrate an understanding of idioms. • use prior reading knowledge and other study to identify the meaning of literary and classical allusions. • interpret figures of speech (e.g., *euphemism, oxymoron*) in context and analyze their role in the text. • analyze connotations of words with similar denotations. • use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception, conceivable*). • consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses, both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. • demonstrate understanding of figurative language, word relationships, and connotations in word meanings.

10.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms.
e) Identify literary and classical allusions and figurative language in text.
f) Extend general and specialized vocabulary through speaking, reading, and writing.
g) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• **Connotation** is subjective cultural and emotional. A stubborn person may be described as being either *strong-willed* or *pig-headed*. They have the same literal meaning (i.e., *stubborn*). *Strong-willed* connotes admiration for the level of someone's will, while *pig-headed* **connotes** frustration in dealing with someone. • **Denotation** is a dictionary definition of a word. • **Idiom** is an expression peculiar to a particular language or group of people that means something different from the dictionary definition. ~~relates to a natural way of using language: the way of using a language that comes naturally to its native speakers~~ (e.g., blessing in disguise, chip on your shoulder). • An **allusion** is an indirect reference to a person, place, event or thing – real or fictional. J.D. Salinger's "The Catcher in the Rye" is an allusion to a poem by Robert Burns. Stephen Vincent Benet's story "By the Waters of Babylon" alludes to Psalm 137 in the Bible.		

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will know the ways that literature is defined by a variety of literary works, themes, and universal themes. They will read a wide range of literary genres from different cultures and time periods in order to gain an appreciation of various cultural histories and recognize similarities in images and themes that connect all peoples. • Students will compare and contrast poetic elements that poets use to evoke an emotional response. • Students will interpret and paraphrase the meanings of poems to demonstrate understanding of the poems. • Students should understand the difference	**All students should** • ~~understand how literary works are constructed by identifying text organization and structure~~ • ~~understand rhyme, rhythm, and sound elements~~ • understand that poets use techniques ~~poets use~~ to evoke emotion in the reader. • ~~demonstrate understanding of selected poems~~ • understand that literature is universal and influenced by	**To be successful with this standard, students are expected to** • construct meaning from text by making connections between what they already know and the new information they read. • use reading strategies to improve comprehension and to achieve the purposes for reading: predicting and adjusting predictions; questioning the text; restating main ideas and summarizing supporting details; and close reading. • ~~identify the text organization pattern and text structure of literary works~~ • ~~make predictions, draw inferences, and connect prior knowledge to support reading comprehension~~ • compare and contrast ~~read and understand~~ a variety of literary works from different cultures and eras, including: ° short stories; ° poems;

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
between a critique and a summary: ◦ A **summary** restates what one just read in one's own words, and presents only main details, and maintains an objective voice. ◦ A **critique** analyzes what was read, offers interpretations, judgments, and evidence for support. • Students will explain ways that characterization in drama differs from that in other literary forms. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc. • **Close reading** entails close observation of the	different cultures and eras. • analyze how an author achieves specific effects and purposes using literary devices and figurative language (e.g., understatement, mood, allusion, allegory, paradox, irony, tone). • analyze a case in which a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, irony, sarcasm, understatement).	◦ plays; ◦ novels; ◦ essays; and ◦ narrative nonfiction. • explain similarities and differences among literary genres from different cultures, such as: ◦ haikus; ◦ sonnets; ◦ fables; ◦ myths; ◦ novels; ◦ graphic novels; and ◦ short stories. • analyze the different functions that characters play in a literary text (e.g., antagonist, protagonist, foil, tragic hero).

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
text, including annotating, determining all word meanings including connotations, syntax, and structure. It also involves paying close attention to figures of speech, and other features that contribute to a writer's style. Close reading also involves reflecting on deeper meanings of text including considering relationships to other texts or social or cultural history. • A complete list of literary devices is included under SOL 9.4 • Students will read and analyze poetry, focusing on rhyme, rhythm, and sound. • Students will compare and contrast poetic elements that poets use to evoke an emotional response.	• ~~understand that~~ evaluate how asides, monologues, and soliloquies focus on single characters, giving insight into their thinking and providing the audience with a deeper understanding of the play. • ~~understand dramatic conventions~~. • understand rhyme, rhythm, and sound elements. • understand techniques poets use to evoke emotion in the reader. • demonstrate understanding of	• analyze how relationships among a character's actions, dialogue, physical attributes, thoughts, feelings, and other characters reveal nuances of character (e.g., beliefs, values, social class, and gender roles) and advance the plot. • identify ~~recurring cultural~~ universal themes, such as: ◦ struggle with nature; ◦ survival of the fittest; ◦ coming of age; ◦ power of love; ◦ loss of innocence; ◦ struggle with self; ◦ disillusionment with life; ◦ the effects of ~~scientific~~ progress; ◦ power of nature; ◦ alienation and isolation; ◦ honoring the historical past;

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will interpret and paraphrase the meanings of poems to demonstrate understanding of the poems.	selected poems.	◦ good overcoming evil; ◦ tolerance of the atypical; ◦ the great journey; ◦ noble sacrifice; ◦ the great battle; ◦ love and friendship; and ◦ revenge. • analyze works of literature for historical information about the period in which they were written. • describe common ~~cultural~~ archetypes that pervade literature, such as the: ◦ hero/heroine; ◦ trickster; ◦ faithful companion; ◦ outsider/outcast; ◦ rugged individualist;

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ shrew; ◦ innocent; ◦ villain; ◦ caretaker; ◦ Earth mother; ◦ rebel; ◦ misfit; ◦ mother/father figure; ◦ monster/villain; ◦ scapegoat; and ◦ lonely orphan ~~looking for a home~~. • examine a literary selection from several different critical perspectives. • analyze a particular point of view or cultural experience reflected in a literary work. • analyze the representation of a subject or a key scene in two different

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		media. • compare and contrast ~~rhyme, rhythm, and sound elements~~ literary devices in order to ~~aid in understanding a poem's~~ convey a poem's message and elicit a reader's emotions. ◦ ~~rhyme~~; – ~~approximate (slant)~~ – ~~end;~~ – ~~internal~~ ◦ ~~alliteration;~~ ◦ ~~assonance;~~ ◦ ~~consonance;~~ ◦ ~~onomatopoeia;~~ ◦ ~~blank verse;~~ ◦ ~~iambic pentameter;~~ ◦ ~~free verse;~~ ◦ ~~repetition;~~

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ ~~refrain;~~ ◦ ~~stanza forms;~~ – ~~couplet~~ – ~~quatrain~~ – ~~sestet~~ – ~~octet (octave)~~ • ~~compare and contrast the ways in which poets use techniques to evoke emotion in the reader, including such techniques as~~ ◦ ~~rhyme~~ ◦ ~~rhythm~~ ◦ ~~meter~~ ◦ ~~figurative language~~ – ~~metaphor~~ – ~~simile~~ ◦ ~~diction~~ ◦ ~~tone~~

10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras.

a) Identify main and supporting ideas.
b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.
d) Analyze the cultural or social function of literature.
e) Identify universal themes prevalent in the literature of different cultures.
f) Examine a literary selection from several critical perspectives.
g) Explain the influence of historical context on the form, style, and point of view of a literary text.
h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
i) Compare and contrast literature from different cultures and eras.
j) Distinguish between a critique and a summary.
k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions.
l) Compare and contrast character development in a play to characterization in other literary forms.
m) Use reading strategies to monitor comprehension throughout the reading process.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

		• interpret and paraphrase the meanings of selected poems.
		• analyze the use of dialogue, special effects, music, and set to interpret characters.
		• ~~compare and contrast character development in a play as compared to that in other literary forms, such as a short story or novel~~
		• identify and describe dramatic conventions~~, such as:~~
		  ◦ ~~aside;~~
		  ◦ ~~monologue, including soliloquy; and~~
		  ◦ ~~irony;~~
		  – ~~dramatic~~
		  – ~~verbal~~
		  – ~~situational.~~

10.5 The student will read, interpret, analyze, and evaluate nonfiction texts.

a) Identify text organization and structure.
b) Recognize an author's intended audience and purpose for writing.
c) Skim manuals or informational sources to locate information.
d) Compare and contrast informational texts.
e) Interpret and use data and information in maps, charts, graphs, timelines, tables, and diagrams.
f) Draw conclusions and make inferences on explicit and implied information using textual support as evidence.
g) Analyze and synthesize information in order to solve problems, answer questions, and generate new knowledge.
h) Use reading strategies throughout the reading process to monitor comprehension.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• ~~Students will understand that reading informational texts is fundamental to being a literate person in today's society.~~ • Students need to be skilled readers of ~~informational~~ nonfictional texts and technical manuals and have the ability to apply different reading strategies when engaging with a variety of such materials. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.	**All students should** • ~~recognize~~ understand that background knowledge may be necessary to understand handbooks and manuals. • ~~read carefully the information in labels, warnings, directions, applications, and forms~~. • know that informational and technical writing is often non-linear, fragmented, and graphic-supported. • understand how format and style in informational text differ from those in narrative and expository texts. • understand reading strategies and in particular, how they are used to locate specific information in ~~print materials~~ informational text.	**To be successful with this standard, students are expected to** • ~~understand~~ identify the different formats and purposes of informational and technical texts. • analyze how authors use rhetoric to advance their point of view. • identify the main idea(s) in informational text. • identify essential details in complex informational passages. • locate specific information in manuals or other informational sources by using strategies such as skimming, summarizing, and highlighting. • interpret and understand information presented in maps, charts, timelines, tables, and diagrams. • make inferences and draw conclusions from informational text. • synthesize information across multiple informational texts. • ~~identify how format and style in consumer materials are different from those in narrative and expository text~~. • ~~compare and contrast product information contained in advertisements with that found in instruction manuals and warranties~~ • ~~demonstrate an understanding of information read by successfully completing simulated or actual tasks.~~

At the tenth-grade level, students will develop their persuasive, expository, and analytical writing skills ~~by analyzing and critiquing peer and professional writing~~. They will synthesize information to support a thesis, provide elaboration, and organize ideas logically. ~~They will learn effective techniques of organization and development by analyzing, revising, and evaluating various written forms and ideas.~~ They will demonstrate understanding by applying a writing process in developing written products. They will revise writing for clarity of content and edit ~~writing~~ for correct use of language, sentence formation, punctuation, capitalization, and spelling as part of the writing process.

10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis.

a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
b) Synthesize information to support the thesis.
c) Elaborate ideas clearly through word choice and vivid description.
d) Write clear and varied sentences, clarifying ideas with precise and relevant evidence.
e) Organize ideas into a logical sequence using transitions.
f) Revise writing for clarity of content, accuracy, and depth of information.
g) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will know how to move through the stages of a writing process, from planning to drafting, revising, editing, and proofreading~~, in order to produce expository writing~~. • Students will understand that expository writing is prose that explains ideas through the use of a clear general statement of the writer's point (thesis) and through the development of ideas, using specific evidence and illustrations for support. • Analytical writing uses precise language and often divides the subject into parts and provides evidence on each part. • ~~Through reader response and critical analysis, students will understand their reactions to writings and respond through formal critiques, paraphrasing ideas they have read into more concise form. In addition, they will make connections between literature and other disciplines~~. • ~~Students will collect, organize, and evaluate materials to write a documented paper.~~ • Students should have practice writing for shorter time frames as well as extended time	**All students should** • understand ~~a~~ that writing is a process. • understand expository and analytical texts and develop products that reflect that understanding. • understand effective organizational patterns. • ~~respond to literature they read~~. • ~~understand the connections between literature and other disciplines~~.	**To be successful with this standard, students are expected to** • write expository texts that: ◦ explain a process; ◦ compare and contrast ideas; ◦ show cause and effect; ◦ enumerate details; ~~and~~ or ◦ define ideas and concepts. • ~~respond to what they read by writing summaries, interpretations, and comparisons of literary, informational, and technical texts~~ • ~~use paraphrasing to summarize and synthesize ideas in both literature and content-area texts~~. • develop written products that demonstrate their understanding of composing, written expression, and usage/mechanics. • write persuasively and analytically on a variety of literary and nonliterary subjects. • develop writing that analyzes complex issues. • plan and organize their ideas for writing. • state a thesis and support it. • elaborate ideas in order to provide support for the thesis. • ~~elaborate ideas clearly through word choice and vivid description~~

10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis.

a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
b) Synthesize information to support the thesis.
c) Elaborate ideas clearly through word choice and vivid description.
d) Write clear and varied sentences, clarifying ideas with precise and relevant evidence.
e) Organize ideas into a logical sequence using transitions.
f) Revise writing for clarity of content, accuracy, and depth of information.
g) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
frames .		• use visual and sensory language as needed for effect. • vary sentence structures for effect. • identify and apply features of the writing domains, including ◦ effective organization; ◦ clear structure; ◦ sentence variety; ◦ unity and coherence; ◦ tone and voice; ◦ effective word choice; ◦ clear purpose; ◦ appropriate mechanics and usage; and ◦ accurate and valuable information. • develop ideas deductively and inductively and organize ideas into a logical sequence, applying effective organizational patterns/techniques, such as: ◦ comparison/contrast; ◦ chronological order; ◦ spatial layout; ◦ cause and effect; ◦ definition; ◦ order of importance; ◦ explanation; ◦ generalization; ◦ classification; ◦ enumeration; and

10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis.

a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
b) Synthesize information to support the thesis.
c) Elaborate ideas clearly through word choice and vivid description.
d) Write clear and varied sentences, clarifying ideas with precise and relevant evidence.
e) Organize ideas into a logical sequence using transitions.
f) Revise writing for clarity of content, accuracy, and depth of information.
g) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		° problem/solution. • evaluate analytical writing by examining and understanding how individual parts of the text relate to the whole, including the writing's purpose and structure. • revise writing for clarity of content and presentation. • use peer- and self-evaluation to review and revise writing. • <u>use computer technology to assist in the writing process.</u> • ~~proofread and prepare final product for intended audience and purpose~~

10.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Distinguish between active and passive voice.
b) Apply rules governing use of the colon.
c) Use a style manual, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA), to apply rules for punctuation and formatting of direct quotations.
d) Differentiate between in-text citations and works cited on the bibliography page.
e) Analyze the writing of others.
f) Describe how the author accomplishes the intended purpose of a piece of writing.
g) Suggest how writing might be improved.
h) Proofread and edit final product for intended audience and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will continue to build knowledge of grammar through the application of rules for parts of a sentence and text. • Students will use a style manual, such as MLA or APA, to punctuate and format sentences and text. • Students will analyze writings critically, using knowledge of composition, written expression, sentence formation, and usage/mechanics. They will also suggest ways that writings can be improved. • Students will describe how writers accomplish their intended purpose.	**All students should** • understand that active voice means that the subject of a verb *performs* the action and passive voice means that the subject of a verb *receives* the action. • use colons according to rules governing their use. • ~~use a style manual to apply rules for punctuation and formatting of direct quotations.~~ • ~~recognize and understand in what they read the specific writing domains of composing, written expression, and usage/mechanics~~ • understand how writers use organization and details to	**To be successful with this standard, students are expected to** • distinguish between active voice and passive voice to convey a desired effect. • know and apply the rules for the use of a colon: ° before a list of items; ° before a long, formal statement or quotation; and ° after the salutation of a business letter. • use direct quotations in their writing, applying MLA or APA style for punctuation and formatting. • ~~suggest how writing might be improved~~. • use peer- and self-evaluation to edit writing. • proofread and prepare final product for intended audience and purpose. • ~~use a handbook to~~ correct grammatical or usage errors.

10.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Distinguish between active and passive voice.
b) Apply rules governing use of the colon.
c) Use a style manual, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA), to apply rules for punctuation and formatting of direct quotations.
d) Differentiate between in-text citations and works cited on the bibliography page.
e) Analyze the writing of others.
f) Describe how the author accomplishes the intended purpose of a piece of writing.
g) Suggest how writing might be improved.
h) Proofread and edit final product for intended audience and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
	communicate their purposes.	

At the tenth-grade level, students will develop skills in accessing, evaluating, organizing, and presenting information in the research process. Students will verify the validity of all information and follow ethical and legal guidelines for using and gathering information. They will also credit sources for quoted and paraphrased information, using a standard method of documentation. Students will present writing in a format appropriate for audience and purpose.

10.8 The student will collect, evaluate, organize, and present information to create a research product.

a) Use technology as a tool to research, organize, evaluate, synthesize, and communicate information.
b) Develop the central idea or focus.
c) Verify the accuracy, validity, and usefulness of information.
d) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
e) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
f) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will utilize a variety of sources to access ideas, evaluate the information for accuracy and relevance, and organize the facts into an oral presentation, a written report, or a visual product. • Students will provide documentation to support their research product. • Students will understand that plagiarism is the theft of intellectual property. • Students will understand that there are consequences of plagiarism according to the guidelines established by local school divisions and the law.	**All students should** • understand the steps involved in organizing information gathered from research. • verify the accuracy and usefulness of information. • ~~understand the use of in-text citations and works-cited pages in crediting sources of information.~~ • understand the appropriate format for citing sources of information. • understand that using standard methods of documentation is one way to protect the intellectual property of writers.	**To be successful with this standard, students are expected to** • use technology, along with other resources, to gather information from various sources by summarizing, paraphrasing, and supporting a thesis. • organize information ~~coherently~~ and maintain coherence throughout the writing based on the topic, purpose, and audience. • use organizational patterns/techniques, such as: ◦ comparison/contrast; ◦ chronological order; ◦ spatial layout; ◦ cause and effect; ◦ definition; ◦ order of importance; ◦ explanation; ◦ enumeration; and ◦ problem/solution. • ~~present information in an appropriate format~~. • evaluate sources for their credibility, reliability, strengths, and limitations. • demonstrate ability to distinguish between reliable and unreliable sources. • distinguish one's own ideas from information created or discovered by others.

10.8 The student will collect, evaluate, organize, and present information to create a research product.

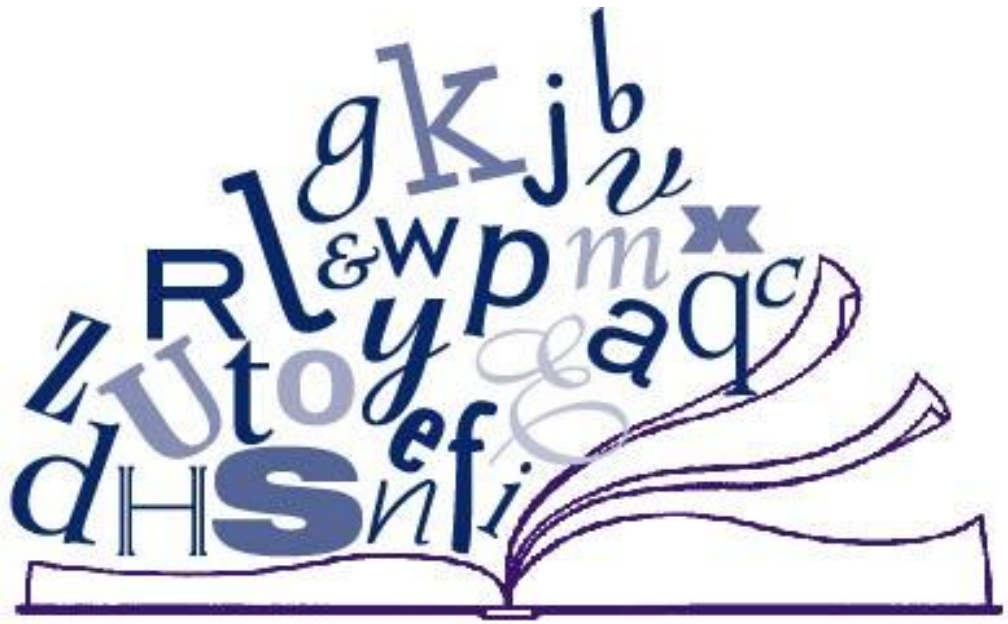
a) Use technology as a tool to research, organize, evaluate, synthesize, and communicate information.
b) Develop the central idea or focus.
c) Verify the accuracy, validity, and usefulness of information.
d) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
e) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
f) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

		• cite primary and secondary sources of information, using the MLA or APA method of documentation for in-text citations and works-cited pages.
		• avoid plagiarism by:
		  ◦ understanding that *plagiarism* is an act of presenting someone else's ideas as one's own;
		  ◦ citing correctly sources to give credit to the author of an original work;
		  ◦ recognizing that sources of information must be cited even when the information has been paraphrased; and
		  ◦ using quotation marks when someone else's exact words are quoted.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Eleven



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the eleventh-grade level, students will use a variety of oral-communication skills and provide accurate evidence to give informative and persuasive oral presentations. They will also critique and assess the effectiveness of persuasive presentations by others. In addition, students will examine how persuasive media messages influence audiences' beliefs and behaviors.

11.1 The student will make informative and persuasive presentations.

a) Gather and organize evidence to support a position.
b) Present evidence clearly and convincingly.
c) Address counterclaims.
d) Support and defend ideas in public forums.
e) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
f) Monitor listening and use a variety of active listening strategies to make evaluations.
g) Use presentation technology.
h) Collaborate and report on small-group learning activities.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will give effective informative and persuasive presentations, using appropriate oral-communication skills. • Students will use grammatically correct language in preparation and presentation of ideas and thoughts. • Students will become critical listeners by assessing the effectiveness of oral presentations.	**All students should** • understand how reading, writing, and discussion can be used to generate ideas and plan presentations. • understand how to support and defend their ideas. • understand rhetorical devices and techniques. • identify speech appropriate for audience, topic, and situation. • understand effective oral-delivery techniques. • evaluate and critique content and delivery of oral presentations.	**To be successful with this standard, students are expected to** • define a position and select evidence to support that position through reading, writing, and discussion. • establish a purpose. • develop well organized presentations to defend a position or present information. • apply and evaluate persuasive rhetorical devices and techniques including rhetorical questioning, parallel structuring, metaphor, imagery, figures of speech, alliterative expressions, etc. • use effective evidence and oral-delivery skills to convince an audience. • make oral-language choices based on predictions of target audience response. • listen actively by asking clarifying and elaborating questions. • develop effective multi-media presentations. • ~~define group goals and work together to report on learning.~~ • demonstrate mastery of content through small group collaboration.

11.1 The student will make informative and persuasive presentations.

a) Gather and organize evidence to support a position.
b) Present evidence clearly and convincingly.
c) Address counterclaims.
d) Support and defend ideas in public forums.
e) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
f) Monitor listening and use a variety of active listening strategies to make evaluations.
g) Use presentation technology.
h) Collaborate and report on small-group learning activities.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
.	**All students should** • understand effective oral-delivery techniques. • evaluate and critique content and delivery of oral presentations.	**To be successful with this standard, students are expected to** • maintain appropriate eye contact. • address an audience with appropriate: ° volume; ° enunciation; ° language choices; and ° poise. • adopt appropriate tone. • maintain appropriate rhythm. • evaluate the use of persuasive techniques, such as: ° introduction (for securing interest and establishing unity); ° organization; ° proof/support; ° logic; ° loaded language; ° rhetorical devices, such as: – call to action – elevated language – rhetorical question – appeals to emotion – repetition – figurative language – <u>addressing counterclaims</u> ° conclusion.

11.1 The student will make informative and persuasive presentations.

a) Gather and organize evidence to support a position.
b) Present evidence clearly and convincingly.
c) Address counterclaims.
d) Support and defend ideas in public forums.
e) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
f) Monitor listening and use a variety of active listening strategies to make evaluations.
g) Use presentation technology.
h) Collaborate and report on small-group learning activities.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• critique the accuracy, relevance, and organization of evidence. • critique the clarity and effectiveness of delivery.

11.2 The student will examine how values and points of view are included or excluded and how media influences beliefs and behaviors.

a) Use technology and other information tools to organize and display knowledge in ways others can view, use, and assess.
b) Use media, visual literacy, and technology skills to create products.
c) Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion.
d) Determine the author's purpose and intended effect on the audience for media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will continue to develop media literacy by examining how media messages influence people's beliefs and behaviors.	**All students should** • recognize that media messages express viewpoints and contain values to influence the beliefs and behaviors of the intended audience. • understand the difference between ***objectivity,*** or fact, and ***subjectivity,*** or bias, in media messages. • realize the purposeful use of persuasive language and word connotations to convey viewpoint and bias. • analyze how the media's use of symbol, imagery, and metaphor affects the message.	**To be successful with this standard, students are expected to** • organize knowledge and display learning using visual images, text, graphics, and/or music to create media messages with visual, audio, and graphic effects. • demonstrate an awareness of the transactional and interactive nature of media by considering audience, context, and purpose in all stages of media production. • evaluate visual and verbal media messages for content (word choice and choice of information), intent (persuasive techniques), impact (public opinion trends), and effectiveness (effect on the audience). • determine author's purpose and distinguish factual content from opinion and possible bias. • analyze and critique how media reach the targeted audience for specific purposes (to persuade, to entertain, to provoke to action, to appeal to ethics or beliefs, etc.).

At the eleventh-grade level, students will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. Students will enhance their appreciation for literature by studying both classic and contemporary American literature. They will read a variety of literary genres and informational texts to identify the prevalent themes in American literature that are reflective of American history and culture. They will continue to develop vocabulary and reading comprehension skills and will apply those skills in other content areas, including history and social science, science, and mathematics. In addition, students will identify the contributions of other cultures to the development of American literature. When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.

11.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms.
e) Identify literary and classical allusions and figurative language in text.
f) Extend general and specialized vocabulary through speaking, reading, and writing.
g) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will increase their independence as learners of vocabulary. • Students will use prefixes, suffixes, roots, derivations, and inflections of polysyllabic words to determine meaning and relationships among related words. • Teachers should use a study of cognates, words from the same linguistic family, to enhance vocabulary instruction. Cognates can occur within the same language or across languages, e.g., *night* (English), *nuit* (French), *Nacht* (German), *nacht* (Dutch), *nicht* (Scots), *natt* (Swedish, Norwegian), *nat* (Danish), *raat* (Urdu), *nátt* (Faroese), *nótt* (Icelandic), *noc* (Czech, Slovak, Polish). • Students will evaluate the use of figurative language ~~and analogies~~ in text. • Students will use context and connotations to help determine the meaning of ~~nearly~~ synonymous words and appreciate an author's choices of words and images. • **Connotation** is subjective, cultural, and emotional. A stubborn person may be	**All students should** • use word structure to analyze and relate words. • ~~recognize internal and external inflections that change meaning and pronunciation.~~ • recognize that words have nuances of meaning and that understanding the connotations may be necessary to determine the appropriate meaning. • recognize that figurative language enriches text.	**To be successful with this standard, students are expected to** • use roots or affixes to determine or clarify the meaning of words. • demonstrate an understanding of idioms. • use prior reading knowledge and other study to identify the meaning of literary and classical allusions. • interpret figures of speech (e.g., euphemism, oxymoron, hyperbole, paradox) in context and analyze their roles in the text. • analyze the connotation of words with similar denotations. • use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive*, *conception*, *conceivable*). • consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. • demonstrate understanding of figurative language, word relationships, and connotations in word meanings.

11.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms.
e) Identify literary and classical allusions and figurative language in text.
f) Extend general and specialized vocabulary through speaking, reading, and writing.
g) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
described as being either *strong-willed* or *pig-headed*. They have the same literal meaning (i.e., *stubborn*). *Strong-willed* connotes admiration for the level of someone's will, while *pig-headed* **connotes** frustration in dealing with someone. • **Denotation** is a dictionary definition of a word. • **Idiom** is an expression peculiar to a particular language or group of people that means something different from the dictionary definition. ~~relates to a natural way of using language: the way of using a language that comes naturally to its native speakers~~ (e.g., blessing in disguise, chip on your shoulder). • An **allusion** is an indirect reference to a person, place, event, or thing – real or fictional. J.D. Salinger's "The Catcher in the Rye" is an allusion to a poem by Robert Burns. Stephen Vincent Benet's story "By the Waters of Babylon" alludes to Psalm 137 in the Bible.		

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will understand literature as it relates to the cultural and historical period in which it was written. More specifically, students will recognize how authors are influenced by the ideas and values of their times. For this reason, literary selections typically reflect not only the values and ideas of the authors who wrote them but also the values and ideas of the times in which they were written. Students will also learn how the ideas presented in literary works may influence the values or conditions of the society in which the works were written. • Students will read, analyze, critique, and compare a variety of contemporary and traditional poetry. • A list of poetic elements and techniques is included in the "Essential Knowledge, Skills,	**All students should** • understand characteristics and cultures of historical periods and literary movements associated with each century. • recognize and understand universal characters, themes, and motifs in American literature. • understand how an author's intent is achieved by the use of context and language. • understand dramatic conventions and devices ~~used by playwrights to present ideas~~.	**To be successful with this standard, students are expected to** • use reading strategies to improve comprehension and to achieve the purposes for reading: predicting and adjusting predictions; questioning the text; restating main ideas and summarizing supporting details; and close reading. • discuss how the subject matter, style, literary type, theme, and purpose of literary works often reflect the culture and events of the times in which the works were written. • analyze how connections among motifs, setting, character traits, character development, and plot suggest multiple ~~levels of~~ themes. • analyze and critique themes across texts and within various social, cultural, and historical contexts. • ~~describe and contrast historical periods from which particular literary pieces derive and the cultures that they portray~~. • describe and contrast literary movements and representative texts associated with each ~~century~~ literary movement, including how two or more texts from

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
and Processes" column for English SOL ~~10.5~~ ~~10.4~~.9.4 • Students will read and critique a variety of dramatic selections. • ~~Students will identify and explain specific dramatic conventions or devices used by playwrights to present ideas.~~ • ~~Lists of staging components and scripting components are included in the "Essential Knowledge, Skills, and Processes" column for English SOL 9.5.~~ • A complete list of literary devices is found in Essential Knowledge, Skills, and Processes column for SOL 9.4. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship),	• ~~understand verbal, situational, and dramatic irony~~	the same period treat similar themes or topics. Literary movements include: ◦ Colonialism/Puritanism (17th century); ◦ Revolutionary movement/Rationalism (18th century); ◦ Romanticism, Transcendentalism, Regionalism, Realism, Naturalism (19th century); ◦ Symbolism/Modernism, Harlem Renaissance, Postmodernism (20th century); and ◦ Contemporary poetry (21st Century) • differentiate among ~~universal~~ archetypal characters in American literature, such as the: ◦ hero/heroine; ◦ trickster; ◦ faithful companion; ◦ outsider/outcast; ◦ rugged individualist; ◦ innocent; ◦ villain; ◦ caretaker;

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
thinking aloud, etc. • **Close reading** entails close observation of the text, including annotating, determining all word meanings including connotations, syntax, and structure. It also involves paying close attention to figures of speech, and other features that contribute to a writer's style. Close reading also involves reflecting on deeper meanings of text, including considering relationships to other texts or social or cultural history.		◦ Earth mother; ◦ rebel; ◦ misfit; ◦ lonely orphan ~~looking for a home~~; ◦ shrew; ◦ mother/father figure; ◦ monster/villain; and ◦ scapegoat. • identify major themes in American literature, such as: ◦ the American Dream; ◦ loss of innocence; ◦ coming of age; ◦ relationship with nature; ◦ relationship with society; ◦ relationship with science; ◦ alienation and isolation; ◦ survival of the fittest; ◦ disillusionment; and

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		° rebellion and protest. • analyze texts to identify the author's attitudes, viewpoints, and beliefs and critique how these relate to larger historical, social, and cultural contexts. • analyze the representation of a subject or a key scene in two different media. • describe how the use of context and language structures conveys an author's intent and viewpoint. • analyze the impact of the author's choices in developing the elements of a story or drama (e.g., setting, plot structure, and character development). • demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. • analyze a case in which a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, irony, sarcasm, understatement).

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• ~~read works by significant and representative poets from each literary movement associated with each century, such as:~~ ◦ ~~Colonialism/Puritanism (17th century);~~ ◦ ~~Revolutionary movement/Rationalism (18th century);~~ ◦ ~~Romanticism, Transcendentalism, Regionalism, Realism, Naturalism (19th century);~~ ◦ ~~Symbolism/Modernism, Harlem Renaissance, Postmodernism (20th century); and~~ ◦ ~~Contemporary poetry (21st century).~~ • ~~identify and understand the elements of classic poetry:~~ ◦ ~~elevated language/style;~~ ◦ ~~figurative language;~~ ◦ ~~rhyme; and~~ ◦ ~~strong regularity in metrical patterns.~~ • use poetic elements to explain, analyze, and evaluate poetry. • compare and contrast the subject matter, theme, form, language, development, and purpose of works of classic poets with those of

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		contemporary poets. • compare how poems of the same form use elements - sound, figurative language, imagery, symbols, and allusions - differently to convey meaning. • identify and discuss the elements and techniques that poets use to achieve a desired result, such as: ◦ imagery; ◦ precise word choice; ◦ sound devices; ◦ metrical patterns; and ◦ metaphorical/figurative language. • describe the language choices and devices that authors use, such as: ◦ rhetorical question; ◦ sarcasm; ◦ satire; ◦ parallelism; ◦ connotation/denotation;

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ pun; ◦ irony; ◦ tone; ◦ dialect; ◦ diction; and ◦ figurative language. • ~~describe the language choices and devices that authors use~~ • identify and describe dramatic conventions. ◦ ~~stage directions;~~ ◦ ~~soliloquy;~~ ◦ ~~monologue;~~ ◦ ~~aside; and~~ ◦ ~~irony~~ ◦ ~~verbal~~ ◦ ~~situational~~ ◦ ~~dramatic.~~ • compare and evaluate adaptations and interpretations of a script for stage,

11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture.

a) Describe contributions of different cultures to the development of American literature.
b) Compare and contrast the development of American literature in its historical context.
c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
d) Analyze the social or cultural function of American literature.
e) Analyze how context and language structures convey an author's intent and viewpoint.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
i) Read and analyze a variety of American dramatic selections.
j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature.
k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		film, ~~or~~ television or other media.

11.5 The student will read and analyze a variety of nonfiction texts.

a) Use information from texts to clarify understanding of concepts.
b) Read and follow directions to complete an application for college admission, for a scholarship, or for employment.
c) Generalize ideas from selections to make predictions about other texts.
d) Draw conclusions and make inferences on explicit and implied information using textual support.
e) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.
f) Identify false premises in persuasive writing.
g) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text.
h) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will read, understand, and use a variety of informational texts. They will develop specific reading skills in order to generalize ideas, make predictions, and follow directions. They will identify and analyze the steps in their own reading process in order to broaden their critical understanding. • Students should recognize persuasive techniques such as: ◦ ad hominem – means "to the man" does not argue the issue, instead it argues the person; ◦ red herring – is a deliberate attempt to divert attention; ◦ straw man – creates the illusion of having refuted a proposition by substituting a similar yet weaker proposition (the "straw man"); and ◦ begging the question – assumes the conclusion is true without proving it; circular argument. • Students will use a variety of reading	**All students should** • understand how to analyze informational material. • understand reading strategies and use those strategies to analyze text.	**To be successful with this standard, students are expected to** • analyze ~~and use~~ the ~~basic~~ vocabulary (jargon, technical terminology, and content-specific) and ~~concepts~~ ideas of informational texts ~~in all~~ from various academic disciplines in order to clarify understandings of concepts. • ~~analyze key vocabulary, such as jargon, technical terms, and content-specific vocabulary~~ • know the purpose of the text they are to read and their own purpose in reading it. • use format (page design and layout), text structures, and features to aid in understanding of text. • understand how an organizational pattern enhances the meaning of a text. • ~~develop effective applications, essays, résumés, and employment forms through simulations and real-life opportunities~~ • ~~identify~~ distinguish main ideas ~~and~~ from supporting details in complex informational text to generalize ideas and make predictions about other texts • ~~apply their knowledge of specific genres and forms to other texts~~ • ~~make predictions about other texts~~

11.5 The student will read and analyze a variety of nonfiction texts.

a) Use information from texts to clarify understanding of concepts.
b) Read and follow directions to complete an application for college admission, for a scholarship, or for employment.
c) Generalize ideas from selections to make predictions about other texts.
d) Draw conclusions and make inferences on explicit and implied information using textual support.
e) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.
f) Identify false premises in persuasive writing.
g) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text.
h) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.		• analyze information from a text to make inferences and draw conclusions. • analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. • compare and contrast how two or more texts treat two or more of the same ideas and analyze the development of those ideas including how they interact and build on one another to provide a complex analysis. • provide an objective summary of the text. • analyze how a variety of logical arguments could reach conflicting conclusions. • evaluate the relevance and quality of evidence used to support a claim. • analyze and identify false premises that intentionally manipulate audiences. • determine an author's point of view or purpose in a rhetorically rich text, analyzing how ambiguity, contradiction, paradox, irony, hyperbole, overstatement, and understatement contribute to text. • before, during, and after reading texts, generate and respond to a variety of critical thinking questions to activate prior knowledge, engage actively with learning new information, and reflect on new learning or fresh

11.5 The student will read and analyze a variety of nonfiction texts.

a) Use information from texts to clarify understanding of concepts.
b) Read and follow directions to complete an application for college admission, for a scholarship, or for employment.
c) Generalize ideas from selections to make predictions about other texts.
d) Draw conclusions and make inferences on explicit and implied information using textual support.
e) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.
f) Identify false premises in persuasive writing.
g) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text.
h) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		insights.

At the eleventh-grade level, students will write in a variety of forms with an emphasis on persuasion~~ve essays and professional correspondence~~. They will produce arguments in writing that demonstrate knowledgeable judgments and address counterclaims. Students will use their knowledge of genres, formats, purposes, audiences, and situations to produce clear and effective products that reflect use of all stages of a writing process.

11.6 The student will write in a variety of forms, with an emphasis on persuasion.

a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
b) Produce arguments in writing that develop a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions.
c) Organize ideas in a sustained and logical manner.
d) Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately.
e) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
f) Revise writing for clarity of content, accuracy and depth of information.
g) Use computer technology to plan, draft, revise, edit, and publish writing.
h) Write and revise correspondence to a standard acceptable both in the workplace and in postsecondary education.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will use a process for writing to communicate clearly and persuasively. • Students will support a position by selecting valid information and amplifying their text logically. • Students will understand that active constructions are preferred. • Students will avoid false premises in writing including, but not limited to those listed as persuasive techniques under SOL 11.5. • ~~Students will collect, organize, and evaluate information to produce a documented research product.~~ • Students will write clear and accurate personal, professional, and informational correspondence. They will use a writing process to develop real-world, practical products. • Students should have practice writing for shorter time frames as well as extended time frames.	**All students should** • understand that ~~a~~ writing is a process. • locate and select appropriate information that clearly supports a definite purpose and position. • understand that vocabulary is used to develop voice and tone for a specific audience, purpose, or situation. • understand revision strategies. • ~~understand how to adapt models of professional and personal correspondence for their own purposes~~ • ~~understand how technology can be used to access, develop, and modify documents.~~	**To be successful with this standard, students are expected to** • ~~plan and organize ideas for writing~~. • apply a variety of planning strategies to generate and organize ideas. • ~~develop a clear focus for writing~~ • present a thesis that focuses on the problem or argument to be solved. • anticipate and address the counterevidence, counterclaims, and counterarguments. • use effective rhetorical appeals, to establish credibility and persuade intended audience. • refine the thesis by considering whether the claim is relevant, interesting, logical, and meaningful. • understand a variety of organizational patterns. • ~~present information in a logical manner~~. • use appropriate and varied transitions to link sentences and paragraphs. • elaborate ideas clearly and accurately. • show how evidence supports each main point of the argument and justify why the evidence credibly supports the claims.

11.6 The student will write in a variety of forms, with an emphasis on persuasion.

a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
b) Produce arguments in writing that develop a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions.
c) Organize ideas in a sustained and logical manner.
d) Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately.
e) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
f) Revise writing for clarity of content, accuracy and depth of information.
g) Use computer technology to plan, draft, revise, edit, and publish writing.
h) Write and revise correspondence to a standard acceptable both in the workplace and in postsecondary education.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims. • organize the reasons and evidence logically. • use specific revision strategies and adapt content, vocabulary, voice, and tone to audience, purpose, and situation. • select an appropriate audience by analyzing assumptions, values, and background knowledge. • develop the topic thoroughly by selecting facts, details, quotations, and appropriate examples for the audience and purpose. • ~~revise writing for accuracy and depth of information~~. • ~~use available technology to plan, draft, revise, edit, and publish writing including correspondence for academic and professional purposes~~. • use MLA (Modern Language Association) or APA (American Psychological Association) style for formatting rules and documentation. • ~~complete employment forms through simulations and real-life opportunities.~~ • ~~complete applications, essays, and résumés for college admission through simulations and real-life opportunities.~~ • ~~revise writing for style and language~~.

11.6 The student will write in a variety of forms, with an emphasis on persuasion.

a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
b) Produce arguments in writing that develop a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions.
c) Organize ideas in a sustained and logical manner.
d) Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately.
e) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
f) Revise writing for clarity of content, accuracy and depth of information.
g) Use computer technology to plan, draft, revise, edit, and publish writing.
h) Write and revise correspondence to a standard acceptable both in the workplace and in postsecondary education.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• ~~understand and use models of professional, personal, and informational correspondence and other writings, such as~~ ◦ ~~business letters, including~~ ◦ ~~letters of recommendation~~ ◦ ~~cover letters for résumés~~ ◦ ~~personal letters~~ ◦ ~~memos~~ ◦ ~~proposals~~ ◦ ~~résumés~~ • ~~use technology to access, develop, and modify documents for professional and informational purposes.~~

11.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

a) Use a style manual, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA), to apply rules for punctuation and formatting of direct quotations.
b) Use verbals and verbal phrases to achieve sentence conciseness and variety.
c) Distinguish between active and passive voice.
d) Differentiate between in-text citations and works cited on the bibliography page.
e) Adjust sentence and paragraph structures for a variety of purposes and audiences.
f) Proofread and edit writing for intended audience and purpose.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will use a style manual, such as MLA or APA, in producing research projects. • Students will understand and apply rules for the use of verbals and verbal phrases. • Students will understand active voice is preferable to passive voice.	**All students should** • understand and apply the rules of the MLA, APA, or other style manual in producing research projects. • understand verbals and verbal phrases and use them appropriately in writing. • use grammatical conventions to vary syntax ~~adjust sentence~~ and paragraph structures for a variety of purposes and audiences.	**To be successful with this standard, students are expected to** • apply MLA or APA style for punctuation conventions and formatting direct quotations. • ~~apply rules for the following verbals:~~ ◦ ~~gerund;~~ ◦ ~~infinitive; and~~ ◦ ~~participle.~~ • use correctly the ~~apply rules for the~~ following verbal phrases in writing: ◦ gerund phrase; ◦ infinitive phrase; ◦ participial phrase; and ◦ absolute phrase. • place main subjects of sentences in front of strong, active verbs and avoid forms of the verb "to be" [The baseball was thrown by the pitcher (passive construction); better: The pitcher threw the baseball (active construction).] • use in-text citations including parenthetical references and a corresponding list of works cited at the end of the paper. • use clauses and phrases for sentence variety. • revise and edit writing for appropriate style and language in informal and formal contexts.

At the eleventh-grade level, students will engage in research that requires the selection, evaluation, use, and documentation of a variety of sources. Students will verify the validity of all information and follow ethical and legal guidelines for using and gathering information. Each student will present a research product that is clearly written and accurately documented according to a standard form of documentation.

11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product.

a) Use technology as a tool to research, organize, evaluate, and communicate information.
b) Narrow a topic and develop a plan for research.
c) Collect information to support a thesis.
d) Critically evaluate quality, accuracy, and validity of information.
e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
f) Synthesize and present information in a logical sequence.
g) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
h) Revise writing for clarity of content, accuracy, and depth of information.
i) Edit writing for grammatically correct use of language, spelling, punctuation, capitalization, and sentence/paragraph structure.
j) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will compose a documented research product that is based on valid resources and procedures. • Students will collect, organize, and evaluate the quality and accuracy of information to ensure that it is ~~up-to-date~~ current, factual, and reliable. • Students will recognize consequences of plagiarism according to the guidelines established by ~~local~~ school divisions.	**All students should** • understand how to evaluate sources of information to determine reliability. • understand how to develop a plan and collect information. • understand how to use technology to access, organize, and develop writing. • understand plagiarism has meaningful consequences.	**To be successful with this standard, students are expected to** • utilize technology to conduct research, organize information, and develop writing. • identify and narrow a topic for research through a variety of strategies, such as mapping, listing, brainstorming, ~~and~~ webbing, and using an Internet search engine. • develop a plan to locate and collect relevant information about the chosen topic. • identify a variety of primary and secondary sources of information. • generate notes while following a logical note-taking system. • preview resource materials to aid in selection of a suitable topic. • identify valid main and supporting ideas in various sources and distinguish them from misconceptions and biased points of view when information conflicts. • synthesize information in a logical sequence.

11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product.

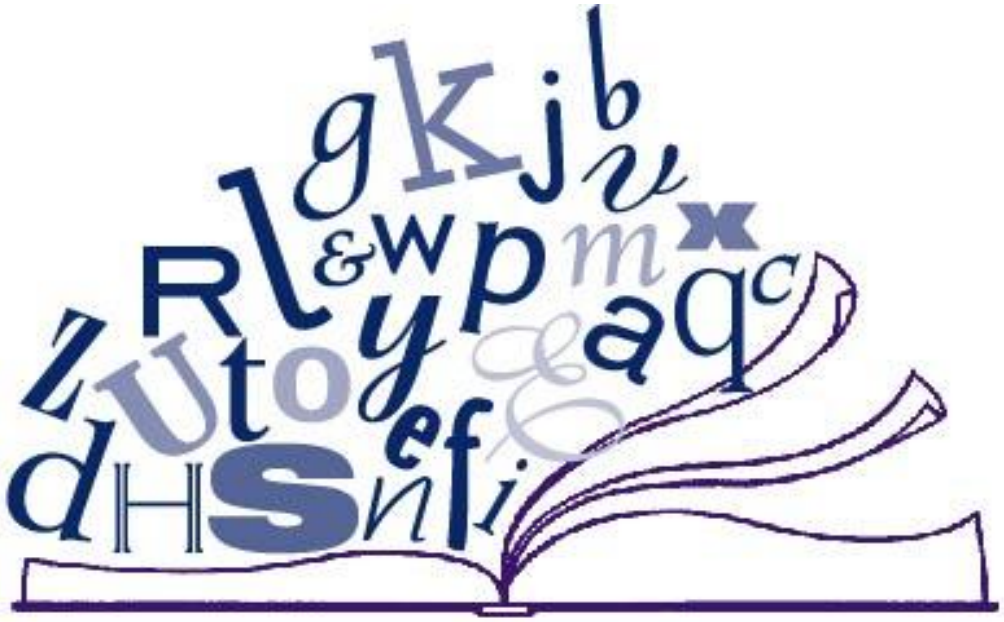
a) Use technology as a tool to research, organize, evaluate, and communicate information.
b) Narrow a topic and develop a plan for research.
c) Collect information to support a thesis.
d) Critically evaluate quality, accuracy, and validity of information.
e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
f) Synthesize and present information in a logical sequence.
g) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
h) Revise writing for clarity of content, accuracy, and depth of information.
i) Edit writing for grammatically correct use of language, spelling, punctuation, capitalization, and sentence/paragraph structure.
j) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES

		• document print and electronic sources using MLA or APA style, including in-text citation and corresponding works-cited list.
		• incorporate ideas and quotations skillfully by directly quoting, paraphrasing, or summarizing text from reliable sources and citing them appropriately.
		• revise writing for effect, clarity, accuracy, and depth of information.
		• follow style manual conventions to ~~ensure~~ edit materials for correct grammar, spelling, punctuation, and capitalization~~, and for clarity of content and effect~~.
		• avoid plagiarism by:
		  ° understanding that *plagiarism* is the act of presenting someone else's ideas as one's own;
		  ° recognizing that one must correctly cite sources to give credit to the author of an original work;
		  ° recognizing that sources of information must be cited even when the information has been paraphrased; and
		  ° using quotation marks when someone else's exact words are quoted.

ENGLISH STANDARDS OF LEARNING CURRICULUM FRAMEWORK

Grade Twelve



Final Review
November 18, 2010

Commonwealth of Virginia
Board of Education
Richmond, Virginia
©2010

At the twelfth-grade level, students will use organizational skills, audience awareness, appropriate vocabulary and grammar, and verbal and nonverbal presentation skills to plan and deliver an effective ~~5 to 10 minute~~ formal oral presentation. Students will use a variety of listening skills to evaluate oral presentations. In addition, students will examine media messages for their objectivity, subjectivity, and effects on the audience.

12.1 The student will make a formal oral presentation in a group or individually.

a) Choose the purpose of the presentation.
b) Choose vocabulary, language, and tone appropriate to the audience, topic, and purpose.
c) Use details, illustrations, statistics, comparisons, and analogies to support the presentation.
d) Use media, visual literacy, and technology skills to create and support the presentation.
e) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
f) Collaborate and report on small group learning activities.
g) Evaluate formal presentations including personal, digital, visual, textual, and technological.
h) Use a variety of listening strategies to analyze relationships among purpose, audience, and content of presentations.
i) Critique effectiveness of presentations.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will develop skills in preparing and delivering formal oral presentations. To this end, they will develop skills in identifying a purpose, researching topics, developing content, and delivering presentations. • ~~Students will learn to evaluate the effectiveness of speeches and develop critiques of presentations~~.	**All students should** • recognize that the major purposes of speeches include exposition, persuasion, inspiration, entertainment, or recognition of special occasions (e.g., acceptance, welcome, or thank-you speeches). • understand that semantics involves words and word order specifically chosen for the meaning intended. • recognize rhetoric as the art of persuasion, especially using devices such as repetition, parallelism, and rhetorical question. • ~~understand the components of effective presentations~~.	**To be successful with this standard, students are expected to** • make a 5-10 minute oral presentation alone and/or as part of a group. • organize and develop a speech, using ~~an order~~ steps in the process such as: ◦ selection of a topic related to audience and situation; ◦ determination of purpose; ◦ research; ◦ development of an outline, including introduction, body, and conclusion; ◦ practice; and ◦ presentation. • choose appropriate vocabulary, language, and tone for the selected topic, purpose, context, and audience. • develop content through inclusion of: ◦ a combination of facts and/or statistics; ◦ examples; ◦ illustrations; ◦ anecdotes and narratives; ◦ reference to experts; ◦ quotations; ◦ analogies and comparisons; and ◦ logical argumentation of their reasoning. • use effective delivery created through a combination of: ◦ clear purpose;

12.1 The student will make a formal oral presentation in a group or individually.

a) Choose the purpose of the presentation.
b) Choose vocabulary, language, and tone appropriate to the audience, topic, and purpose.
c) Use details, illustrations, statistics, comparisons, and analogies to support the presentation.
d) Use media, visual literacy, and technology skills to create and support the presentation.
e) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
f) Collaborate and report on small group learning activities.
g) Evaluate formal presentations including personal, digital, visual, textual, and technological.
h) Use a variety of listening strategies to analyze relationships among purpose, audience, and content of presentations.
i) Critique effectiveness of presentations.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ organization and development of content; ◦ semantics; ◦ rhetoric; ◦ visual aids; ◦ voice modulation and strength; ◦ gestures, stance, and eye contact; and ◦ sufficient practice of delivery. • use appropriate and effective visual aids and/or technology to support presentations. • use grammatically correct language and appropriate vocabulary. • work together to establish group goals, define individual roles, and report on learning activities. • evaluate a formal presentation by analyzing and critiquing the effectiveness of the speaker's demeanor, voice, language, gestures, clarity of thought, organization of evidence, relevance, and delivery. • monitor audience feedback, engagement, and understanding, ~~and agreement~~ to adjust delivery and content. • ~~analyze and critique the relationships among purpose, audience, and content of a presentation.~~ • analyze and critique the effectiveness of purpose and content of a presentation with respect to how the audience responds.

12.2 The student will examine how values and points of view are included or excluded and how media influences beliefs and behaviors.

a) Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion.

b) Determine the author's purpose and intended effect on the audience for media messages.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will continue to develop media literacy by examining how media messages influence people's beliefs and behaviors.	**All students should** • recognize that media messages express points of view and contain values to influence the beliefs and behaviors of the intended audience. • understand the difference between ***objectivity,*** or fact, and ***subjectivity,*** or bias, in media messages. • realize the purposeful use of persuasive language and word connotations to convey viewpoint and bias.	**To be successful with this standard, students are expected to** • organize knowledge and display learning using visual images, text, graphics, and/or music to create media messages with visual, audio, and graphic effects. • evaluate visual and verbal media messages for content (word choice and choice of information), intent (persuasive techniques), impact (public opinion trends), and effectiveness (effect on the audience). • determine author's purpose and distinguish factual content from opinion and possible bias. • analyze and critique how media reach the targeted audience for specific purposes (to persuade, to entertain, to push to action, to appeal to ethics or beliefs, etc.). • identify fact and opinion in media messages and how those elements relate to purpose and audience.

At the twelfth-grade level, students will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. They will analyze British literature and literature of other cultures with emphasis on the many classic works that may be studied. In addition, students will read ~~informational~~ nonfiction and technical texts and continue to develop their own reading-process skills. Students will apply these reading skills in other content areas, including history and social science, science, and mathematics. When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.

12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms, literary and classical allusions in text.
e) Expand general and specialized vocabulary through speaking, reading, and writing.
f) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will increase their independence as learners of vocabulary. • Students will be exposed to affixes, including prefixes and suffixes, roots, derivations, and inflections of polysyllabic words and understand that words with similar parts may be related to each other in meaning and origin. • Teachers should use a study of cognates, words from the same linguistic family, to enhance vocabulary instruction. Cognates can occur within the same language or across languages, e.g., *night* (English), *nuit* (French), *Nacht* (German), *nacht* (Dutch), *nicht* (Scots), *natt* (Swedish, Norwegian), *nat* (Danish), *raat* (Urdu), *nátt* (Faroese), *nótt* (Icelandic), *noc* (Czech, Slovak, Polish). • Students will evaluate the use of figurative language and analogies in text. • Students will use context and connotations to help determine the meaning of ~~nearly~~ synonymous words and appreciate an author's choices of words and images. • **Connotation** is subjective, cultural, and emotional. A stubborn person may be described	**All students should** • use word structure to analyze and relate words. • ~~recognize internal and external inflections that change meaning and pronunciation.~~ • recognize that words have nuances of meaning and that understanding the connotations may be necessary to determine the appropriate meaning. • recognize how ~~that~~ figurative language enriches text.	**To be successful with this standard, students are expected to** • use roots or affixes to determine or clarify the meaning of words. • demonstrate an understanding of idioms. • use prior reading knowledge and other study to identify the meaning of literary and classical allusions. • interpret figures of speech (e.g., euphemism, oxymoron, hyperbole, paradox) in context and analyze their role in the text. • analyze connotations of words with similar denotations. • use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. • identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive*, *conception*, *conceivable*). • consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage. • demonstrate understanding of figurative language, word relationships, and connotations in word meanings.

12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.

a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
b) Use context, structure, and connotations to determine meanings of words and phrases.
c) Discriminate between connotative and denotative meanings and interpret the connotation.
d) Identify the meaning of common idioms, literary and classical allusions in text.
e) Expand general and specialized vocabulary through speaking, reading, and writing.
f) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
as being either *strong-willed* or *pig-headed*. They have the same literal meaning (i.e., *stubborn*). *Strong-willed* connotes admiration for the level of someone's will, while *pig-headed* **connotes** frustration in dealing with someone. • **Denotation** is a dictionary definition of a word. • **Idiom** is an expression peculiar to a particular language or group of people that means something different from the dictionary definition. ~~relates to a natural way of using language: the way of using a language that comes naturally to its native speakers~~ (e.g., blessing in disguise, chip on your shoulder). • An **allusion** is an indirect reference to a person, place, event, or thing – real or fictional. J.D. Salinger's "The Catcher in the Rye" is an allusion to a poem by Robert Burns. Stephen Vincent Benet's story "By the Waters of Babylon" alludes to Psalm 137 in the Bible .		

12.4 The student will read, comprehend, and analyze the development of British literature and literature of other cultures.

a) Compare and contrast the development of British literature in its historical context.
b) Recognize major literary forms and their elements.
c) Recognize the characteristics of major chronological eras.
d) Relate literary works and authors to major themes and issues of their eras.
e) Analyze the social and cultural function of British literature.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Compare and contrast traditional and contemporary poems from many cultures.
h) Analyze how dramatic conventions including character, scene, dialogue, and staging contribute to the theme and effect.
i) Compare and contrast dramatic elements of plays from American, British, and other cultures.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will understand how British literature has influenced and has been influenced by the literature of other cultures. • Students will trace and examine the development of British literature and the literature of other cultures by recognizing characteristics of chronological periods and literary techniques. Students will relate literary works and their authors to major themes and issues. • Students will understand that critical evaluation is the process of judging the merit or value of a piece of literature and that the process includes evaluating the author's effectiveness in integrating component parts to create a whole. • ~~Students will use critical analysis to judge the merit of a dramatic selection. Critical analysis includes determining the author's effectiveness in integrating component parts of a drama to create a whole~~. • A complete list of literary devices is found in	**All students should** • recognize literary forms employed in major literary eras. • recognize the literary characteristics of the major chronological eras. • understand how a writer's choice of words reveals the content of a poem and the speaker's attitude regarding the content of the poem. • understand how the subject and mood of the poem are supported or reinforced through the use of sound structures. • understand a reader's response to ~~the poem~~ poetry is manipulated by imagery and figures of speech.	**To be successful with this standard, students are expected to** • use reading strategies to improve comprehension and to achieve the purposes for reading: predicting and adjusting predictions; questioning the text; restating main ideas and summarizing supporting details; and close reading. • analyze texts to identify the author's attitudes, viewpoints, and beliefs and critique how these relate to larger historical, social, and cultural contexts. • analyze the representation of a subject or a key scene in two different media . • ~~identify literary forms, such as~~ ◦ ~~epic~~ ◦ ~~tragedy~~ ◦ ~~comedy~~ ◦ ~~sonnet and other poetic forms~~ ◦ ~~essay~~ ◦ ~~journal/diary~~ ◦ ~~satire~~ • identify the literary characteristics of specific eras, such as: ◦ Anglo-Saxon/Medieval period; ◦ Tudor/Renaissance period; ◦ Neoclassical period;

12.4 The student will read, comprehend, and analyze the development of British literature and literature of other cultures.

a) Compare and contrast the development of British literature in its historical context.
b) Recognize major literary forms and their elements.
c) Recognize the characteristics of major chronological eras.
d) Relate literary works and authors to major themes and issues of their eras.
e) Analyze the social and cultural function of British literature.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Compare and contrast traditional and contemporary poems from many cultures.
h) Analyze how dramatic conventions including character, scene, dialogue, and staging contribute to the theme and effect.
i) Compare and contrast dramatic elements of plays from American, British, and other cultures.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
Essential Knowledge, Skills, and Processes column for SOL 9.4. • **Close reading** entails close observation of the text, including annotating, determining all word meanings including connotations, syntax, and structure. It also involves paying close attention to figures of speech, and other features that contribute to a writer's style. Close reading also involves reflecting on deeper meanings of text including considering relationships to other texts or social or cultural history. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer Relationship), thinking aloud, etc.	• understand traditional and contemporary dramatic works of authors from a variety of cultures. • identify and understand the most effective elements of a selected play.	◦ Restoration Age; ◦ Romantic and Victorian periods; and ◦ Modern and Postmodern periods. • recognize major themes and issues related to: ◦ religious diversity; ◦ political struggles; ◦ ethnic and cultural mores and traditions; and ◦ individual rights, gender equity, and civil rights. • distinguish between what is directly stated in a text from what is intended or implied ~~really meant~~ because of the use of satire, sarcasm, irony, or understatement. • analyze how British literature has provided social commentary on various cultural developments including religious and political struggles, changing mores and traditions, etc. • ~~identify sound structures, such as~~ ◦ ~~rhyme~~ ◦ ~~rhythm~~ ◦ ~~repetition~~ ◦ ~~alliteration~~ ◦ ~~assonance~~

12.4 The student will read, comprehend, and analyze the development of British literature and literature of other cultures.

a) Compare and contrast the development of British literature in its historical context.
b) Recognize major literary forms and their elements.
c) Recognize the characteristics of major chronological eras.
d) Relate literary works and authors to major themes and issues of their eras.
e) Analyze the social and cultural function of British literature.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Compare and contrast traditional and contemporary poems from many cultures.
h) Analyze how dramatic conventions including character, scene, dialogue, and staging contribute to the theme and effect.
i) Compare and contrast dramatic elements of plays from American, British, and other cultures.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ ~~consonance~~ ◦ ~~onomatopoeia~~ ◦ ~~parallelism~~ • explain how the choice of words in a poem creates tone. • explain how the reader's response to the poem is manipulated by imagery, figures of speech, and diction (word choice)~~, such as~~. ◦ ~~metaphor~~ ◦ ~~simile~~ ◦ ~~analogy~~ ◦ ~~symbolism~~ ◦ ~~personification~~ ◦ ~~paradox~~ ◦ ~~oxymoron~~ ◦ ~~apostrophe~~ ◦ ~~allusion~~ • compare and contrast traditional and contemporary poetry <u>and drama</u> from many cultures. • ~~explain how dramatic conflict is created through~~ ◦ ~~exposition/initiating event~~ ◦ ~~rising action~~ ◦ ~~climax or crisis~~

12.4 The student will read, comprehend, and analyze the development of British literature and literature of other cultures.

a) Compare and contrast the development of British literature in its historical context.
b) Recognize major literary forms and their elements.
c) Recognize the characteristics of major chronological eras.
d) Relate literary works and authors to major themes and issues of their eras.
e) Analyze the social and cultural function of British literature.
f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
g) Compare and contrast traditional and contemporary poems from many cultures.
h) Analyze how dramatic conventions including character, scene, dialogue, and staging contribute to the theme and effect.
i) Compare and contrast dramatic elements of plays from American, British, and other cultures.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		◦ ~~falling action~~ ◦ ~~resolution/dénouement (conclusion/resolution)~~ • explain how a dramatist uses dialogue to reveal the theme of a drama. • ~~compare and contrast the use of dialogue and staging found in a variety of plays~~ • ~~identify the most effective elements of selected plays~~ • compare and contrast the use of exposition/initiating event, rising action, complication/conflict, climax or crisis, falling action, and resolution/denouement among plays from various cultures.

12.5 The student will read and analyze a variety of nonfiction texts.

a) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.
b) Analyze and synthesize information in order to solve problems, answer questions, and generate new knowledge.
c) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.
d) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text.
e) Identify false premises in persuasive writing.
f) Draw conclusions and make inferences on explicit and implied information using textual support.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will develop skill in analyzing, evaluating, and applying the format (structure) and content of a variety of informational and technical texts. Such informational and technical texts include statements of fact and essential information needed for making consumer choices and other important decisions. • Students should recognize persuasive techniques, such as: ◦ ad hominem – means "to the man" does not argue the issue, instead it argues the person; ◦ red herring – is a deliberate attempt to divert attention; ◦ straw man – creates the illusion of having refuted a proposition by substituting a similar yet weaker proposition (the "straw man"); and ◦ begging the question – assumes the conclusion is true without proving it; circular argument. • Analyze and identify false premises in arguments and evaluate their role in the	**All students should** • understand formats common to information resources ~~and new publications~~.	**To be successful with this standard, students are expected to** • before, during, and after reading texts, generate and respond to a variety of critical thinking questions to activate prior knowledge, engage actively with learning new information, and reflect on new learning or fresh insights. • ~~use graphic organizers to~~ analyze printed and Web-based informational and technical texts.~~, such as~~ ◦ ~~product evaluations~~ ◦ ~~warranties~~ ◦ ~~instructional manuals~~ ◦ ~~technical manuals~~ ◦ ~~contracts~~ ◦ ~~E-zines~~ • examine the format (structure) of an informational or technical text as an aid to determining and analyzing its content. • recognize and apply specialized vocabulary. • analyze how two or more texts develop and treat the same idea. • determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, • ~~draw conclusions regarding the quality of a product based on analysis of the accompanying warranty and instruction manual~~. • make frequent references to texts in order to verify conclusions and support logical inferences.

12.5 The student will read and analyze a variety of nonfiction texts.

a) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.
b) Analyze and synthesize information in order to solve problems, answer questions, and generate new knowledge.
c) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.
d) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text.
e) Identify false premises in persuasive writing.
f) Draw conclusions and make inferences on explicit and implied information using textual support.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
argument. • Students will use a variety of reading strategies ~~including~~ such as text annotation, QAR (Question-Answer, Relationship), thinking aloud, etc.		

At the twelfth-grade level, students will produce expository, ~~and~~ informational, analytic, and persuasive/argumentative papers that are logically organized and contain ~~with~~ clear and accurate ideas. Students will clarify and defend a position using precise and relevant evidence. In addition, students will revise writing for clarity of content and depth of information.

12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings.

a) Generate, gather, and organize ideas for writing to address a specific audience and purpose.
b) Produce arguments in writing that develop a thesis to demonstrate~~s~~ knowledgeable judgments, address counterclaims, and provide effective conclusions.
c) Clarify and defend a position with precise and relevant evidence.
d) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
e) Use a variety of rhetorical strategies to accomplish a specific purpose.
f) Create arguments free of errors in logic and externally supported.
g) Revise writing for clarity of content, depth of information and technique of presentation.
h) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• The intent of this standard is that students will develop skill in creating expository, technical, and persuasive/argumentative writings. ~~Technical writing is prose that explains or clarifies information of a specialized nature for a targeted audience.~~ • Persuasive techniques are defined under SOL 12.5. • Students should have practice writing for shorter time frames as well as extended time frames.	**All students should** • understand that writing is a process. • locate and select appropriate information that clearly supports a definite purpose and position. • understand that format (structure) determines the sequence of a writing. ~~(The sequence in technical writing may be determined by the format of the task, for example, filling in blanks and answering questions.)~~ • understand that vocabulary is used to develop voice and tone for a specific audience, purpose, or situation.	**To be successful with this standard, students are expected to** • ~~generate~~ develop expository writings that: ° explain their ideas through a clear general statement of the writer's point (thesis); ° use specific evidence and illustrations; and ° provide concise and accurate information. • ~~plan~~ develop technical writings (e.g., personal data sheet, résumé, job description, questionnaire, job application, or business communication) that address a clearly identified audience and have a clearly identified purpose. • complete employment forms through simulations and real-life opportunities. • complete applications, essays, and résumés for college admission through simulations and real-life opportunities. • develop analytical essays that do one or more of the following: ° examine a process; ° make a comparison; ° propose solutions; ° classify; ° define; ° show cause and effect; ° illustrate problems; and

12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings.

a) Generate, gather, and organize ideas for writing to address a specific audience and purpose.
b) Produce arguments in writing that develop a thesis to demonstrate~~s~~ knowledgeable judgments, address counterclaims, and provide effective conclusions.
c) Clarify and defend a position with precise and relevant evidence.
d) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
e) Use a variety of rhetorical strategies to accomplish a specific purpose.
f) Create arguments free of errors in logic and externally supported.
g) Revise writing for clarity of content, depth of information and technique of presentation.
h) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		° evaluate. • construct arguments that: ° introduce precise, substantive claims; ° establish the significance of the claims; ° distinguish them from opposing claims; and ° sequence information logically (e.g., problem-solution, cause and effect). • use a range of strategies to elaborate and persuade, such as: ° descriptions; ° anecdotes,; ° case studies, ° analogies; and ° illustrations. • develop claim(s) and counterclaims thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both. • provide a clear and effective conclusion. • develop a thesis that demonstrates clear and knowledgeable judgments. • clarify and defend positions with precise and relevant evidence, including facts, expert opinions, quotations and/logical reasoning.

12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings.

a) Generate, gather, and organize ideas for writing to address a specific audience and purpose.
b) Produce arguments in writing that develop a thesis to demonstrate~~s~~ knowledgeable judgments, address counterclaims, and provide effective conclusions.
c) Clarify and defend a position with precise and relevant evidence.
d) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
e) Use a variety of rhetorical strategies to accomplish a specific purpose.
f) Create arguments free of errors in logic and externally supported.
g) Revise writing for clarity of content, depth of information and technique of presentation.
h) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• strategically focus paragraphs by using a variety of techniques. • use transition words and phrases to signal progression of ideas within and between paragraphs, and use appropriate words and phrases to signal organizational patterns (e.g., description, question-answer, compare-contrast, problem-solution, cause and effect). • use words, phrases, and clauses to link the major sections of the text. • create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. • elaborate ~~on ideas~~ for clarity and accuracy developing the topic fully with significant and relevant facts, extended definitions, concrete details, and important quotations. • develop ideas in a logical sequence. • establish and maintain a style and tone. • apply persuasive rhetorical devices and techniques including rhetorical questioning, parallel structuring, metaphor, imagery, figures of speech, alliterative expressions, etc., when appropriate. • recognize and avoid common logical fallacies or false premises.

12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings.

a) Generate, gather, and organize ideas for writing to address a specific audience and purpose.
b) Produce arguments in writing that develop a thesis to demonstrate~~s~~ knowledgeable judgments, address counterclaims, and provide effective conclusions.
c) Clarify and defend a position with precise and relevant evidence.
d) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
e) Use a variety of rhetorical strategies to accomplish a specific purpose.
f) Create arguments free of errors in logic and externally supported.
g) Revise writing for clarity of content, depth of information and technique of presentation.
h) Use computer technology to plan, draft, revise, edit, and publish writing.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		• revise writing to provide depth of information and to adhere to ~~their~~ presentation format. • use computer technology as available to edit writing before submitting the final copy ~~for correct use of language, spelling, punctuation, and capitalization~~. • ~~proofread writing before submitting the final copy~~.

12.7 The student will write, revise, and edit writing.

a) Edit, proofread, and prepare writing for intended audience and purpose.

b) Apply grammatical conventions to edit writing for correct use of language, spelling, punctuation, and capitalization.

c) Use a style manual, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA), to apply rules for punctuation and formatting of direct quotations.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will understand and apply mechanics, usage, and grammar conventions to prepare writing for intended audiences. • Students will understand that usage is a matter of convention, can change over time, and is sometimes contested. • Students will use a style manual, such as MLA or APA, to apply punctuation rules and the formatting of quotations in documented papers.	**All students should** • use grammatical conventions to adjust sentence and paragraph structures for a variety of purposes and audiences. • observe hyphenation rules. • understand the difference between revising and editing ~~which is similar to the difference between an architect and a carpenter~~.	**To be successful with this standard, students are expected to** • assess and strengthen the quality of writing through revision. • use a variety of strategies (e.g., reading the draft aloud; peer feedback; using a rubric; reading the draft from the perspective of the intended audience) to evaluate whether the draft is effectively supported and adequately developed. • edit both one's own and others' work for grammar, style and tone appropriate to audience, purpose and context. • apply MLA or APA style for punctuation conventions and formatting direct quotations, particularly for in-text citation in documented papers.

At the twelfth-grade level, students will produce well-documented research papers, using a standard method of documentation, such as MLA or APA. Students will critically evaluate the accuracy, quality, and validity of all information and follow ethical and legal guidelines for using and gathering information.

12.8 The student will write documented research papers.

a) Use technology as a tool to research, organize, evaluate, and communicate information.
b) Frame, analyze, and synthesize information to solve problems, answer questions, and generate new knowledge.
c) Critically evaluate the accuracy, quality, and validity of the information.
d) Synthesize information to support the thesis and present information in a logical manner.
e) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
f) Revise writing for clarity, depth of information, and technique of presentation.
g) Edit writing for language, spelling, punctuation, capitalization, syntax, and paragraphing as appropriate for standard English.
h) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
• Students will research topics and develop documented papers that support a thesis. A documented paper is the result of following a process leading to discovery of information that is then synthesized to support a focus on a particular topic through content, style, structure, and presentation. • ~~Students must avoid committing plagiarism.~~ • Students will recognize consequences of plagiarism according to the guidelines established by school divisions or post-secondary schools.	**All students should** • understand how to gather information and analyze it to organize and begin the writing process. • understand the ethical issues and responsibility of documentation in research writings.	**To be successful with this standard, students are expected to** • identify and narrow a topic for research through a variety of strategies, such as mapping, listing, brainstorming, webbing, and using an Internet search engine. • utilize technology to conduct research, organize information, and develop writing. • ~~identify the ethical issues of documentation in research writings~~. • collect, evaluate, analyze and synthesize relevant information, using a variety of primary and secondary print and electronic sources. • evaluate collected information from print and electronic sources by: ° determining its validity, accuracy, credibility, reliability, consistency, strengths and limitations; and ° formulating a reason/focus to represent findings. • record and organize information into a draft by: ° prioritizing and synthesizing information; ° ~~developing an outline with appropriate details~~ ° summarizing and/or paraphrasing information; and ° selecting direct quotations. • cite print or electronic sources of information to avoid plagiarism when

12.8 The student will write documented research papers.

a) Use technology as a tool to research, organize, evaluate, and communicate information.
b) Frame, analyze, and synthesize information to solve problems, answer questions, and generate new knowledge.
c) Critically evaluate the accuracy, quality, and validity of the information.
d) Synthesize information to support the thesis and present information in a logical manner.
e) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
f) Revise writing for clarity, depth of information, and technique of presentation.
g) Edit writing for language, spelling, punctuation, capitalization, syntax, and paragraphing as appropriate for standard English.
h) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

UNDERSTANDING THE STANDARD (Teacher Notes)	ESSENTIAL UNDERSTANDINGS	ESSENTIAL KNOWLEDGE, SKILLS, AND PROCESSES
		paraphrasing, summarizing, quoting, or inserting graphics, using MLA or APA style. • ~~revise and edit writing to comply with major requirements and expectations of the assignment~~. • edit writing for correct use of language, capitalization, punctuation, and spelling. • demonstrate a sophisticated understanding of the ethics of writing by: ° understanding that *plagiarism* is the act of presenting someone else's ideas as one's own; ° recognizing that one must correctly cite sources to give credit to the author of an original work; ° recognizing that sources of information must be cited even when the information has been paraphrased; and ° using quotation marks when someone else's exact words are quoted.

Virginia Department of Education

Comparison of Virginia's 2010 English Standards of Learning with the Common Core State Standards for English and Literacy

November 18, 2010

Comparison of Virginia's 2010 English Standards of Learning with the Common Core State Standards for English and Literacy

Table of Contents

Introduction.....3

Kindergarten 9

Grade 1 26

Grade 2 46

Grade 3 65

Grade 4 87

Grade 5 109

Grade 6 129

Grade 7 153

Grade 8 178

Grades 9-10 ..... **204**

Grades 11-12 ..... **233**

Introduction

The *Comparison of Virginia's 2010 English Standards of Learning (SOL) with the Common Core State Standards (CCSS) for English Language Arts and Literacy (ELAL)* provides a side-by-side overview demonstrating how the 2010 English SOL are aligned to the CCSS for ELAL. The comparison was made using Virginia's complete standards program for supporting teaching and learning in the Commonwealth's public schools and school divisions, including both the 2010 *English Standards of Learning* and the *Curriculum Framework for 2010 English Standards of Learning*. The Curriculum Framework is essential to any comparison conducted between the CCSS for ELAL and the English SOL since it "unpacks" the SOL, providing detail that complements the standards.

It is important to note that the *Curriculum Framework for 2010 English Standards of Learning* is being presented to the Virginia Board of Education for final review at the November 18, 2010 meeting. In developing the draft of the *Revised Curriculum Framework for 2010 English Standards of Learning,* Virginia Department of Education staff met with a review committee of educators from school divisions who assisted in the revision process. As a part of the process, committee members reviewed the CCSS for ELAL and if it was determined that a CCSS provided an enhancement to the 2010 English SOL and was appropriate to the standard, the content was added to the *Curriculum Framework for 2010 English Standards of Learning.*

Organization of the *Comparison of Virginia's 2010 English SOL with the CCSS for ELAL*

The correlation of the SOL to the CCSS was conducted by DOE staff members, with assistance from English educators in Virginia. The Department would like to acknowledge the help provided by Terri McCaughan, Newport News City Public Schools; Jessica Taylor, Charlottesville City Public Schools; Randi Smith, Chesterfield County Public Schools; Tracey Engle, Powhatan County Public Schools; E. J. Brletich, Spotsylvania County Public Schools; and Eileen Burgwyn, Fauquier County Public Schools.

The CCSS for ELAL are presented in the left column of the table and are organized using the CCSS for ELAL format. Headings and subheadings are those used in the CCSS for ELAL. Using the format provided in the CCSS for ELAL, the comparison is completed by individual grade levels in kindergarten through grade 8 and by two-year grade bands (9-10, 11-12) in grades 9-12. As the SOL and Curriculum Framework components were reviewed and aligned to the CCSS for ELAL, they were placed in the right column of the table adjacent to the similar standard in the CCSS for ELAL. SOL listed as correlated to CCSS content may include correlations from the *Curriculum Framework for 2010 English Standards of Learning* and are denoted with "CF" following the SOL number (e.g., 7.4 CF). While there is a matching SOL or CF for each of the CCSS, a number of SOL in each grade level are not addressed in the CCSS at any grade level; this list follows the correlation at each grade level.

Summary of Similarities and Differences Between the CCSS for ELAL and the 2010 English SOL

Both the CCSS for ELAL and the Virginia *English Standards of Learning* (SOL) are rigorous and provide a progression of expectations for student learning and understanding in English Language Arts. By the time students have graduated from high school, they will have been exposed to the same content through different learning progressions, although there is some content in the SOL that is not covered in the CCSS. The CCSS and the SOL generally have a strong alignment. While the organization and learning progressions are not necessarily identical, the overall content from both is generally aligned.

- Beginning in grade 4 of the SOL, the Oral Language strand changes to Communication: Speaking, Listening, and Media Literacy. An emphasis is put on speaking for a variety of purposes and audiences, active listening, understanding, and creating media messages. The CCSS address media literacy as an application within the standards.
- The SOL begin a study of fact vs. opinion in grade 4; the CCSS do not address fact vs. opinion in reading.
- A study of author's purpose begins in grade 4 in the SOL. The CCSS do not address author's purpose in the English Language Arts Standards; instead, it is covered in the CCSS Literacy in History/Social Studies, Science, and Technical Subjects.
- Students are introduced to a definition of plagiarism in grade 3 in the SOL. Ethical gathering of information and plagiarism are also emphasized in the Research strand of the SOL beginning in grade 4. The CCSS do not address plagiarism in the ELA standards until grade 6.
- The SOL begin citing sources in grade 5 with citing primary and secondary sources beginning in grade 6. The CCSS begin citing sources in grade 7 with bibliographic information.
- Both the CCSS and SOL address grammatical conventions. The SOL address grammar, usage, and mechanics through writing, while the CCSS do the same in the Language strand.
- The CCSS do not prescribe a reading list per se, but they offer reading text exemplars to illustrate text complexity for each grade level. Virginia does not endorse specific titles or authors to support the SOL. Rather, curriculum decisions are made locally in Virginia.

- The CCSS use writing exemplars to illustrate modes and types of writing. Virginia uses an interactive Web-based tool offering teachers, parents, and students the opportunity to study actual student anchor papers that illustrate the scoring of each of the three writing domains. By using this tool, teachers gain a better understanding of the Virginia Standards of Learning Direct Writing Assessments and develop consistency in scoring actual student work. Teachers may also use this program with students to facilitate their understanding of the expectations in each of the domains.

K-Grade 8 English/Language Arts

- The SOL and CCSS utilize different organizational strands:

Grade Level/Band	SOL Strands	CCSS Strands
K-3	• Oral Language • Reading • Writing	• Speaking and Listening • Language • Reading • Writing
4-8	• Communication: Speaking, Listening, Media Literacy • Reading • Writing • Research	• Speaking and Listening • Language • Reading • Writing

- The K-3 SOL offer explicit, student-focused reading standards providing teachers with clear goals of what students should know and be able to do as a result of standard mastery. The CCSS include the following caveats preceding several reading standards: "With prompting and support students will…" The provision in the CCSS for "guidance and support from adults" makes it difficult to gain a true picture of the exact expectation for students and how well they are meeting the standard on their own, without adult support.

- The CCSS, beginning in grade 2, state that students will read and comprehend at a predetermined text complexity level (grades 2-3 text complexity band). This CCSS standard may promote placing students in reading texts that are beyond the students' instructional reading levels. Virginia's standards in the early elementary grades are clearly focused, explicit reading standards that permit teachers to provide instruction at students' instructional reading levels. Reading research clearly indicates that students are best taught foundational reading skills at their instructional reading level.

- The CCSS K-5 reading standards are divided into the following categories: reading standards for literature; reading standards for informational text; reading standards: foundational skills. The SOL address reading foundations within each reading standard K-5.

- Virginia's SOL program is committed to a strong focus on building the foundational skills of reading. The SOL address fictional texts of all types and genres, while the CCSS place an emphasis upon drama and mythology in the elementary grades (e.g., significant characters found in mythology; structural elements of drama).

- While both the CCSS and SOL address foundational reading principles, the SOL address reading foundations in a logical progression. Teachers can follow the SOL to easily develop lessons. For example, SOL 1.9 reading fictional texts offers a sequential process. The CCSS Reading Standards for Literature grade 1 impose an artificial structure, which although covering the essential foundations, does not follow a logical instructional progression.

CCSS	SOL
1. Ask and answer questions about key details in a text. 2. Retell stories, including key details, and demonstrate understanding of their central message or lesson. 3. Describe characters, settings, and major events in a story, using key details. 4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. 5. Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types. 6. Identify who is telling the story at various points in a text. 7. Use illustrations and details in a story to describe its characters, setting, or events. 8. (Not applicable to literature) *No standard stated for CCSS.* 9. Compare and contrast the adventures and experiences of characters in stories. 10. With prompting and support, read prose and poetry of appropriate complexity for grade 1.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. a) Preview the selection. b) Set a purpose for reading. c) Relate previous experiences to what is read. d) Make and confirm predictions. e) Ask and answer who, what, when, where, why, and how questions about what is read. f) Identify characters, setting, and important events. g) Retell stories and events, using beginning, middle, and end. h) Identify the main idea or theme. i) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

High School English

- Both the SOL and the CCSS provide a rigorous progression of expectations for student learning in English. By the time students have graduated from high school, they have been exposed to the same general content through different learning progressions. The SOL do provide some content that is not contained in the CCSS.

- The SOL and CCSS utilize different organizational formats. The SOL consistently use grade level standards, while the CCSS switch from specific grade level expectations to grade bands (e.g., 9-10, 11-12) in high school.

- The CCSS address the study of American literature in the 9-10 Reading Standards for Literature. Yet, the CCSS text exemplars list most American literary classics and foundational documents at grades 11-12 (e.g., *The Great Gatsby* by F. Scott Fitzgerald, *Their Eyes Were Watching God* by Zora Neale Hurston, *A Raisin in the Sun* by Lorraine Hansberry, *The Crisis* by Thomas Paine, *Walden* by Henry David Thoreau, *Society and Solitude* by Ralph Waldo Emerson, *The Gettysburg Address* by Abraham Lincoln, *Letter from a Birmingham Jail* by Martin Luther King, Jr.).

- Both the CCSS and SOL emphasize all modes of writing with modes or text types covered in the CCSS writing strand. The SOL address all modes of writing focusing on the writing process of composing, revising, and editing. For each type of writing, the CCSS address each part of an essay: introduction, body, and conclusion.

- Many of the CCSS Writing Standards are almost identical from grade to grade. The SOL address writing as a process focusing on unity and elaboration of a piece of writing. The CCSS address separate parts of a piece of writing (e.g., introduction, body paragraphs, and conclusion).

- The *English Standards of Learning* have been externally validated by Achieve's American Diploma Project and The College Board. A letter to the Virginia Department of Education from Laura Slover, vice president for content and policy research for Achieve, contained the following analysis: "The proposed revised *Virginia English Standards of Learning Curriculum Framework* presents student learning expectations that are intellectually demanding and well aligned with the ADP Benchmarks. If Virginia students master the state standards, they will likely be prepared for both college and career success." According to The College Board's alignment study dated August 24, 2007, "General alignment between Virginia English Standards and The College Board's English Standards is strong."

Kindergarten

CCSS Kindergarten	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	*Note: CCSS specify "with prompting and support" while Virginia sets student performance expectations.*
1. With prompting and support, ask and answer questions about key details in a text.	K.9 The student will demonstrate comprehension of fictional texts. K.9 d) Begin to ask and answer questions about what is read. 3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 f) Ask and answer questions about what is read.
2. With prompting and support, retell familiar stories, including key details.	K.9 The student will demonstrate comprehension of fictional texts. K.9 e) Use story language in discussions and retellings.
3. With prompting and support, identify characters, settings, and major events in a story.	K.9 The student will demonstrate comprehension of fictional texts. K.9 g) Discuss characters, setting, and events. 1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 f) Identify characters, setting, and important events.
Craft and Structure	
4. Ask and answer questions about unknown words in a text.	K.8 CF Ask and respond to questions about unknown words in a text. K.9 The student will demonstrate comprehension of fictional texts. K.9 d) Begin to ask and answer questions about what is read. 1.8 The student will expand vocabulary. 1.8 c) Ask for the meaning of unknown words and make connections to familiar words.

CCSS Kindergarten	English SOL
5. Recognize common types of texts (e.g., storybooks, poems).	K.9 CF Recognize various types of fictional texts (e.g., storybooks, poems)
6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.	K.9 The student will demonstrate comprehension of fictional texts. K.9 a) Identify what an author does and what an illustrator does. K.9 CF Understand that authors tell stories through words and illustrators tell stories with pictures. K.9 CF Identify the roles of the author and the illustrator of selected texts.
Integration of Knowledge and Ideas	
7. With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).	K.9 CF Describe the relationship between illustration and the story (e.g., what moment in the story does the illustration depict).
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.	2.8 CF Compare and contrast characters, setting, and important events in at least two versions of the same story (e.g., Cinderella stories).
Range of Reading and Level of Text Complexity	
10. Actively engage in group reading activities with purpose and understanding.	K CF Reading Focus Statement: [Students] will learn the concepts of print, basic phonetic principles, comprehension of stories, and letter identification skills through systematic, direct instruction, individual and small group activities, and time spent exploring and reading books and other print material.
Reading for Informational Texts	
Key Ideas and Details	*Note: CCSS specify "with prompting and support" while Virginia sets student performance expectations.*
1. With prompting and support, ask and answer questions about key details in a text.	K.9 The student will demonstrate comprehension of fictional texts. K.9 d) Begin to ask and answer questions about what is read.

CCSS Kindergarten	English SOL
2. With prompting and support, identify the main topic and retell key details of a text.	K CF Reading Focus Statement: [Students] will also learn to comprehend and relate stories through drama, retelling, drawing, and their own writing. K.10 The student will demonstrate comprehension of nonfiction texts. K.10 a) Use pictures to identify topic and make predictions. K. 10 CF Identify the topic of a nonfiction selection.
3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 c) Relate previous experiences to what is read. 2.9 CF Use knowledge from their own experiences to make sense of and talk about a topic, recognizing similarities between: ◦ personal experiences and the text; ◦ the current text and other texts read; and ◦ what is known about the topic and what is discovered in the new text.
Craft and Structure	
4. With prompting and support, ask and answer questions about unknown words in a text.	K.8 CF Ask and respond to questions about unknown words in a text.
5. Identify the front cover, back cover, and title page of a book.	K.5 The student will understand how print is organized and read. K.5 a) Hold print materials in the correct position. K.5 b) Identify the front cover, back cover, and title page of a book.
6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	K.10 CF Identify the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.
Integration of Knowledge and Ideas	
7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g.,	K.5 The student will understand how print is organized and read. K.5 a) Hold print materials in the correct position.

CCSS Kindergarten	English SOL
what person, place, thing, or idea in the text an illustration depicts).	K.5 c) Distinguish between print and pictures. K.10 CF Relate pictures and illustrations to the text in which they appear.
8. With prompting and support, identify the reasons an author gives to support points in a text.	1.10 CF Identify the main idea and key details of a short nonfiction selection and identify the reasons an author gives to support points in a text.
9. With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	2.9 CF Use knowledge from their own experiences to make sense of and talk about a topic, recognizing similarities between: ° personal experiences and the text; ° the current text and other texts read; and ° what is known about the topic and what is discovered in the new text.
Range of Reading and Level of Text Complexity	
10. Actively engage in group reading activities with purpose and understanding.	K CF Reading Focus Statement: [Students] will learn the concepts of print, basic phonetic principles, comprehension of stories, and letter identification skills through systematic, direct instruction, individual and small group activities, and time spent exploring and reading books and other print material.
Foundational Skills	
Print Concepts	
1. Demonstrate understanding of the organization and basic features of print. a. Follow words from left to right, top to bottom, and page by page.	K.5 The student will understand how print is organized and read. K.5 d) Follow words from left to right and from top to bottom on a printed page. 1.5 The student will apply knowledge of how print is organized and read. 1.5 a) Read from left to right and from top to bottom. 1.5 b) Match spoken words with print.

CCSS Kindergarten	English SOL
b. Recognize that spoken words are represented in written language by specific sequences of letters.	K.5 The student will understand how print is organized and read. K.5 e) Match voice with print (concept of word). K.7 The student will develop an understanding of basic phonetic principles. K.7 c) Demonstrate a speech-to-print match through accurate finger-point reading in familiar text that includes words with more than one syllable. K.7 CF Write the grapheme (letter) that represents a spoken sound. K.7 CF Use basic knowledge of one-to-one letter-sound correspondences by producing sounds for each consonant. 1.5 The student will apply knowledge of how print is organized and read. 1.5 b) Match spoken words with print.
c. Understand that words are separated by spaces in print.	K.5 CF Follow text with a finger, pointing to each word as it is read from left to right and top to bottom. K.5 CF Locate lines of text, words, letters, and spaces. 1.5 The student will apply knowledge of how print is organized and read. 1.5 b) Match spoken words with print. 1.12 The student will print legibly. 1.12 b) Space words within sentences.
d. Recognize and name all upper- and lowercase letters of the alphabet.	K.7 The student will develop an understanding of basic phonetic principles. K.7 a) Identify and name the uppercase and lowercase letters of the alphabet. 1.5 The student will apply knowledge of how print is organized and read.

CCSS Kindergarten	English SOL
	1.5 c) Identify letters, words, sentences, and ending punctuation.
Phonological Awareness	
2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words.	K.4 The student will identify, say, segment, and blend various units of speech sounds. K.4 a) Begin to discriminate between spoken sentences, words, and syllables. K.4 b) Identify and produce words that rhyme. 1.4. The student will orally identify, produce, and manipulate various units of speech sounds within words. 1.4 a) Create rhyming words.
b. Count, pronounce, blend, and segment syllables in spoken words.	K.4 The student will identify, say, segment, and blend various units of speech sounds. K.4 a) Begin to discriminate between spoken sentences, words, and syllables. K.4 c) Blend and segment multisyllabic words at the syllable level. 2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 2.4 b) Blend sounds to make one-syllable words.
c. Blend and segment onsets and rimes of single-syllable spoken words.	K.4 The student will identify, say, segment, and blend various units of speech sounds. K.4 d) Segment one-syllable words into speech sound units including beginning phoneme(s) (onset) and ending (rimes). K.4 CF Blend and segment consonants and rimes of spoken words (e.g., /b/- /oat/ = *boat*, *black* = /bl/-_/ack/).
d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. (This does not include CVCs ending with /l/, /r/, or /x/.)	K.4 CF Students segment spoken words into individual sounds (e.g., man → /m/- /a/- /n/. K.7 d) Identify beginning consonant sounds in single-syllable words.

CCSS Kindergarten	English SOL
	2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 2.4 c) Segment one-syllable words into individual speech sounds (phonemes).
e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	K.4 CF Substitute the beginning consonant to make a new word (e.g., the teacher asks the student to say c*at, but in the place of /c/ she asks them to say /b/*, and the student responds with *bat*). 1.4 The student will orally identify, produce, and manipulate various units of speech. 1.4 e) Add or delete phonemes (sounds) to make new words. 2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 2.4 d) Add or delete phonemes (sounds) to make words.
Phonics and Word Recognition	
K.3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant.	K.4 The student will identify, say, segment, and blend various units of speech sounds. K.4 e) Identify words according to shared beginning and/or ending sounds. K.7 The student will develop an understanding of basic phonetic principles. K.7 CF Students are expected to use basic knowledge of one-to-one letter-sound correspondences by producing sounds for each consonant.
b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels.	K.7 CF Associate long and short sounds with common spellings for the five major vowels.
c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does).	K.6 The student will demonstrate an understanding that print conveys meaning. K.6 d) Read his/her name and read fifteen meaningful, concrete

CCSS Kindergarten	English SOL
	words. K.6 CF Recognize a selection of high-frequency and sight words.
d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.	K.7 CF Distinguish between similarly spelled words by identifying sounds of the letters that differ.
Fluency	
4. Read emergent-reader texts with purpose and understanding.	1 CF Reading Focus Statement: Through reading decodable books, students will build fluency and automaticity in using their knowledge of phonetic principles and print to read.
CCSS Writing Standards	
Text Types and Purposes	
1. Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is . . .).	K.12 CF Use writing, dictation, and drawing to compose informative/explanatory texts that name a topic (what they are writing about), state an opinion and provide some information (e.g., My favorite book is …).
2. Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	K.12 The student will write to communicate ideas for a variety of purposes. K.12 b) Draw pictures and/or use letters and phonetically spelled words to write about experiences. K.12 c) Use letters and beginning consonant sounds to spell phonetically words to describe pictures or write about experiences. K.12 CF Use writing, dictation, and drawing to compose informative/explanatory texts that name a topic (what they are writing about), state an opinion and provide some information (e.g., My favorite book is …).
3. Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a	K.1 The student will demonstrate growth in the use of oral language. K.1 c) Participate in oral generation of language experience

CCSS Kindergarten	English SOL
reaction to what happened.	narratives. K.12 CF Use writing, dictation, and drawing to compose informative/explanatory texts that name a topic (what they are writing about), state an opinion and provide some information (e.g., My favorite book is …).
Production and Distribution of Writing	
4. (Begins in grade 3) *No standard stated for CCSS.*	
5. With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.	1.13 CF Revise their written pieces by adding descriptive words (adjectives) when writing about people, places, things, and events; focusing on the topic; and responding to questions and suggestions from peers and teachers.
6. With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.	K.13 The student will use available technology for reading and writing. K.13 CF Students are expected to share their writing with others.
Research to Build and Present Knowledge	
7. Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).	K.12 CF The intent of this standard is that students will understand that writing is used for a variety of purposes, including sharing events and telling stories (narrative writing), informing others and making reports (informational writing), labeling and making lists (functional writing), and responding to literature. K.13 CF: Use available digital tools for reading and writing.
8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	K.13 CF Use available digital tools for reading and writing. K.13 CF Ask and respond to questions about material presented through media. K.13 CF Share their writing with others. 2.9 CF Use information from the text to locate information and answer questions (e.g., illustrations and captions, heading and subheadings, bold and italic print, tables of contents, glossaries,

CCSS Kindergarten	English SOL
	graphs, charts, tables).
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.	K.3 The student will build oral communication skills. K.3 b) Begin to initiate conversations. K.3 d) Listen and speak in informal conversations with peers and adults. K.3 e) Participate in group and partner discussions about various texts and topics.
a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	K.3 The student will build oral communication skills. K.3 c) Begin to follow implicit rules for conversation, including taking turns and staying on topic.
b. Continue a conversation through multiple exchanges.	K.3 CF Participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, small group, teacher-led). K.3 CF Participate in partner or group activities, (i.e., conversations, discussions, book chats, retellings of stories, choral speaking, language experience narratives, morning routines, dramatizations and role play).
2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	K.1 The student will demonstrate growth in the use of oral language. K.1 a) Listen to a variety of literary forms, including stories and poems. K.1 CF Listen to texts read aloud and ask and answer questions for further understanding. 1.2 The student will expand understanding and use of word meanings. 1.2 b) Begin to ask for clarification and explanation of words and ideas.

CCSS Kindergarten	English SOL
3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	K.3 The student will build oral communication skills. K.3 h) Begin to ask how and why questions.
Presentation of Knowledge and Ideas	
4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	*Note: CCSS specify "with prompting and support" while Virginia sets student performance expectations.* K.2 The student will expand understanding and use of word meanings. K.2 c) Use words to describe/name people, places, and things. K.2 d) Use words to describe/name location, size, color, and shape. K.2 e) Use words to describe/name actions.
5. Add drawings or other visual displays to descriptions as desired to provide additional detail.	K.6 The student will demonstrate an understanding that print conveys meaning. K.6 c) Read and explain own writing and drawings. K.12 The student will write to communicate ideas for a variety of purposes. K.12 b) Draw pictures and/or use letters and phonetically spelled words to write about experiences.
6. Speak audibly and express thoughts, feelings, and ideas clearly.	K.3 The student will build oral communication skills. K.3 f) Begin to use voice level, phrasing, and intonation appropriate for various language situations. K.3 CF Students are expected to speak audibly in complete sentences, expressing thoughts, feelings and ideas clearly.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters.	K.11 The student will print in manuscript. K.11 a) Print uppercase and lowercase letters of the alphabet independently.
b. Use frequently occurring nouns and verbs.	K.1 CF Use complete sentences that include subject, verb, and

CCSS Kindergarten	English SOL
	object when speaking. 1.2 CF Use common singular and plural nouns with matching verbs in basic sentences (e.g., She walks., We walk.).
c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).	1.2 The student will expand understanding and use of word meanings. 1.2 c) Use common singular and plural nouns.
d. Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).	K.3 CF Ask who, what, where, when, why, and how questions to obtain information, seek help, or clarify something not understood.
e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).	K.2 The student will expand understanding and use of word meanings. K.2 d) Use words to describe/name location, size, color, and shape. K.2 CF Use words to show direction and location (e.g., on, off, in, out, over, under, between, and beside) to describe location.
f. Produce and expand complete sentences in shared language activities.	K.1 The student will demonstrate growth in the use of oral language. K.1 e) Use complete sentences that include subject, verb, and object. K.3 The student will build oral communication skills. K.3 e) Participate in group and partner discussions about various texts and topics.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize the first word in a sentence and the pronoun I.	K.11 CF Capitalize the first word in a sentence and the pronoun *I*.
b. Recognize and name end punctuation.	K.5 CF Locate and name periods, question marks, and exclamation points.
c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).	K.12 The student will write to communicate ideas for a variety of purposes.

CCSS Kindergarten	English SOL
	K.12 c) Use letters and beginning consonant sounds to spell phonetically words to describe pictures or write about experiences.
d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	K.12 The student will write to communicate ideas for a variety of purposes. K.12 b) Draw pictures and/or use letters and phonetically spelled words to write about experiences. K.12 c) Use letters and beginning consonant sounds to spell phonetically words to describe pictures or write about experiences.
Knowledge of Language	
3. (Begins in grade 2) *No standard stated for CCSS.*	
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).	K.8 The student will expand vocabulary. K.8 a) Discuss meanings of words. K.8 CF Identify new meanings for familiar words and apply them accurately (e.g., knowing *water* as a drink and learning the verb *water the flowers*).
b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.	1.7 CF Expand vocabulary by using frequently occurring root words to read inflectional forms (e.g., look, looks, looked, looking). 2.7 The student will expand vocabulary when reading 2.7 b) Use knowledge of prefixes and suffixes.
5. With guidance and support from adults, explore word relationships and nuances in word meanings. a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.	*Note: CCSS specify "with guidance and support from adults" while Virginia sets student performance expectations.* K.8 CF Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

CCSS Kindergarten	English SOL
b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).	K.8 CF Discuss meanings of specific words including those with opposite or similar meanings in partner, group and teacher-guided settings. 2.2 CF Recognize when two or more different words are being used orally to mean contrasting or opposite things.
c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).	K.8 CF Identify real-life connections between words and their use (e.g., places that are *loud*).
d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.	K.1 The student will demonstrate growth in the use of oral language. K.1 d) Participate in creative dramatics. K.8 CF Discuss meanings of specific words including those with opposite or similar meanings in partner, group and teacher-guided settings.
6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.	K.2 The student will expand understanding and use of word meanings. K.2 a) Increase listening and speaking vocabularies. K.2 g) Use vocabulary from other content areas. K.2 CF Students are expected to use vocabulary from content areas during partner or group activities and during teacher-directed instruction. K.8 The student will expand vocabulary. K.8 b) Develop vocabulary by listening to a variety of texts read aloud. 2.2 The student will expand understanding and use of word meanings. 2.2 b) Use words that reflect a growing range of interests and knowledge.

English SOL for Kindergarten aligned with the CCSS at other grade levels	
Grade 2 Speaking and Listening 5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.	K.1 The student will demonstrate growth in the use of oral language. K.1 b) Participate in a variety of oral language activities including choral and echo speaking and recitation of short poems, rhymes,
Grade 1 Speaking and Listening 1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. c. Ask questions to clear up any confusion about the topics and	K.2 The student will expand understanding and use of word meanings. K.2 f) Ask about words not understood.
Grade 2 Speaking and Listening 6. Produce complete sentences when appropriate to task and situation. Grade 3 Language 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	K.3 The student will build oral communication skills. K.3 a) Express ideas in complete sentences and express needs through direct requests.
Grade 1 Reading Standards: Foundational Skills 3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs.	K.7 The student will develop an understanding of basic phonetic principles. K.7 b) Match consonant, short vowel, and initial consonant digraph sounds to appropriate letters.
Grade 2 Speaking and Listening 2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.	K.9 The student will demonstrate comprehension of fictional texts. K.9 f) Retell familiar stories, using beginning, middle, and end.

English SOL for Kindergarten not explicitly stated in the CCSS at any grade level	
	K.2 The student will expand understanding and use of word meanings. K.2 b) Use number words.
	K.3 The student will build oral communication skills. K.3 g) Follow one- and two-step directions.
	K.6 The student will demonstrate an understanding that print conveys meaning. K.6 a) Identify common signs and logos.
	K.6 b) Explain that printed materials provide information.
	K.9 The student will demonstrate comprehension of fictional texts. K.9 b) Relate previous experiences to what is read.
	K.9 c) Use pictures to make predictions.
	K.11 The student will print in manuscript. K.11 b) Print his/her first and last names.

Grade 1

CCSS Grade 1	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
1. Ask and answer questions about key details in a text.	K.9 The student will demonstrate comprehension of fictional texts. d) Begin to ask and answer questions about what is read. 1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 e) Ask and answer who, what, when, where, why, and how questions about what is read. 2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 d) Locate information to answer questions.
2. Retell stories, including key details, and demonstrate understanding of their central message or lesson.	1.9 CF Demonstrate comprehension by retelling stories and events orally or in writing, using beginning, middle, and end structure, and demonstrating comprehension of the central message or lesson.
3. Describe characters, settings, and major events in a story, using key details.	1.9 CF Identify and describe characters, settings, and important events in a story using details. 2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 e) Describe characters, setting, and important events in fiction and poetry. 3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 j) Identify supporting details.
Craft and Structure	
4. Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.	1.9 CF Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.

CCSS Grade 1	English SOL
	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 g) Identify sensory words.
5. Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.	1.9 CF Teachers should read a wide range of fiction and nonfiction texts aloud and explain differences between books that tell stories and books that provide information.
6. Identify who is telling the story at various points in a text.	1.9 CF Identify who is telling the story at various points in a text.
Integration of Knowledge and Ideas	
7. Use illustrations and details in a story to describe its characters, setting, or events.	1.9 CF Use illustrations and details to describe characters, settings, and important events in a story.
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. Compare and contrast the adventures and experiences of characters in stories.	2.8 CF Compare and contrast characters, setting, and important events in at least two versions of the same story (e.g., Cinderella stories).
Range of Reading and Level of Text Complexity	
10. With prompting and support, read prose and poetry of appropriate complexity for grade 1.	*Note: CCSS specify "with prompting and support" while Virginia sets student performance expectations.* 1.9 CF Students will build fluency and experience success as readers while reading aloud and will begin to develop and demonstrate comprehension skills by reading a variety of fiction and poetry selections. 1.9 CF To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ◦ independent level – 98-100% accuracy, or about two of every 100 words misread; student reads independently with little or no instructional support, and comprehension is strong.

CCSS Grade 1	English SOL
	◦ instructional level – 90-97% accuracy, or three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ◦ frustration level – less than 90% accuracy, or more than ten of every 100 words misread; student reads with neither accuracy nor fluency, and therefore his or her comprehension will be affected.
Reading for Informational Texts	
Key Ideas and Details	
1. Ask and answer questions about key details in a text.	K.9 The student will demonstrate comprehension of fictional texts. d) Begin to ask and answer questions about what is read. 1.10 The student will read and demonstrate comprehension of a variety of nonfiction texts. 1.10 f) Ask and answer who, what, where, when, why, and how questions about what is read.
2. Identify the main topic and retell key details of a text.	1.10 CF Identify the main idea and key details of a short nonfiction selection.
3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.	2.9 CF Use knowledge from their own experiences to make sense of and talk about a topic, recognizing similarities between: • personal experiences and the text; • the current text and other texts read; and • what is known about the topic and what is discovered in the new text.
Craft and Structure	
4. Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	1.8 The student will expand vocabulary. 1.8 a) Discuss meanings of words in context. 1.10 The student will read and demonstrate comprehension of a

CCSS Grade 1	English SOL
	variety of nonfiction texts. 1.10 f) Ask and answer who, what, where, when, why, and how questions about what is read.
5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.	K.10 The student will demonstrate comprehension of nonfiction texts. K.10 b) Identify text features specific to the topic, such as titles, headings, and pictures. 1.10 CF Use text features to locate facts and information in a text (e.g., headings, tables of contents, glossaries). 2.10 The student will demonstrate comprehension of information in reference materials. 2.10 a) Use table of contents. 3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 c) Preview and use text features.
6. Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.	1.10 CF Students are expected to distinguish between information provided by pictures or illustrations and information provided by words in the text.
Integration of Knowledge and Ideas	
7. Use the illustrations and details in a text to describe its key ideas.	1.9 CF Use illustrations and details to describe characters, settings, and important events in a story.
8. Identify the reasons an author gives to support points in a text.	1.10 CF Identify the main idea and key details of a short nonfiction selection and identify the reasons an author gives to support points in a text.
9. Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	2.9 CF Use knowledge from their own experiences to make sense of and talk about a topic, recognizing similarities between: • personal experiences and the text; • the current text and other texts read; and • what is known about the topic and what is discovered in

CCSS Grade 1	English SOL
	the new text.
Range of Reading and Level of Text Complexity	
10. With prompting and support, read informational texts appropriately complex for grade 1.	*Note: CCSS specify "with prompting and support" while Virginia sets student performance expectations. The entire standard is provided below so as to highlight its level of detail.* 1.10 CF The intent of this standard is that students will read and demonstrate comprehension of nonfiction texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics. In addition, see word accuracy rates under Range of Reading and Level of Text Complexity within *Reading for Literature*. *(SOL 1.9 CF)*
Foundational Skills	
Print Concepts	
1. Demonstrate understanding of the organization and basic features of print. a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).	K.5 The student will understand how print is organized and read. K.5 a) Hold print materials in the correct position. K.5 b) Identify the front cover, back cover, and title page of a book. K.5 c) Distinguish between print and pictures. K.5 d) Follow words from left to right and from top to bottom on a printed page. 1.5 CF Differentiate between letters and words by recognizing spaces between words in sentences and recognizing that a sentence starts with a capital letter and ends with a period, question mark, or exclamation point.
Phonological Awareness	
2. Demonstrate understanding of spoken words, syllables, and	1.4 CF Distinguish whether the medial vowel sound is the same

CCSS Grade 1	English SOL
sounds (phonemes). a. Distinguish long from short vowel sounds in spoken single-syllable words.	or different (e.g., long or short) in a set of one-syllable words.
b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.	1.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 1.4 c) Blend sounds to make one-syllable words. 2.5 The student will use phonetic strategies when reading and spelling. 2.5 a) Use knowledge of consonants, consonant blends, and consonant digraphs to decode and spell words.
c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.	1.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 1.4 d) Segment one-syllable words into individual speech sounds (phonemes).
d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).	1.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. d) Segment one-syllable words into individual speech sounds (phonemes). 2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 2.4 c) Segment one-syllable words into individual speech sounds (phonemes).
Phonics and Word Recognition	
3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs.	K.7 The student will develop an understanding of basic phonetic principles. K.7 b) Match consonant, short vowel, and initial consonant digraph sounds to appropriate letters. 1.6 The student will apply phonetic principles to read and spell. 1.6 c) Use beginning consonant digraphs to decode and spell

CCSS Grade 1	English SOL
	single-syllable words. 2.5 The student will use phonetic strategies when reading and spelling. 2.5 a) Use knowledge of consonants, consonant blends, and consonant digraphs to decode and spell words.
b. Decode regularly spelled one-syllable words.	1.6 The student will apply phonetic principles to read and spell. 1.6 a) Use beginning and ending consonants to decode and spell single-syllable words.
c. Know final -e and common vowel team conventions for representing long vowel sounds.	1.6 CF Use the consonant-vowel patterns CVVC and CVCE to decode and spell some single-syllable words.
d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.	1.6 CF Use knowledge that every syllable has a vowel sound to help determine if a word has one or two syllables.
e. Decode two-syllable words following basic patterns by breaking the words into syllables.	1.6 CF Read and spell simple two-syllable compound words following basic patterns by segmenting the words into syllables.
f. Read words with inflectional endings.	1.7 CF Expand vocabulary by using frequently occurring root words to read inflectional forms (e.g., *look, looks, looked, looking*).
g. Recognize and read grade-appropriate irregularly spelled words.	1.2 CF Use common irregular plural forms, such as *man/men*, *child/children*, and *mouse/mice.*
Fluency	
4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 b) Set a purpose for reading. 1.9 i) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression. 2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 j) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.

CCSS Grade 1	English SOL
	2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 d) Set purpose for reading. 3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 a) Set a purpose for reading.
b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 i) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression. 2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 h) Read and reread familiar passages with fluency, accuracy, and meaningful expression.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	1.7 The student will use semantic clues and syntax to expand vocabulary when reading. 1.7 a) Use words, phrases, and sentences. 1.7 c) Use information in the story to read words. 1.7 f) Reread and self-correct. 3.4 The student will expand vocabulary when reading. 3.4 d) Use context to clarify meaning of unfamiliar words.
CCSS Writing Standards	
Text Types and Purposes	
1. Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	1.13 CF Write informative/explanatory texts that introduce a topic, state an opinion, and provide a conclusion.
2. Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	1.13 The student will write to communicate ideas for a variety of purposes. 1.13 b) Focus on one topic.

CCSS Grade 1	English SOL
	1.13 CF Write informative/explanatory pieces that name a topic, some facts, and concluding sentence (e.g., write about Benjamin Franklin).
3. Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	1.13 CF Write narrative pieces that include at least two sequenced events, with some details, and conclusion.
Production and Distribution of Writing	
4. (Begins in grade 3) *No standard stated for CCSS.*	
5. With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.	1.13 CF Students are expected to revise their written pieces by adding descriptive words (adjectives) when writing about people, places, things, and events; focusing on the topic; and responding to questions and suggestions from peers and teachers.
6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.	1.14 CF Use digital tools to produce and publish writing including in collaboration with peers.
Research to Build and Present Knowledge	
7. Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).	1.13 CF participate in shared research and writing projects
8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	1.14 CF Ask and respond to questions about material presented through media.
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.	1.3 The student will adapt or change oral language to fit the situation. 1.3 a) Initiate conversation with peers and adults.

CCSS Grade 1	English SOL
a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).	1.3 b) Follow rules for conversation using appropriate voice level in small-group settings.
b. Build on others' talk in conversations by responding to the comments of others through multiple exchanges.	1.3 CF Students are expected to sustain two-person conversation through multiple exchanges.
c. Ask questions to clear up any confusion about the topics and texts under discussion.	K.2 The student will expand understanding and use of word meanings. K.2 f) Ask about words not understood. 1.1 CF Participate in a variety of oral language activities, such as asking and answering questions about what is said in order to gather additional information or clarify something not understood; 1.3 The student will adapt or change oral language to fit the situation. 1.3 c) Ask and respond to questions.
2. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.	1.1 The student will continue to demonstrate growth in the use of oral language. 1.1 a) Listen and respond to a variety of electronic media and other age-appropriate materials. 1.2 The student will expand understanding and use of word meanings. 1.2 b) Begin to ask for clarification and explanation of words and ideas.
3. Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.	1.1 CF Participate in a variety of oral language activities, such as asking and answering questions about what is said in order to gather additional information or clarify something not understood.
Presentation of Knowledge and Ideas	
4. Describe people, places, things, and events with relevant	K.2 The student will expand understanding and use of word

CCSS Grade 1	English SOL
details, expressing ideas and feelings clearly.	meanings. K.2 c) Use words to describe/name people, places, and things. 1.1 The student will continue to demonstrate growth in the use of oral language. 1.1 b) Tell and retell stories and events in logical order. 1.1 e) Express ideas orally in complete sentences.
5. Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings.	K.6 The student will demonstrate an understanding that print conveys meaning. K.6 c) Read and explain own writing and drawings. K.12 The student will write to communicate ideas for a variety of purposes. K.12 b) Draw pictures and/or use letters and phonetically spelled words to write about experiences.
6. Produce complete sentences when appropriate to task and situation.	1.1 The student will continue to demonstrate growth in the use of oral language. 1.1 e) Express ideas orally in complete sentences.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print all upper- and lowercase letters.	K.11 The student will print in manuscript. K.11 a) Print uppercase and lowercase letters of the alphabet independently.
b. Use common, proper, and possessive nouns.	1.2 The student will expand understanding and use of word meanings. 1.2 c) Use common singular and plural nouns. 2.7 CF demonstrate an understanding of what the apostrophe signifies in singular possessive words (e.g.,Maria's).
c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).	1.2 CF Use common singular and plural nouns with matching verbs in basic sentences (e.g., *She walks., We walk.*).
d. Use personal, possessive, and indefinite pronouns (e.g., I, me,	1.2 CF Use common pronouns (e.g., I, me, mine; they, them,

CCSS Grade 1	English SOL
my; they, them, their, anyone, everything).	theirs, anyone, everything). 2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 d) Use singular and plural nouns and pronouns.
e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).	2.1 CF Use present, past, and future tenses appropriately.
f. Use frequently occurring adjectives.	K.8 CF Use common adjectives to distinguish objects (e.g., the *small red* square; the *shy white cat*) (Students are not required to know the term adjective at this level.).
g. Use frequently occurring conjunctions (e.g., and, but, or, so, because).	1.2 CF Use articles (e.g., a, an, the), conjunctions (e.g., and, but, or, so, because), and prepositions (e.g., during, beyond, toward) correctly.
h. Use determiners (e.g., articles, demonstratives).	3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 i) Use the articles a, an, and the correctly. 1.2 CF Use articles (e.g., a, an, the), conjunctions (e.g., and, but, or, so, because), and prepositions (e.g., during, beyond, toward) correctly.
i. Use frequently occurring prepositions (e.g., during, beyond, toward).	1.2 CF Use articles (e.g., a, an, the), conjunctions (e.g., and, but, or, so, because), and prepositions (e.g., during, beyond, toward) correctly. 4.8 CF Appropriately identify and use the following parts of a sentence in writing: subject, predicate, and prepositional phrase.
j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.	1.13 The student will write to communicate ideas for a variety of purposes. 1.13 d) Use complete sentences in final copies. 1.13 CF In final copies, use complete sentences that begin with a

CCSS Grade 1	English SOL
	capital letter and use correct ending punctuation. 2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 a) Recognize and use complete sentences. 2.13 b) Use and punctuate declarative, interrogative, and exclamatory sentences.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize dates and names of people.	1.13 CF Capitalize dates and names of people.
b. Use end punctuation for sentences.	1.13 The student will write to communicate ideas for a variety of purposes. 1.13 e) Begin each sentence with a capital letter and use ending punctuation in final copies.
c. Use commas in dates and to separate single words in a series.	1.13 CF In final copies, use complete sentences that begin with a capital letter, use correct ending punctuation, and use commas in dates. 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 f) Use commas in a simple series.
d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.	1.6 The student will apply phonetic principles to read and spell. 1.6 a) Use beginning and ending consonants to decode and spell single-syllable words. 1.6 b) Use two-letter consonant blends to decode and spell single-syllable words. 1.6 c) Use beginning consonant digraphs to decode and spell single-syllable words. 1.6 d) Use short vowel sounds to decode and spell single-syllable words. 1.6 e) Blend beginning, middle, and ending sounds to recognize

CCSS Grade 1	English SOL
	and read words. 1.6 f) Use word patterns to decode unfamiliar words. 1.6 g) Read and spell simple two-syllable compound words. 1.6 h) Read and spell commonly used sight words. 1.13 The student will write to communicate ideas for a variety of purposes. 1.13 f) Use correct spelling for commonly used sight words and phonetically regular words in final copies.
e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.	1.12 The student will print legibly. 1.12 c) Use the alphabetic code to write unknown words phonetically.
Knowledge of Language	
3. (Begins in grade 2) *No standard stated for CCSS.*	
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase.	1.2 The student will expand understanding and use of word meanings. 1.2 d) Use vocabulary from other content areas. 1.7 The student will use semantic clues and syntax to expand vocabulary when reading. 1.7 d) Use knowledge of sentence structure. 1.8 The student will expand vocabulary. 1.8 b) Develop vocabulary by listening to and reading a variety of texts. 1.8 c) Ask for the meaning of unknown words and make connections to familiar words. 1.8 d) Use text clues such as words or pictures to discern meanings of unknown words. 1.8 e) Use vocabulary from other content areas. 2.6 CF Determine which of the multiple meanings of a word in

CCSS Grade 1	English SOL
	context makes sense by using semantic clues.
b. Use frequently occurring affixes as a clue to the meaning of a word.	2.7 The student will expand vocabulary when reading. 2.7 b) Use knowledge of prefixes and suffixes.
c. Identify frequently occurring root words (e.g., look) and their inflectional forms (e.g., looks, looked, looking).	1.7 CF Expand vocabulary by using frequently occurring root words to read inflectional forms (e.g., *look, looks, looked, looking*).
5. With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. a. Sort words into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.	K.8 CF Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
b. Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes).	1.8 CF Ask for the meaning of unknown words and make connections to familiar words by defining words by category and by one or more attributes (e.g., *a swan is a bird that swims*, *a cardinal is a red bird*)
c. Identify real-life connections between words and their use (e.g., note places at home that are cozy).	K.8 CF Identify real-life connections between words and their use (e.g., places that are loud). 1.8 CF Ask for the meaning of unknown words and make connections to familiar words by identifying real-life connections between words and their use (e.g., places that are *safe*).
d. Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.	1.1 The student will continue to demonstrate growth in the use of oral language. 1.1 d) Participate in creative dramatics. 1.1 CF Participate in creative dramatics, (e.g., classroom songs, plays, skits, and group activities) designed to give students frequent opportunities for listening and speaking. 2.7 CF Discuss meanings of words and develop vocabulary (e.g., closely related adjectives such as slender, thin, scrawny; closely related verbs such as look, peek, glance).

CCSS Grade 1	English SOL
6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., I named my hamster Nibblet because she nibbles too much because she likes that).	1.2 The student will expand understanding and use of word meanings. 1.2 a) Increase listening and speaking vocabularies. 1.2 CF Use articles (e.g., a, an, the), conjunctions (e.g., and, but, or, so, because), and prepositions (e.g., during, beyond, toward) correctly.

English SOL for grade 1 aligned with the CCSS at other grade levels	
Grade 2 Speaking and Listening 5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.	1.1 The student will continue to demonstrate growth in the use of oral language. 1.1 c) Participate in a variety of oral language activities, including choral speaking and reciting short poems, rhymes, songs, and stories with repeated patterns.
Kindergarten Reading Standards: Foundational Skills 2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words.	1.4. The student will orally identify, produce, and manipulate various units of speech sounds within words. 1.4 a) Create rhyming words.
Kindergarten Reading Standards: Foundational Skills 2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes). e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	1.4 e) Add or delete phonemes (sounds) to make new words.
Kindergarten Reading Standards: Foundational Skills 1. Demonstrate understanding of the organization and basic features of print. a. Follow words from left to right, top to bottom, and page by page.	1.5 The student will apply knowledge of how print is organized and read. 1.5 a) Read from left to right and from top to bottom.

English SOL for grade 1 aligned with the CCSS at other grade levels	
Kindergarten Reading Standards: Foundational Skills 1. Demonstrate understanding of the organization and basic features of print. b. Recognize that spoken words are represented in written language by specific sequences of letters.	1.5 The student will apply knowledge of how print is organized and read. 1.5 b) Match spoken words with print.
Kindergarten Reading Standards: Foundational Skills 1. Demonstrate understanding of the organization and basic features of print. c. Understand that words are separated by spaces in print.	1.5 The student will apply knowledge of how print is organized and read. 1.5 a) Read from left to right and from top to bottom. 1.5 b) Match spoken words with print.
Kindergarten Reading Standards: Foundational Skills 1. Demonstrate understanding of the organization and basic features of print. d. Recognize and name all upper- and lowercase letters of the alphabet.	1.5 c) Identify letters, words, sentences, and ending punctuation.
Grade 2 Reading Standards for Literature 5. Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.	1.7 The student will use semantic clues and syntax to expand vocabulary when reading. 1.7 e) Use knowledge of story structure.
Kindergarten Reading Standards for Literature 3. With prompting and support, identify characters, settings, and major events in a story.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 f) Identify characters, setting, and important events.
Grade 2 Reading Standards for Literature 2. Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	1.9 g) Retell stories and events, using beginning, middle, and end.

English SOL for grade 1 aligned with the CCSS at other grade levels	
Grade 5 Reading Standards for Literature 2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.	1.9 h) Identify the main idea or theme.
Grade 2 Language 2. e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	1.11 The student will use simple reference materials. 1.11 a) Use knowledge of alphabetical order by first letter.
Grade 2 Language 2. e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	1.11 b) Use a picture dictionary to find meanings of unfamiliar words.
Grade 2 Writing 5. With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.	1.13 c) Revise by adding descriptive words when writing about people, places, things, and events.

English SOL for grade 1 not explicitly stated in the CCSS at any grade level	
	1.3 The student will adapt or change oral language to fit the situation. 1.3 d) Follow simple two-step oral directions.
	1.3 e) Give simple two-step oral directions.
	1.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 1.4 b) Count phonemes (sounds) in one-syllable words.
	1.5 The student will apply knowledge of how print is organized and read. 1.5 d) Read his/her own writing.
	1.7 The student will use semantic clues and syntax to expand

English SOL for grade 1 not explicitly stated in the CCSS at any grade level	
	vocabulary when reading. 1.7 b) Use titles and pictures.
	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 a) Preview the selection.
	1.9 d) Make and confirm predictions.
	1.12 The student will print legibly. 1.12 a) Form letters accurately.
	1.13 The student will write to communicate ideas for a variety of purposes. 1.13 a) Generate ideas.
	1.13 g) Share writing with others.

Grade 2

CCSS Grade 2	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
1. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 c) Ask and answer questions about what is read. 3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 d) Ask and answer questions about what is read.
2. Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 g) Retell stories and events, using beginning, middle, and end. 2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 g) Identify the main idea. 3.5 CF Gain meaning before, during, and after reading by understanding the basic-lessons or morals of fairy tales, myths, folktales, legends, and fables from diverse cultures.
3. Describe how characters in a story respond to major events and challenges.	2.8 CF Describe how characters in a story or poem respond to key events.
Craft and Structure	
4. Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.	1.1 CF Participate in a variety of oral language activities, such as participating in discussions about stories and poems; 3.5 CF Develop an increased understanding of the essential elements and characteristics of fictional text and poetry.

CCSS Grade 2	English SOL
5. Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.	1.7 The student will use semantic clues and syntax to expand vocabulary when reading. 1.7 e) Use knowledge of story structure. 2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 h) Summarize stories and events with beginning, middle, and end in the correct sequence.
6. Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	2.1 CF Dramatize familiar stories (e.g., plays, skits, reader's theater).
Integration of Knowledge and Ideas	
7. Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.	2.8 CF Use information from illustrations and words to demonstrate comprehension of characters, settings, and plots.
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.	2.8 CF Compare and contrast at least two versions of the same story (e.g., Cinderella stories).
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	2.5 CF Reading Focus Statement: When [students] read independently, students will understand and enjoy books that are considerably longer and more complex in plot, syntax, and structure. 2.8 CF To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ◦ independent level – 98-100% accuracy, or about two of every 100 words misread; student reads independently with little or no instructional support, and

CCSS Grade 2	English SOL
	comprehension is strong. ◦ instructional level – 90-97% accuracy, or three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ◦ frustration level – less than 90% accuracy, or more than ten of every 100 words misread; student reads with neither accuracy nor fluency, and therefore his or her comprehension will be affected.
Reading for Informational Texts	
Key Ideas and Details	
1. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	1.10 The student will read and demonstrate comprehension of a variety of nonfiction texts. 1.10 f) Ask and answer who, what, where, when, why, and how questions about what is read. 2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 e) Ask and answer questions about what is read.
2. Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.	2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 g) Identify the main idea.
3. Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	2.9 CF Students will relate their own experiences to make sense of and talk about a topic by: ◦ recognizing similarities between personal experiences and the text (text to self); ◦ recognizing similarities between the current text and other texts read (text to text); and ◦ recognizing similarities between what is known about the topic and what is discovered in the new text (text to

CCSS Grade 2	English SOL
	world).
Craft and Structure	
4. Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.	2.7 CF Students will also develop vocabulary by discussing meanings of words and by listening and reading a variety of text across the content areas.
5. Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.	2.9 CF Locate information in textbooks and other trade books texts to answer questions (e.g., use text features to locate and answer questions - headings, subheadings, bold print, charts, tables of contents). 2.10 The student will demonstrate comprehension of information in reference materials. 2.10 b) Use pictures, captions, and charts. 3.7 The student will demonstrate comprehension of information from a variety of print and electronic resources. 3.7 b) Use table of contents, indices, and charts.
6. Identify the main purpose of a text, including what the author wants to answer, explain, or describe.	2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 g) Identify the main idea. 3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 e) Identify the author's purpose.
Integration of Knowledge and Ideas	
7. Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	2.9 CF Explain how illustrations and images (e.g., a diagram showing how a machine works) contribute to and clarify text.
8. Describe how reasons support specific points the author makes in a text.	2.9 CF Understand that they must attend to the details of the text in order to comprehend.
9. Compare and contrast the most important points presented by two texts on the same topic.	2.9 CF Students will relate their own experiences to make sense of and talk about a topic by: ◦ recognizing similarities between the current text and

CCSS Grade 2	English SOL
	other texts read (text to text)
Range of Reading and Level of Text Complexity	
10. By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	2.9 CF The intent of this standard is that students will read and demonstrate comprehension of nonfiction texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history and social science, science, and mathematics. In addition, see word accuracy rates under Range of Reading and Level of Text Complexity within *Reading for Literature*. *(SOL 2.8 CF)*
Foundational Skills	
Phonics and Word Recognition	
3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Distinguish long and short vowels when reading regularly spelled one-syllable words.	2.5 The student will use phonetic strategies when reading and spelling. 2.5 CF Distinguish long and short vowels when reading one-syllable regularly spelled words.
b. Know spelling-sound correspondences for additional common vowel teams.	2.5 b) Use knowledge of short, long, and r-controlled vowel patterns to decode and spell words. 2.5 CF Apply knowledge of the consonant-vowel patterns-CV (e.g., *go*), VC (e.g., *in*) , CVC (e.g., *pin*), CVCE (e.g., *take*), CVVC (e.g., *wait*), and CVCC (e.g., *wind*), to decode and spell words.
c. Decode regularly spelled two-syllable words with long vowels.	2.5 The student will use phonetic strategies when reading and spelling. 2.5 c) Decode regular multisyllabic words.
d. Decode words with common prefixes and suffixes.	2.5 CF Decode words with common prefixes and suffixes.
e. Identify words with inconsistent but common spelling-sound correspondences.	3.3 The student will apply word-analysis skills when reading. 3.3 a) Use knowledge of regular and irregular vowel patterns.
f. Recognize and read grade-appropriate irregularly spelled	3.3 CF Apply knowledge of all regular and irregular vowel

CCSS Grade 2	English SOL
words.	patterns to decode words.
Fluency	
4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 b) Set a purpose for reading. 2.8 CF Set a purpose for reading.
b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.	1.7 CF Use intonation, pauses, and emphasis emphases that signal the structure of the sentence when reading aloud (prosody). 2.8 CF Fluency develops as students have many opportunities to practice reading at their independent reading level.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	1.8 CF Use words, pictures, and other clues from text to confirm or self-correct, rereading as necessary. 2.6 The student will use semantic clues and syntax to expand vocabulary when reading. 2.6 a) Use information in the story to read words. 2.6 d) Reread and self-correct. 2.9 CF Reread as necessary to confirm and self-correct for word accuracy and comprehension.
CCSS Writing Standards	
Text Types and Purposes	
1. Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.	2.12 CF Write informative/explanatory pieces that introduce the topic, use facts or opinions, and provide a concluding statement. 3.9 CF Use linking words (e.g., *also*, *another*, *and*, *more*) and linking phrases (e.g., *in order to, because of this, for example*) to connect ideas within categories of information. 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 b) Use transition words to vary sentence structure.

CCSS Grade 2	English SOL
2. Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.	2.12 CF Write informative/explanatory pieces that introduce the topic, use facts, and provide a concluding statement.
3. Write narratives in which they recount a well elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.	2.12 The student will write stories, letters, and simple explanations. 2.12 c) Expand writing to include descriptive detail. 2.12 CF Include a beginning, middle, and end in narrative and expository writing. 2.12 CF Write narratives describing events with details, sequence, and a closure.
Production and Distribution of Writing	
4. (Begins in grade 3) *No standard stated for CCSS.*	
5. With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.	*Note: CCSS specify "with guidance and support" while Virginia sets student performance expectations.* 1.13 The student will write to communicate ideas for a variety of purposes. 1.13 c) Revise by adding descriptive words when writing about people, places, things, and events. 2.12 CF Stay on topic. 2.12 The student will write stories, letters, and simple explanations. 2.12 d) Revise writing for clarity. 4.7 The student will write cohesively for a variety of purposes. 4.7 f) Write a clear topic sentence focusing on the main idea.
6. With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.	*Note: CCSS specify "with guidance and support" while Virginia sets student performance expectations.* 2.14 The student will use available technology for reading and writing. 2.14 CF Use available technology and media for reading and

CCSS Grade 2	English SOL
	writing, including in collaboration with peers.
Research to Build and Present Knowledge	
7. Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).	2.12 CF Participate in shared research and writing projects.
8. Recall information from experiences or gather information from provided sources to answer a question.	2.14 CF Ask and respond to questions about material presented through media.
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).	1.3 The student will adapt or change oral language to fit the situation. 1.3 b) Follow rules for conversation using appropriate voice level in small-group settings. 2.3 The student will use oral communication skills. 2.3 c) Participate as a contributor and leader in a group. 2.3 CF Engage in taking turns in conversations by: ◦ making certain all group members have an opportunity to contribute; ◦ listening attentively by making eye contact while facing the speaker; and ◦ eliciting information or opinions from others.
b. Build on others' talk in conversations by linking their comments to the remarks of others.	2.3 CF Participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, small group, teacher led).
c. Ask for clarification and further explanation as needed about the topics and texts under discussion.	2.3 CF Ask and respond to questions to check for understanding of information presented (e.g., stay on topic, link remarks to those of others).
2. Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.	K.9 The student will demonstrate comprehension of fictional texts.

CCSS Grade 2	English SOL
	K.9 f) Retell familiar stories, using beginning, middle, and end. 2.3 The student will use oral communication skills. 2.3 d) Retell information shared by others.
3. Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.	K.3 The student will build oral communication skills. K.3 h) Begin to ask how and why questions. 1.2 The student will expand understanding and use of word meanings. 1.2 b) Begin to ask for clarification and explanation of words and ideas. 2.3 CF Ask and respond to questions to check for understanding of information presented (e.g., stay on topic, link remarks to those of others).
Presentation of Knowledge and Ideas	
4. Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.	K.3 CF Speak audibly in complete sentences, expressing thoughts, feelings and ideas clearly. 2.3 The student will use oral communication skills. 2.3 a) Use oral language for different purposes: to inform, to persuade, to entertain, to clarify, and to respond. 2.3 b) Share stories or information orally with an audience.
5. Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.	K.1 The student will demonstrate growth in the use of oral language. K.1 b) Participate in a variety of oral language activities including choral and echo speaking and recitation of short poems, rhymes, songs, and stories with repeated word order patterns.2.1 The student will demonstrate an understanding of oral language structure. 1.1 The student will continue to demonstrate growth in the use of oral language. 1.1 c) Participate in a variety of oral language activities, including

CCSS Grade 2	English SOL
	choral speaking and reciting short poems, rhymes, songs, and stories with repeated patterns. 2.1 a) Create oral stories to share with others. 2.2 c) Clarify and explain words and ideas orally.
6. Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification.	K.3 The student will build oral communication skills. K.3 a) Express ideas in complete sentences and express needs through direct requests. 1.1 CF Produce complete sentences when appropriate to task and situation. 2.1 CF Speak in complete sentences when appropriate to task and situation to provide details and clarification.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use collective nouns (e.g., group).	2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. d) Use singular and plural nouns and pronouns.
b. Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish).	2.13 CF Use frequently occurring irregular plural nouns (e.g., feet, children, teeth, fish).
c. Use reflexive pronouns (e.g., myself, ourselves).	4.8 CF Use reflexive pronouns (e.g., myself, ourselves).
d. Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told).	2.1 The student will demonstrate an understanding of oral language structure. 2.1 c) Use correct verb tenses in oral communication. 3.10 d) Use past and present verb tenses.
e. Use adjectives and adverbs, and choose between them depending on what is to be modified.	4.8 CF Use adjectives and adverbs (use adverbs instead of adjectives where appropriate, (e.g., "He played really well." instead of "He played real well.").
f. Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the	2.12 CF Produce, and expand complete simple and compound sentences (e.g., The girl listened to the music; The little girl listened to the loud music).

CCSS Grade 2	English SOL
little boy).	
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize holidays, product names, and geographic names.	3.10 CF Students will demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. 2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 c) Capitalize all proper nouns and the word I.
b. Use commas in greetings and closings of letters.	2.13 i) Use commas in the salutation and closing of a letter.
c. Use an apostrophe to form contractions and frequently occurring possessives.	2.13 e) Use apostrophes in contractions and possessives.
d. Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil).	2.13 h) Use correct spelling for commonly used sight words, including compound words and regular plurals.
e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	1.11 The student will use simple reference materials. 1.11 a) Use knowledge of alphabetical order by first letter. 1.11 b) Use a picture dictionary to find meanings of unfamiliar words. 2.12 CF Consult beginning reference materials, to check and correct spelling (e.g., beginning dictionaries).
Knowledge of Language	
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Compare formal and informal uses of English.	4.2 CF Make oral presentations and reports by-differentiating formal and informal language and style when appropriate to task and situation (e.g., presentations, small-group discussions).
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase.	1.7 CF Use sentence-level context as a clue to the meaning of words and phrases. 2.2 The student will expand understanding and use of word meanings. 2.2 e) Use vocabulary from other content areas. 2.6 The student will use semantic clues and syntax to expand

CCSS Grade 2	English SOL
	vocabulary when reading. 2.6 b) Use knowledge of sentence structure. 2.7 The student will expand vocabulary when reading. 2.7 a) Use knowledge of homophones.
b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell).	2.7 CF Determine the meaning of words when a known prefix is added to a known word (e.g., tie/untie, fold/unfold, write/rewrite, call/recall).
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).	2.7 CF Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., sign, signal).
d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).	2.7 CF Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse; notebook).
e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.	2.10 The student will demonstrate comprehension of information in reference materials. 2.10 c) Use dictionaries, glossaries, and indices. 2.10 d) Use online resources.
5. Demonstrate understanding of word relationships and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).	K.8 CF Identify real-life connections between words and their use (e.g., places that are loud).
b. Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny).	2.7 CF Discuss meanings of words and develop vocabulary (e.g., closely related adjectives such as slender, thin, scrawny; closely related verbs such as look, peek, glance).
6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).	2.2 The student will expand understanding and use of word meanings. 2.2 a) Increase listening and speaking vocabularies. 2.3 CF Share and retell an experience or story to an audience in a

CCSS Grade 2	English SOL
	logical order, with appropriate facts, and descriptive details.

English SOL for grade 2 aligned with the CCSS at other grade levels	
Grade 3 Language 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. i. Produce simple, compound, and complex sentences.	2.1 The student will demonstrate an understanding of oral language structure. 2.1 d) Use increasingly complex sentence structures in oral communication.
Grade 4 Language 5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	2.2 The student will expand understanding and use of word meanings. 2.2 d) Identify and use synonyms and antonyms.
Kindergarten Reading Standards: Foundational Skills 2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes). b. Count, pronounce, blend, and segment syllables in spoken words.	2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 2.4 b) Blend sounds to make one-syllable words.
Kindergarten Reading Standards: Foundational Skills 2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes). d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. (This does not include CVCs ending with /l/, /r/, or /x/.) Grade 1 Reading Standards: Foundational Skills 2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	2.4 c) Segment one-syllable words into individual speech sounds (phonemes).

English SOL for grade 2 aligned with the CCSS at other grade levels	
d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).	
Grade 3 Reading Standards: Foundational Skills 3. Know and apply grade-level phonics and word analysis skills in decoding words. c. Decode multisyllable words.	2.4 e) Blend and segment multisyllabic words at the syllable level.
Grade 1 Reading Standards: Foundational Skills 2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes). b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends. Grade 1 Reading Standards: Foundational Skills 3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the spelling-sound correspondences for common consonant digraphs.	2.5 The student will use phonetic strategies when reading and spelling. 2.5 a) Use knowledge of consonants, consonant blends, and consonant digraphs to decode and spell words.
Kindergarten Language 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.	2.7 The student will expand vocabulary when reading. 2.7 b) Use knowledge of prefixes and suffixes.
Grade 3 Reading for Informational Text 4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.	2.7 d) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts.
Grade 3 Reading for Informational Text 1. Ask and answer questions to demonstrate understanding of a	2.8 The student will read and demonstrate comprehension of fictional texts.

English SOL for grade 2 aligned with the CCSS at other grade levels	
text, referring explicitly to the text as the basis for the answers.	2.8 d) Locate information to answer questions.
Grade 1 Reading for Literature 3. Describe characters, settings, and major events in a story, using key details.	2.8 e) Describe characters, setting, and important events in fiction and poetry.
Grade 3 Speaking and Listening 2. Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	2.8 f) Identify the problem and solution.
Grade 4 Reading for Literature 1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	2.8 i) Draw conclusions based on the text.
Grade 1 Reading Standards: Foundational Skills 4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	2.8 j) Read and reread familiar stories, poems, and passages with fluency, accuracy, and meaningful expression.
Grade 8 Language 6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 c) Use prior and background knowledge as context for new learning.
Grade 1 Reading Standards: Foundational Skills 4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	2.9 d) Set purpose for reading.
Grade 5 Reading for Informational Text 7. Draw on information from multiple print or digital sources,	2.9 f) Locate information to answer questions.

English SOL for grade 2 aligned with the CCSS at other grade levels	
demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	
Grade 1 Reading Standards: Foundational Skills 4. Read with sufficient accuracy and fluency to support comprehension. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.	2.9 h) Read and reread familiar passages with fluency, accuracy, and meaningful expression.
Grade 1 Reading for Informational Text 5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.	2.10 The student will demonstrate comprehension of information in reference materials. 2.10 a) Use table of contents.
Grade 1 Language 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.	2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 b) Use and punctuate declarative, interrogative, and exclamatory sentences.
Grade 1 Language 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print all upper- and lowercase letters. d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their, anyone, everything).	2.13 d) Use singular and plural nouns and pronouns.
Grade 3 Language 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. d. Form and use possessives.	2.13 f) Use contractions and singular possessives.
Grade 4 Language 1. Demonstrate command of the conventions of standard English	2.13 j) Use verbs and adjectives correctly in sentences.

English SOL for grade 2 aligned with the CCSS at other grade levels	
grammar and usage when writing or speaking. d. Order adjectives within sentences according to conventional patterns (e.g., *a small red bag* rather than *a red small bag*).	

English SOL for grade 2 not explicitly stated in the CCSS at any grade level	
	2.1 The student will demonstrate an understanding of oral language structure. 2.1 b) Create and participate in oral dramatic activities.
	2.1 e) Begin to self-correct errors in language use.
	2.3 The student will use oral communication skills. 2.3 e) Follow three- and four-step directions.
	2.3 f) Give three- and four-step directions.
	2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 2.4 a) Count phonemes (sounds) within one-syllable words.
	2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 a) Make and confirm predictions.
	2.8 b) Relate previous experiences to the main idea.
	2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 a) Preview the selection using text features.
	2.9 b) Make and confirm predictions about the main idea.
	2.11 The student will maintain legible printing and begin to make the transition to cursive.
	2.12 The student will write stories, letters, and simple explanations.

English SOL for grade 2 not explicitly stated in the CCSS at any grade level	
	2.12 a) Generate ideas before writing.
	2.12 b) Organize writing to include a beginning, middle, and end for narrative and expository writing.
	2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 g) Use knowledge of simple abbreviations.

Grade 3

CCSS Grade 3	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 f) Ask and answer questions about what is read. 3.5 CF Read for a specific purpose by: ◦ locating specific information in a reading selection; ◦ identifying details that support a stated main idea.
2. Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 i) Identify the main idea. 3.5 CF Gain meaning before, during, and after reading by: understanding the basic-lessons or morals of fairy tales, myths, folktales, legends, and fables from diverse cultures.
3. Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.	3.5 CF Apply knowledge of characterization by describing a character's attributes (traits, motivations or feelings);
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language.	5.4 CF Use context and sentence structure to determine meanings and differentiate among multiple meanings of words. 5.4 CF Identify when an author uses language figuratively.
5. Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.	5.5 CF Recognize structural elements of poems (e.g., verse, rhythm) and drama (e.g., casts, dialogue).
6. Distinguish their own point of view from that of the narrator or those of the characters.	5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5f) Identify and ask questions that clarify various points of

CCSS Grade 3	English SOL
	view.
Integration of Knowledge and Ideas	
7. Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).	2.8 CF Explain how illustrations and images contribute to and clarify text.
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 b) Make connections between previous experiences and reading selections. 3.5 d) Compare and contrast settings, characters, and events.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.	3.3 CF Reading Focus Statement: An emphasis will be placed on learning about words, reading age-appropriate text with fluency and expression, and learning comprehension strategies. 3.5 CF To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ◦ independent level – 98-100% accuracy, or about two of every 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ◦ instructional level – 90-97% accuracy, or three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ◦ frustration level – less than 90% accuracy, or more than ten of every 100 words misread; student reads with

CCSS Grade 3	English SOL
	neither accuracy nor fluency, and therefore his or her comprehension will be affected.
Reading for Informational Texts	
Key Ideas and Details	
1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	3.5 CF Asks and answer questions about the text to demonstrate understanding. 6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 c) Identify questions to be answered.
2. Determine the main idea of a text; recount the key details and explain how they support the main idea.	3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 g) Identify the main idea. 3.6 h) Identify supporting details.
3. Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.	3.5 CF Apply understanding of text structure to guide reading by: ◦ identifying sequence and cause-effect relationships of information in functional texts, such as recipes and other sets of directions.
Craft and Structure	
4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.	2.7 The student will expand vocabulary when reading. 2.7 d) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts. 3.4 The student will expand vocabulary when reading. 3.4 f) Use vocabulary from other content areas.
5. Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.	3.6 CF Use text formats such as the following to preview and set a purpose for reading, and to locate information relevant to a given topic efficiently: ◦ content text features, such as headings and chapter layout by topic;

CCSS Grade 3	English SOL
	◦ functional formats, such as advertisements, flyers, and directions; ◦ specialized type, such as bold face and italics; and ◦ visually and graphically represented information, such as charts, graphs, graphic organizers, pictures, and photographs. 3.7 CF Retrieve information from electronic sources. 6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 a) Use text structures such as type, headings, and graphics, to predict and categorize information in both print and digital texts.
6. Distinguish their own point of view from that of the author of a text.	5.6 CF Form opinions and draw conclusions from the selection.
Integration of Knowledge and Ideas	
7. Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).	3.6 CF Use text features to make meaning by using illustrations to gain information (e.g., maps, photographs).
8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).	5.6 CF Identify structural and organizational patterns such as cause and effect, comparison/contrast, problem/solution, and chronological order. 3.4 CF Apply understanding of language structure to make meaning from text by ◦ using signal transition words of time sequence, such as (e.g., first, second, next, later, after, and finally). 6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 k) Identify cause and effect relationships.
9. Compare and contrast the most important points and key	2.9 CF Use knowledge from their own experiences to make sense

CCSS Grade 3	English SOL
details presented in two texts on the same topic.	of and talk about a topic, recognizing similarities between: ◦ personal experiences and the text; ◦ the current text and other texts read; and ◦ what is known about the topic and what is discovered in the new text.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.	3.3 CF Reading Focus Statement: At the third-grade level, students will make the transition from a focus on learning how to read to an emphasis on reading to learn and reading for enjoyment. An emphasis will be placed on learning about words, reading age-appropriate text with fluency and expression, and learning comprehension strategies. In addition, see word accuracy rates under Range of Reading and Level of Text Complexity within *Reading for Literature*. *(SOL 3.5 CF)*
Foundational Skills	
Phonics and Word Recognition	
3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Identify and know the meaning of the most common prefixes and derivational suffixes.	3.3 The student will apply word-analysis skills when reading. 3.4 The student will expand vocabulary when reading. 3.4 b) Use knowledge of roots, affixes, synonyms, and antonyms.
b. Decode words with common Latin suffixes.	3.4 The student will expand vocabulary when reading. 3.4 b) Use knowledge of roots, affixes, synonyms, and antonyms. 5.4 CF Students will build their knowledge of word origins by learning about Greek and Latin affixes.
c. Decode multisyllable words.	2.4 The student will orally identify, produce, and manipulate various units of speech sounds within words. 2.4 e) Blend and segment multisyllabic words at the syllable level.

CCSS Grade 3	English SOL
	3.3 The student will apply word-analysis skills when reading. 3.3 b) Decode regular multisyllabic words.
d. Read grade-appropriate irregularly spelled words.	3.3 The student will apply word-analysis skills when reading. 3.3 a) Use knowledge of regular and irregular vowel patterns.
Fluency	
4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	3.3 CF Reading Focus Statement: An emphasis will be placed on learning about words, reading age-appropriate text with fluency and expression, and learning comprehension strategies.
b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings	3.5 CF Practice reading and rereading familiar text that is on their independent reading level to develop fluency, accuracy, and expression.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	3.4 The student will expand vocabulary when reading. 3.4 c) Apply meaning clues, language structure, and phonetic strategies. 3.5 CF Use reading strategies to monitor comprehension throughout the reading process by using context to confirm or self-correct word recognition and understanding, rereading as necessary.
CCSS Writing Standards	
Text Types and Purposes	
1. Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons.	3.9 CF Follow the organization of particular forms of writing for informative/explanatory purposes : • use facts, definitions, opinions, quotations, details, or other examples and information to develop the topic.
b. Provide reasons that support the opinion.	3.9 CF Follow the organization of particular forms of writing for informative/explanatory purposes : use facts, definitions, opinions, quotations, details, or other examples and information to develop the topic.
c. Use linking words and phrases (e.g., because, therefore, since,	3.9 CF Use linking words (e.g., *also*, *another*, *and*, *more*) and

CCSS Grade 3	English SOL
for example) to connect opinion and reasons.	linking phrases (e.g., *in order to, because of this, for example*) to connect ideas within categories of information.
d. Provide a concluding statement or section.	3.9 CF Follow the organization of particular forms of writing for informative/explanatory purposes: • introduce a topic and group related information in paragraph form • use facts, definitions, opinions, quotations, details, or other examples and information to develop the topic • use specific vocabulary to inform and explain the topic • provide a concluding statement or section
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.	3.9 CF Follow the organization of particular forms of writing for informative/explanatory purposes: • introduce a topic and group related information in paragraph form
b. Develop the topic with facts, definitions, and details.	3.9 CF Follow the organization of particular forms of writing for informative/explanatory purposes: • use facts, definitions, quotations, details, or other examples and information to develop the topic
c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.	3.9 CF Use linking words (e.g., also, another, and, more) and linking phrases (e.g., in order to, because of this, for example) to connect ideas within categories of information.
d. Provide a concluding statement or section.	3.9 CF Follow the organization of particular forms of writing for: ◦ informative/explanatory purposes – provide a concluding statement or section
3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or	3.9 CF Follow the organization of particular forms of writing for: ◦ narratives – sequence events – use transition words and phrases for sentence variety

CCSS Grade 3	English SOL
characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure.	and to manage the sequence of events – use specific vocabulary to convey experiences and events – provide a conclusion 3.10 CF Punctuate correctly: ◦ using conventions of dialogue, (e.g., quotation marks to indicate someone is saying something, indentation to show that the speaker has changed, and signal words like *he said* and *she exclaimed*).
Production and Distribution of Writing	
4. With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3.)	*Note: CCSS specify "with guidance and support" while Virginia sets student performance expectations.* 3.8 CF Writing Focus Statement: At the third-grade level, students will continue to develop their writing skills. When they write letters, stories, and simple explanations, the instructional emphasis will be on paragraph development. Their sentences will become more complex, and they will learn to select details to elaborate the main idea of the paragraph. Students will revise and edit for correct sentence formation, grammar, capitalization, punctuation, and spelling. They will use their written communication skills across the curricula.
5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 3)	*Note: CCSS specify "with guidance and support" while Virginia sets student performance expectations.* 3.9 The student will write for a variety of purposes. 3.9 a) Identify the intended audience. 3.9 b) Use a variety of prewriting strategies. 3.9 c) Write a clear topic sentence focusing on the main idea. 3.9 d) Write a paragraph on the same topic. 3.9 e) Use strategies for organization of information and

CCSS Grade 3	English SOL
	elaboration according to the type of writing. 3.9 f) Include details that elaborate the main idea. 3.9 g) Revise writing for clarity of content using specific vocabulary and information. 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 a) Use complete sentences. 3.10 b) Use transition words to vary sentence structure. 3.10 c) Use the word I in compound subjects. 3.10 d) Use past and present verb tense. 3.10 e) Use singular possessives. 3.10 f) Use commas in a simple series. 3.10 h) Use apostrophes in contractions with pronouns and in possessives. 3.10 i) Use the articles a, an, and the correctly. 3.10 j) Use correct spelling for frequently used sight words, including irregular plurals.
6. With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.	*Note: CCSS specify "with guidance and support" while Virginia sets student performance expectations.* 3.12 CF Use available technology to compose, edit and share writing as well as to interact and collaborate with others.
Research to Build and Present Knowledge	
7. Conduct short research projects that build knowledge about a topic.	3.11 The student will write a short report. 3.11 a) Construct questions about the topic. 3.11 b) Identify appropriate resources. 3.11 c) Collect and organize information about the topic into a short report. 3.11 d) Understand the difference between plagiarism and using own words.

CCSS Grade 3	English SOL
8. Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.	3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 k) Identify new information gained from reading. 3.7 The student will demonstrate comprehension of information from a variety of print and electronic resources. 3.7 a) Use encyclopedias and other reference books, including online reference materials. 3.11 The student will write a short report. 3.11 a) Construct questions about the topic. 3.11 b) Identify appropriate resources. 3.11 c) Collect and organize information about the topic into a short report. 3.11 d) Understand the difference between plagiarism and using own words. 3.12 CF Use available technology for reading and writing.
9. (Begins in grade 4) *No standard stated for CCSS.*	
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	3.9 CF Students should have practice writing on demand, for shorter time frames, and over extended periods of time.
CCSS Speaking and Listening Standards – Grade 3	
Comprehension and Collaboration	
1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other	3.1 CF Participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, small group, teacher led). 11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.

CCSS Grade 3	English SOL
information known about the topic to explore ideas under discussion.	
b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).	3.1 Take initiative in moving a group discussion forward by following rules for discussions and assigned group roles.
c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.	3.9 CF Ask and respond to questions to check for understanding of information presented (e.g., stay on topic, link remarks to those of others).
d. Explain their own ideas and understanding in light of the discussion.	3.1 CF Participate in a range of collaborative discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, small group, teacher-led).
2. Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 f) Identify the problem and solution. 3.5 CF Identify the problem (conflict) and solution, main idea, and supporting details.
3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.	3.1 The student will use effective communication skills in group activities. 3.1 a) Listen attentively by making eye contact, facing the speaker, asking questions, and summarizing what is said. 3.1 b) Ask and respond to questions from teachers and other group members. 3.1 c) Explain what has been learned. 3.1 d) Use language appropriate for context. 3.1 e) Increase listening and speaking vocabularies.
Presentation of Knowledge and Ideas	
4. Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.	3.2 The student will present brief oral reports using visual media. 3.2 a) Speak clearly. 3.2 b) Use appropriate volume and pitch.

CCSS Grade 3	English SOL
	3.2 c) Speak at an understandable rate. 3.2 e) Use contextually appropriate language and specific vocabulary to communicate ideas. 3.2 CF Deliver oral presentations in an engaging manner that maintains audience interest by reporting on a topic, telling a story, or recounting an experience with appropriate facts and relevant details.
5. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.	3.2 CF Deliver oral presentations in an engaging manner that maintains audience interest by: ◦ speaking at an understandable rate; ◦ using visual media (e.g., images, posters, and charts) to emphasize or enhance facts or details.
6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.	2.1 CF Speak in complete sentences when appropriate to task and situation to provide details and clarification.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.	K.3 The student will build oral communication skills. K.3 a) Express ideas in complete sentences and express needs through direct requests. 3.10 CF Students will identify the following parts of speech: nouns, verbs, and pronouns. 3.9 CF Use precise nouns, verbs, and adjectives. 4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 4.8 d) Use noun-pronoun agreement. 4.8 f) Incorporate adjectives and adverbs. 6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and

CCSS Grade 3	English SOL
	paragraphing. 6.8 g) Choose adverbs to describe verbs, adjectives, and other adverbs**.**
b. Form and use regular and irregular plural nouns.	2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 h) Use correct spelling for commonly used sight words, including compound words and regular plurals. 2.13 CF Use frequently occurring irregular plural nouns (e.g., *feet*, *children*, *teeth*, *fish*). 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 j) Use correct spelling for frequently used sight words, including irregular plurals.
c. Use abstract nouns (e.g., childhood).	2.13 CF Use frequently occurring irregular plural nouns (e.g., feet, children, teeth, fish).
d. Form and use regular and irregular verbs.	2.1 The student will demonstrate an understanding of oral language structure. 2.1 c) Use correct verb tenses in oral communication. 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 d) Use past and present verb tense.
e. Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses.	3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 d) Use past and present verb tense.
f. Ensure subject-verb and pronoun-antecedent agreement.	4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 4.8 a) Use subject-verb agreement. 4.8 CF Use noun/pronoun agreement (pronoun agrees in

CCSS Grade 3	English SOL
	number and gender with its antecedent). 6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 b) Use subject-verb agreement with intervening phrases and clauses. 7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 d) Use subject-verb agreement with intervening phrases and clauses.
g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.	5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 b) Use adjective and adverb comparisons.
h. Use coordinating and subordinating conjunctions.	5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 h) Edit for fragments and run-on sentences. 5.8 k) Identify and use conjunctions.
i. Produce simple, compound, and complex sentences.	2.1 The student will demonstrate an understanding of oral language structure. 2.1 d) Use increasingly complex sentence structures in oral communication. 3.8 CF Writing Focus Statement: Their sentences will become more complex, and they will learn to select details to elaborate the main idea of the paragraph.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

CCSS Grade 3	English SOL
a. Capitalize appropriate words in titles.	2.13 c) Capitalize all proper nouns and the word I.
b. Use commas in addresses.	4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 4.8 e) Use commas in series, dates, and addresses.
c. Use commas and quotation marks in dialogue.	3.10 CF Use conventions of dialogue, (e.g., quotation marks to indicate someone is saying something, indentation to show that the speaker has changed, and signal words like *he said* and *she exclaimed*). 5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 e) Use quotation marks with dialogue. 6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 f) Use quotation marks with dialogue. 6.8 CF Punctuate and format dialogue. 7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 g) Use quotation marks with dialogue.
d. Form and use possessives.	2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 f) Use contractions and singular possessives. 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 e) Use singular possessives. 3.10 h) Use apostrophes in contractions with pronouns and in

CCSS Grade 3	English SOL
	possessives. 5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 a) Use plural possessives.
e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).	3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 j) Use correct spelling for frequently used sight words, including irregular plurals.
f. Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.	3.4 The student will expand vocabulary when reading. 3.4 b) Use knowledge of roots, affixes, synonyms, and antonyms. 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 j) Use correct spelling for frequently used sight words, including irregular plurals.
g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	3.4 The student will expand vocabulary when reading. 3.4 g) Use word reference resources including the glossary, dictionary, and thesaurus.
Knowledge of Language	
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases for effect.	3.2 CF Deliver oral presentations in an engaging manner that maintains audience interest by selecting words and phrases for effect. 4.7 The student will write cohesively for a variety of purposes. 4.7 i) Utilize elements of style, including word choice and sentence variation.
b. Recognize and observe differences between the conventions of spoken and written standard English.	3.10 CF Students will demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
Vocabulary Acquisition and Use	

CCSS Grade 3	English SOL
4. Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.	3.4 The student will expand vocabulary when reading. 3.4 c) Apply meaning clues, language structure, and phonetic strategies. 3.4 e) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts. 3.4 f) Use vocabulary from other content areas.
a. Use sentence-level context as a clue to the meaning of a word or phrase.	3.4 CF Using context clues, such as a restatement, a renaming or synonym, an example, or a direct description or definition included in the sentence or paragraph, to clarify the meaning of unfamiliar words.
b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).	3.4 The student will expand vocabulary when reading. 3.4 b) Use knowledge of roots, affixes, synonyms, and antonyms.
c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).	3.4 CF Apply knowledge of roots to decode unknown words with the same root (e.g., *company, companion*).
d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.	3.4 The student will expand vocabulary when reading. 3.4 g) Use word reference resources including the glossary, dictionary, and thesaurus.
5. Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps).	2.7 CF Discuss meanings of words and develop vocabulary (e.g., closely related adjectives such as slender, thin, scrawny). 5.4 The student will expand vocabulary when reading. 5.4 d) Identify an author's use of figurative language.
b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).	1.8 CF Ask for the meaning of unknown words and make connections to familiar words by identifying real-life connections between words and their use (e.g., places that are *safe*).
c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew,	2.7 CF Discuss meanings of words and develop vocabulary (e.g., closely related adjectives such as slender, thin, scrawny; closely

CCSS Grade 3	English SOL
believed, suspected, heard, wondered).	related verbs such as look, peek, glance).
6. Acquire and use accurately grade-appropriate conversational, general academic, and domain specific words and phrases, including those that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).	3.4 The student will expand vocabulary when reading. 3.4 f) Use vocabulary from other content areas. 4.4 Determine the meaning of general academic and content-specific words or phrases in a text.

English SOL for grade 3 aligned with the CCSS at other grade levels	
Grade 6 Writing 2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.	3.2 The student will present brief oral reports using visual media. 3.2 d) Organize ideas sequentially or around major points of information.
Grade 1 Reading Standards: Foundational Skills 4. Read with sufficient accuracy and fluency to support comprehension. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	3.4 The student will expand vocabulary when reading. 3.4 d) Use context to clarify meaning of unfamiliar words.
Grade 1 Reading Standards: Foundational Skills 4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 a) Set a purpose for reading.
Grade 6 Reading for Informational Text 6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	3.5 e) Identify the author's purpose.

English SOL for grade 3 aligned with the CCSS at other grade levels	
Kindergarten Reading for Literature 1. With prompting and support, ask and answer questions about key details in a text.	3.5 f) Ask and answer questions about what is read.
Grade 4 Reading for Literature 1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	3.5 g) Draw conclusions about text.
Grade 1 Reading for Literature 3. Describe characters, settings, and major events in a story, using key details.	3.5 j) Identify supporting details.
Grade 4 Reading Standards: Foundational Skills 4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	3.5 m) Read with fluency and accuracy.
Grade 6 Reading for Informational Text 6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 a) Identify the author's purpose.
Grade 8 Language 6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	3.6 b) Use prior and background knowledge as context for new learning.
Grade 1 Reading for Informational Text 5. Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.	3.6 c) Preview and use text features.
Grade 2 Reading for Literature 1. Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a	3.6 d) Ask and answer questions about what is read.

English SOL for grade 3 aligned with the CCSS at other grade levels	
text.	
Grade 4 Reading for Informational Text 1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	3.6 e) Draw conclusions based on text.
Grade 4 Reading for Informational Text 2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.	3.6 f) Summarize major points found in nonfiction texts.
Grade 2 Reading for Informational Text 5. Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.	3.7 b) Use table of contents, indices, and charts.
Grade 2 Writing 1. Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also)	3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 b) Use transition words to vary sentence structure.
Grade 1 Language 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. c. Use commas in dates and to separate single words in a series.	3.10 f) Use commas in a simple series.
Grade 1 Language 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. h. Use determiners (e.g., articles, demonstratives).	3.10 i) Use the articles *a*, *an*, and *the* correctly.

English SOL for grade 3 not explicitly stated in the CCSS at any grade level	
	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 c) Make, confirm, or revise predictions.
	3.5 k) Use reading strategies to monitor comprehension throughout the reading process.
	3.5 l) Differentiate between fiction and nonfiction.
	3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 i) Compare and contrast the characteristics of biographies and autobiographies.
	3.8 The student will write legibly in cursive.
	3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 g) Use simple abbreviations.

Grade 4

CCSS Grade 4	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 h) Draw conclusions/make inferences about text. 2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 i) Draw conclusions based on the text. 3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 g) Draw conclusions about text. 4.5 CF Refer to details and examples in a text when explaining what the text says, drawing conclusions/making inferences from text.
2. Determine a theme of a story, drama, or poem from details in the text; summarize the text.	2.8 The student will read and demonstrate comprehension of fictional texts. 2.8 h) Summarize stories and events with beginning, middle, and end in the correct sequence. 4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 c) Identify the main idea. 4.5 CF Identify main ideas of a text and summarize using supporting details.
3. Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).	4.5 CF Describe in depth a character, setting, or event drawing on specific details from the text (e.g., words, actions, or a character's thoughts).
Craft and Structure	

CCSS Grade 4	English SOL
4. Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).	3.5 CF Students will read various types of fictional texts (e.g., children's adventure stories, folktales, legends, fables, fantasy, realistic fiction, and myth), and poetry. 3.5 CF Apply knowledge of characterization by ◦ describing a character's attributes (traits, motivations or feelings).
5. Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.	5.5 CF Recognize structural elements of poems (e.g., verse, rhythm) and drama (e.g., casts, dialogue).
6. Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.	5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5f) Identify and ask questions that clarify various points of view.
Integration of Knowledge and Ideas	
7. Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.	4.5 CF Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.
8. (Not applicable to literature)	
9. Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 f) Describe the relationship between text and previously read materials. 4.5 CF Discuss the similarities and differences between text and previously read materials (e.g., similar themes and topics, patterns of events).

CCSS Grade 4	English SOL
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	4.4 CF Reading Focus Statement: Students will read widely from content-area texts and nonfiction literature. They will also collect information from a variety of resources in order to acquire additional knowledge about a topic. 4.5 CF To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ◦ independent level – 98-100% accuracy, or about two of every 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ◦ instructional level – 90-97% accuracy, or three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored. ◦ frustration level – less than 90% accuracy, or more than ten of every 100 words misread; student reads with neither accuracy nor fluency, and therefore his or her comprehension will be affected.
Reading for Informational Texts	
Key Ideas and Details	
1. Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.	3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 e) Draw conclusions based on text. 4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 f) Draw conclusions and make simple inferences using textual information as support.

CCSS Grade 4	English SOL
2. Determine the main idea of a text and explain how it is supported by key details; summarize the text.	3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 f) Summarize major points found in nonfiction texts. 3.6 CF State in their own words the main idea of a nonfiction selection. 3.6 CF Identify details that support the main idea of a nonfiction selection. 3.6 CF Summarize major points in a selection. 4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 d) Identify the main idea. 4.6 e) Summarize supporting details.
3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.	4.4 CF Reading Focus Statement: Students will read widely from content-area texts and nonfiction literature. They will also collect information from a variety of resources in order to acquire additional knowledge about a topic. They will construct questions about their topic, gather information, and synthesize the information for use in their oral presentations and writings.
Craft and Structure	
4. Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	4.4 CF Determine the meaning of general academic and content-specific words or phrases in a text. 4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 e) Identify the problem and solution
5. Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 h) Identify the problem and solution. 3.6 CF Apply understanding of text structure to guide reading by identifying sequence and cause-effect relationships of

CCSS Grade 4	English SOL
	information in functional texts, such as recipes and other sets of directions. 4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 g) Distinguish between cause and effect. 5.6 CF Identify structural and organizational patterns such as cause and effect, comparison/contrast, problem/solution, and chronological order.
6. Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.	5.6 CF Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.
Integration of Knowledge and Ideas	
7. Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	2.10 CF Interpret pictures, captions, diagrams, and tables. 4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 a) Use text structures, such as type, headings, and graphics, to predict and categorize information in both print and digital texts.
8. Explain how an author uses reasons and evidence to support particular points in a text.	4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6c) Explain the author's purpose.
9. Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	4.9 CF Evaluate and combine (synthesize) related information from two or more sources.
Range of Reading and Level of Text Complexity	
10. By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.	4.4 CF Reading Focus Statement: Students will read widely from content-area texts and nonfiction literature. They will also collect information from a variety of resources in order to acquire additional knowledge about a topic. They will construct

CCSS Grade 4	English SOL
	questions about their topic, gather information, and synthesize the information for use in their oral presentations and writings. In addition, see word accuracy rates under Range of Reading and Level of Text Complexity within *Reading for Literature*. *(SOL 4.5 CF)*
Foundational Skills	
Phonics and Word Recognition	
3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multi-syllabic words in context and out of context.	4.4 CF Students will use combined knowledge of all letter-sound correspondences, syllabication patterns, roots, and affixes to read accurately multisyllabic words. 5.4 CF Students will use combined knowledge of all letter-sound correspondences, syllabication patterns, roots, and affixes to read accurately multisyllabic words in context and out.
Fluency	
4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 m) Read with fluency and accuracy. 4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 k) Use reading strategies throughout the reading process to monitor comprehension. 4.5 l) Read with fluency and accuracy. 4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 l) Read with fluency and accuracy.
b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 l) Read with fluency and accuracy.

CCSS Grade 4	English SOL
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 k) Use reading strategies throughout the reading process to monitor comprehension.
CCSS Writing Standards	
Text Types and Purposes	
1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.	4.7 The student will write cohesively for a variety of purposes. 4.7 g) Write two or more related paragraphs on the same topic. 4.7 CF Recognize different modes of writing have different patterns of organization ◦ informative/explanatory – clearly introduce a topic and group related information in paragraphs – use facts, definitions, opinions, quotations, details, or other examples and information to develop the topic – use specific vocabulary to inform and explain the topic; – provide a concluding statement or section related to the topic
b. Provide reasons that are supported by facts and details.	4.1 The student will use effective oral communication skills in a variety of settings. 4.1 d) Use evidence to support opinions.
c. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).	4.7 CF Link ideas within paragraphs using words and phrases (e.g., another, for example, since, also).
d. Provide a concluding statement or section related to the opinion presented.	4.7 CF Recognize different modes of writing have different patterns of organization ◦ informative/explanatory – clearly introduce a topic and group related information in paragraphs

CCSS Grade 4	English SOL
	– use facts, definitions, opinions, quotations, details, or other examples and information to develop the topic – use specific vocabulary to inform and explain the topic; and – provide a concluding statement or section related to the topic
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.	4.7 CF Recognize different modes of writing have different patterns of organization ° informative/explanatory – clearly introduce a topic and group related information in paragraphs.
b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.	4.7 The student will write cohesively for a variety of purposes. 4.7 b) Focus on one aspect of a topic. 4.7 k) Include supporting details that elaborate the main idea. 4.7 CF Recognize different modes of writing have different patterns of organization ° informative/explanatory – use facts, definitions, quotations, details, or other examples and information to develop the topic.
c. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).	3.9 CF Use linking words (e.g., also, another, and, more) and linking phrases (e.g., in order to, because of this, for example) to connect ideas within categories of information.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	4.2 The student will make and listen to oral presentations and reports. 4.2 a) Use subject-related information and vocabulary. 4.7 CF Recognize different modes of writing have different patterns of organization

CCSS Grade 4	English SOL
	◦ informative/explanatory – use specific vocabulary to inform and explain the topic.
e. Provide a concluding statement or section related to the information or explanation presented.	4.7 CF Recognize different modes of writing have different patterns of organization ◦ informative/explanatory – provide a concluding statement or section related to the topic
3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.	4.7 CF Recognize different modes of writing have different patterns of organization ◦ narrative – organize an event sequence that unfolds naturally
b. Use dialogue and description to develop experiences and events or show the responses of characters to situations.	5.7 CF Use narrative techniques, such as dialogue, description, and pacing, to develop experiences or characters.
c. Use a variety of transitional words and phrases to manage the sequence of events.	4.7 The student will write cohesively for a variety of purposes. 4.7 h) Use transition words for sentence variety. 4.7 CF Recognize different modes of writing have different patterns of organization ◦ narrative – use transition words and phrases for sentence variety and to manage the sequence of events.
d. Use concrete words and phrases and sensory details to convey experiences and events precisely.	4.7 CF Recognize different modes of writing have different patterns of organization ◦ narrative – use specific vocabulary, words, and phrases to convey experiences and events

CCSS Grade 4	English SOL
e. Provide a conclusion that follows from the narrated experiences or events.	4.7 CF Recognize different modes of writing have different patterns of organization ◦ narrative – provide a conclusion
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.	4.7 The student will write cohesively for a variety of purposes. 4.7 a) Identify intended audience. 4.7 d) Organize writing to convey a central idea. 4.7 CF Produce clear and coherent writing in which the development and organization are appropriate to purpose and audience.
5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 4.)	*Note: CCSS specify "with guidance and support" while Virginia sets student performance expectations.* 4.7 The student will write cohesively for a variety of purposes. 4.7 j) Revise writing for clarity of content using specific vocabulary and information. 4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 4.8 a) Use subject-verb agreement. 4.8 b) Include prepositional phrases. 4.8 c) Eliminate double negatives. 4.8 d) Use noun-pronoun agreement. 4.8 e) Use commas in series, dates, and addresses. 4.8 f) Incorporate adjectives and adverbs. 4.8 g) Use correct spelling for frequently used words, including common homophones. 4.8 h) Use singular possessives.

CCSS Grade 4	English SOL
	4.7 CF Create a plan and organize thoughts to convey a central idea before writing. 4.7 CF Revise the language, organization, and content of a piece of writing for a specific purpose.
6. With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.	4.7 CF Use available technology to gather information, aid in writing, and interact and collaborate with others.
Research to Build and Present Knowledge	
7. Conduct short research projects that build knowledge through investigation of different aspects of a topic.	4.9 CF Research Focus Statement: At the fourth-grade level, students will conduct short research projects based on focused questions. Students will gather relevant information from sources and integrate the information while avoiding plagiarism.
8. Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.	4.9 The student will demonstrate comprehension of information resources to research a topic. 4.9 b) Collect information from multiple resources including online, print, and media. 4.9 c) Use technology as a tool to organize, evaluate, and communicate information. 4.9 d) Give credit to sources used in research. 4.9 e) Understand the difference between plagiarism and using own words.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	3.11 CF Understand how information should be collected, analyzed and organized as a part of the process of writing a short report.
a. Apply grade 4 Reading standards to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 b) Describe how the choice of language, setting, characters,

CCSS Grade 4	English SOL
thoughts, words, or actions].”).	and information contributes to the author's purpose.
b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).	4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 c) Explain the author's purpose. 4.5 CF Describe in depth a character, setting, or event drawing on specific details from the text (e.g., words, actions, or a character’s thoughts). 4.1 CF Identifying reasons and evidence a speaker provides to support particular points.
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	4.7 CF Students should have practice writing on demand, for shorter time frames, and over extended periods of time.
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on *grade 4 topics and texts*, building on others’ ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.	4.1 The student will use effective oral communication skills in a variety of settings. 4.1 b) Contribute to group discussions across content areas. 4.1 e) Use grammatically correct language and specific vocabulary to communicate ideas. 4.1 f) Communicate new ideas to others. 4.1 g) Demonstrate the ability to collaborate with diverse teams. 4.1 CF Participate in a range of discussions building on others' ideas and clearly expressing their own (e.g., one-on-one, in groups, teacher-led). 11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.
b. Follow agreed-upon rules for discussions and carry out	4.1 CF Following rules for discussions and assigned partner or

CCSS Grade 4	English SOL
assigned roles.	group roles.
c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.	4.1 CF Responding to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	4.1 CF Reviewing key ideas expressed in discussions and explaining their own ideas and understanding;
2. Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	5.9 CF Summarize or paraphrase information in notes and finished work.
3. Identify the reasons and evidence a speaker provides to support particular points.	4.1 CF Identifying reasons and evidence a speaker provides to support particular points;
Presentation of Knowledge and Ideas	
4. Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	3.2 The student will present brief oral reports using visual media. 3.2 a) Speak clearly. 3.2 b) Use appropriate volume and pitch. 3.2 c) Speak at an understandable rate. 3.2 e) Use contextually appropriate language and specific vocabulary to communicate ideas. 4.2 CF Reporting on a topic or text, telling a story, or recounting an experience in an organized manner, using specific vocabulary, appropriate facts and descriptive details to support main ideas or themes.
5. Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.	4.2 CF Adding visual displays to presentations when appropriate to enhance development of theme and/or main ideas. 4.2 The student will make and listen to oral presentations and reports. 4.2 b) Listen to and record information.
6. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse	4.2 CF Make oral presentations and reports, differentiating formal and informal language and style when appropriate to task

CCSS Grade 4	English SOL
is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.	and situation (e.g., presentations, small-group discussions).
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (*who, whose, whom, which, that*) and relative adverbs (*where, when, why*).	4.8 CF Appropriately identify and use the following parts of speech: nouns, pronouns, verbs, adjectives, adverbs, and prepositions in their writing. 5.8 CF Students will also identify effectively use the following parts of speech: nouns, pronouns, verbs, adjectives, adverbs, prepositions, and interjections.
b. Form and use the progressive (e.g., *I was walking; I am walking; I will be walking*) verb tenses.	3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 d) Use past and present verb tense.
c. Use modal auxiliaries (e.g., *can, may, must*) to convey various conditions.	4.8 CF Appropriately identify and use the following parts of speech: nouns, pronouns, verbs, adjectives, adverbs, and prepositions in their writing.
d. Order adjectives within sentences according to conventional patterns (e.g., *a small red bag* rather than *a red small bag*).	2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 2.13 j) Use verbs and adjectives correctly in sentences.
e. Form and use prepositional phrases.	4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 4.8 b) Include prepositional phrases.
f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.	5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 h) Edit for fragments and run-on sentences.
g. Correctly use frequently confused words (e.g., *to, too, two; there, their*).	4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and

CCSS Grade 4	English SOL
	paragraphing. 4.8 g) Use correct spelling for frequently used words, including common homophones. 6.8 CF Use reference sources to differentiate among homophones and easily confused words,(e.g., *a lot/allot, effect/affect, bored/board*).
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use correct capitalization.	4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 4.8 a) Use subject-verb agreement. 4.8 b) Include prepositional phrases. 4.8 c) Eliminate double negatives. 4.8 d) Use noun-pronoun agreement. 4.8 e) Use commas in series, dates, and addresses. 4.8 f) Incorporate adjectives and adverbs. 4.8 g) Use correct spelling for frequently used words, including common homophones. 4.8 h) Use singular possessives. 5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 i) Eliminate double negatives.
b. Use commas and quotation marks to mark direct speech and quotations from a text.	3.10 CF Using conventions of dialogue, (e.g., quotation marks to indicate someone is saying something, indentation to show that the speaker has changed, and signal words like *he said* and *she exclaimed*). 5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing.

CCSS Grade 4	English SOL
	5.8 e) Use quotation marks with dialogue. 6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 f) Use quotation marks with dialogue. 6.8 CF Punctuate and format dialogue.
c. Use a comma before a coordinating conjunction in a compound sentence.	6.7 CF Incorporate variety into sentences, using appropriate coordination, joining words, phrases, clauses, or sentences by using appropriate coordinating conjunctions;
d. Spell grade-appropriate words correctly, consulting references as needed.	4.4 The student will expand vocabulary when reading. 4.4 c) Use word-reference materials, including the glossary, dictionary, and thesaurus. 4.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 4.8 g) Use correct spelling for frequently used words, including common homophones.
Knowledge of Language	
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases to convey ideas precisely.	4.7 CF Use precise language and vocabulary to explain a topic.
b. Choose punctuation for effect.	4.7 The student will write cohesively for a variety of purposes. 4.7 i) Utilize elements of style, including word choice and sentence variation.
c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).	4.2 CF Make oral presentations and reports, differentiating formal and informal language and style when appropriate to task and situation (e.g., presentations, small-group discussions).
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-	4.4 The student will expand vocabulary when reading.

CCSS Grade 4	English SOL
meaning words and phrases based on *grade 4 reading and content,* choosing flexibly from a range of strategies. a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.	4.4 a) Use context to clarify meanings of unfamiliar words. 4.4 b) Use knowledge of roots, affixes, synonyms, antonyms, and homophones. 4.4 c) Use word-reference materials, including the glossary, dictionary, and thesaurus. 4.4 d) Develop vocabulary by listening to and reading a variety of texts. 4.4 e) Use vocabulary from other content areas.
b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *telegraph, photograph, autograph*).	5.4 CF Students will build their knowledge of word origins by learning about Greek and Latin affixes. 6.4 CF Use common, grade-appropriate Greek or Latin affixes and roots as clues to determine meanings of common English words.
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	4.4 The student will expand vocabulary when reading. 4.4 c) Use word-reference materials, including the glossary, dictionary, and thesaurus. 6.4 CF Students will develop independence with reference books to determine meaning, pronunciation, and origin of words.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*) in context.	5.4 The student will expand vocabulary when reading. 5.4 d) Identify an author's use of figurative language. 6.4 CF Identify figurative language in text, including: ◦ simile – figures of speech that use the words *like* or *as* to make comparisons; ◦ hyperbole – intentionally exaggerated figures of speech; and ◦ metaphor – a comparison equating two or more unlike things without using "like" or "as."
b. Recognize and explain the meaning of common idioms,	9.3 The student will apply knowledge of word origins,

CCSS Grade 4	English SOL
adages, and proverbs.	derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 d) Identify the meaning of common idioms.
c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	2.2 The student will expand understanding and use of word meanings. 2.2 d) Identify and use synonyms and antonyms. 2.7 The student will expand vocabulary when reading. 2.7 c) Use knowledge of antonyms and synonyms. 4.4 CF Use their knowledge of synonyms (words with similar meanings) and antonyms (words with opposite meanings) to understand the meanings of unfamiliar words.
6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., *quizzed, whined, stammered*) and that are basic to a particular topic (e.g., *wildlife, conservation,* and *endangered* when discussing animal preservation).	4.4 The student will expand vocabulary when reading. 4.4e) Use vocabulary from other content areas. 4.4 CF Determine the meaning of general academic and content-specific words or phrases in a text.

English SOL for grade 4 aligned with the CCSS at other grade levels	
Grade 6 Writing 2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.	4.2 The student will make and listen to oral presentations and reports. 4.2 c) Organize information for clarity.

English SOL for grade 4 aligned with the CCSS at other grade levels	
Grade 6 Speaking and Listening 1. b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.	4.2 d) Use language and style appropriate to the audience, topic, and purpose.
Grade 7 Reading for Literature 7. Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).	4.3 The student will learn how media messages are constructed and for what purposes. 4.3 a) Differentiate between auditory, visual, and written media messages.
Grade 6 Reading for Informational Text 6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 a) Explain the author's purpose.
Grade 5 Reading for Literature 2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.	4.5 d) Summarize supporting details.
Grade 5 Reading Standards: Foundational Skills c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.5 i) Make, confirm, or revise predictions.
Grade 5 Writing 9. Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., "Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]").	4.5 j) Identify cause and effect relationships.
Grade 6 Reading for Informational Text 6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 c) Explain the author's purpose.

English SOL for grade 4 aligned with the CCSS at other grade levels	
Grade 6 Speaking and Listening 3. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	4.6 h) Distinguish between fact and opinion.
Grade 5 Writing 9.b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").	4.6 j) Identify new information gained from reading.
Grade 2 Writing 5. With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.	4.7 The student will write cohesively for a variety of purposes. 4.7 f) Write a clear topic sentence focusing on the main idea.
Grade 5 Reading for Informational Text 7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	4.9 The student will demonstrate comprehension of information resources to research a topic. 4.9 a) Construct questions about a topic.

English SOL for grade 4 not explicitly stated in the CCSS at any grade level	
	4.1 The student will use effective oral communication skills in a variety of settings. 4.1 a) Present accurate directions to individuals and small groups.
	4.1 c) Seek ideas and opinions of others.
	4.1 h) Demonstrate the ability to work independently.
	4.3 The student will learn how media messages are constructed and for what purposes. 4.3 b) Identify the characteristics of various media messages.
	4.6 The student will read and demonstrate comprehension of

English SOL for grade 4 not explicitly stated in the CCSS at any grade level	
	nonfiction texts. 4.6 i) Use prior knowledge and build additional background knowledge as context for new learning.
	4.7 The student will write cohesively for a variety of purposes. 4.7 c) Use a variety of pre-writing strategies.

Grade 5

CCSS Grade 5	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 h) Draw conclusions/make inferences about text. 4.5 CF Refer to details and examples in a text when explaining what the text says, drawing conclusions/making inferences from text. 5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 i) Draw conclusions and make inferences from text.
2. Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.	1.9 The student will read and demonstrate comprehension of a variety of fictional texts. 1.9 h) Identify the main idea or theme. 4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 d) Summarize supporting details. 5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 g) Identify main idea. 5.5 h) Summarize supporting details from text. 5.5 CF Identify main idea or theme.
3. Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 d) Compare and contrast settings, characters, and events.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and	5.4 The student will expand vocabulary when reading. 5.4 a) Use context to clarify meaning of unfamiliar words and

CCSS Grade 5	English SOL
similes.	phrases. 5.4 b) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words. 5.4 d) Identify an author's use of figurative language. 6.4 CF Identify figurative language in text, including: ◦ simile – figures of speech that use the words *like* or *as* to make comparisons; ◦ hyperbole – intentionally exaggerated figures of speech; and ◦ metaphor – a comparison equating two or more unlike things without using "like" or "as."
5. Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support. 8.5 j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases. 8.5 k) Identify cause and effect relationships.
6. Describe how a narrator's or speaker's point of view influences how events are described.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning. 8.5 g) Identify and ask questions that clarify various viewpoints.
Integration of Knowledge and Ideas	
7. Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).	5.3 CF Format (This is not just the medium being used but also how the creators used specific elements for effect, i.e., color, sound, emphasis on certain words, amateur video, children's voices.)

CCSS Grade 5	English SOL
	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 c) Describe how word choice and imagery contribute to the meaning of a text. 8.3 CF Recognize that each medium creates meaning differently using visual and verbal techniques. For example, a dissolving picture indicates the passing of time, as do transitional words and phrases in verbal presentations. 8.3 CF Analyze a media text by considering what techniques have been used and their purpose.
8. (Not applicable to literature)	
9. Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.	7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 7.5 b) Compare and contrast various forms and genres of fictional text. 7.5 c) Identify conventional elements and characteristics of a variety of genres.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.	5.5 CF To determine a student's functional reading level for a specific text consider these word accuracy rates from Virginia's Phonological Awareness Literacy Screening (PALS): ◦ independent level – 98-100% accuracy, or about two of every 100 words misread; student reads independently with little or no instructional support, and comprehension is strong. ◦ instructional level – 90-97% accuracy, or three to ten words of every 100 words misread; student reads with modest accuracy and variable fluency and comprehension should be closely monitored.

CCSS Grade 5	English SOL
	° frustration level – less than 90% accuracy, or more than ten of every 100 words misread; student reads with neither accuracy nor fluency, and therefore his or her comprehension will be affected.
Reading for Informational Texts	
Key Ideas and Details	
1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.	4.6 CF Make simple inferences, using information from the text.
2. Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.	5.6 The student will read and demonstrate comprehension of nonfiction texts. 5.6 d) Identify the main idea of nonfiction texts. 5.6 e) Summarize supporting details in nonfiction texts.
3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.	5.6 The student will read and demonstrate comprehension of nonfiction texts. 5.6 j) Identify, compare, and contrast relationships.
Craft and Structure	
4. Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.	5.4 The student will expand vocabulary when reading. 5.4 g) Study word meanings across content areas.
5. Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.	5.6 CF Identify structural and organizational patterns such as cause and effect, comparison/contrast, problem/solution, and chronological order. 7.6 CF Analyze how two or more authors writing about the same topic shape their presentations or viewpoints of key information using facts, opinions, and reasoning.
6. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they	5.6 CF Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in

CCSS Grade 5	English SOL
represent.	focus and the information provided.
Integration of Knowledge and Ideas	
7. Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.	2.9 The student will read and demonstrate comprehension of nonfiction texts. 2.9 f) Locate information to answer questions. 4.9 The student will demonstrate comprehension of information resources to research a topic. 4.9 a) Construct questions about a topic. 4.9 b) Collect information from multiple resources including online, print, and media. 5.9 The student will find, evaluate, and select appropriate resources for a research product. 5.9 a) Construct questions about a topic. 5.9 b) Collect information from multiple resources including online, print, and media.
8. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).	7.6 CF Analyze how two or more authors writing about the same topic shape their presentations or viewpoints of key information using facts, opinions, and reasoning.
9. Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	5.9 CF Evaluate and combine (synthesize) related information from two or more sources. 7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 k) Organize and synthesize information for us in written forms.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.	*Note: See word accuracy rates listed above under Reading for Literature (SOL 5.5 CF)* See word accuracy rates under *Reading for Literature*.

CCSS Grade 5	English SOL
Foundational Skills	
Phonics and Word Recognition	
3. Know and apply grade-level phonics and word analysis skills in decoding words. a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.	5.4 The student will expand vocabulary when reading. 5.4 b) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words. 5.4 c) Use knowledge of roots, affixes, synonyms, antonyms, and homophones. 5.4 CF Students will use combined knowledge of all letter-sound correspondences, syllabication patterns, roots, and affixes to read accurately multisyllabic words in context and out.
Fluency	
4. Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 l) Use reading strategies throughout the reading process to monitor comprehension. 5.5 m) Read with fluency and accuracy. 5.6 CF The intent of this standard is that students will read and demonstrate comprehension of nonfiction texts across the curriculum, including age-appropriate materials that reflect the Virginia Standards of Learning in English, history, and social science, science, and mathematics.
b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.	4.5 CF Read familiar text with fluency, accuracy, and expression. 5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 m) Read with fluency and accuracy. 5.5 CF Read familiar text with fluency, accuracy, and expression to support comprehension.
c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry.

CCSS Grade 5	English SOL
	4.5 i) Make, confirm, or revise predictions. 5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 k) Make, confirm, or revise predictions. 5.5 l) Use reading strategies throughout the reading process to monitor comprehension. 5.5 CF Become aware of when they do not understand (e.g., by reflecting upon and articulating what exactly is causing difficulty). 8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 m), 8.6 l) Use reading strategies to monitor comprehension throughout the reading process.
CCSS Writing Standards	
Text Types and Purposes	
1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.	*Note: The SOL states that writing will be done for a variety of purposes and does not specifically state that opinion pieces will be written.* 5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade. 5.7 d) Write a clear topic sentence focusing on the main idea. 5.7 e) Write multiparagraph compositions. 5.7 CF Produce a clear and coherent written piece in which the development and organization are appropriate to purpose and audience.
b. Provide logically ordered reasons that are supported by facts and details.	5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade. 5.7 i) Include supporting details that elaborate the main idea.
c. Link opinion and reasons using words, phrases, and clauses	5.7 CF Produce a clear and coherent written piece in which the

CCSS Grade 5	English SOL
(e.g., consequently, specifically).	development and organization are appropriate to purpose and audience.
d. Provide a concluding statement or section related to the opinion presented.	5.7 CF Provide a concluding statement or section related to the topic.
2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented.	4.7 CF Recognize different modes of writing have different patterns of organization ° informative/explanatory – clearly introduce a topic and group related information in paragraphs – use facts, definitions, quotations, details, or other examples and information to develop the topic – use specific vocabulary to inform and explain the topic; – provide a concluding statement or section related to the topic 5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade. 5.7 f) Use precise and descriptive vocabulary to create tone and voice.
3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to	4.7 CF Recognize different modes of writing have different patterns of organization ° narrative – organize an event sequence that unfolds naturally – use transition words and phrases for sentence variety and to manage the sequence of events – use specific vocabulary, words, and phrases to convey experiences and events – provide a conclusion 5.7 The student will write for a variety of purposes: to describe,

CCSS Grade 5	English SOL
manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	to inform, to entertain, to explain, and to persuade. 5.7 g) Vary sentence structure by using transition words. 5.7 CF Use narrative techniques, such as dialogue, description, and pacing, to develop experiences or characters.
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3.)	4.7 CF Produce clear and coherent writing in which the development and organization are appropriate to purpose and audience. 5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade. 5.7 a) Identify intended audience. 5.7 b) Use a variety of prewriting strategies. 5.7 c) Organize information to convey a central idea.
5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 5.)	*Note: CCSS specify "with guidance and support" while Virginia sets student performance expectations.* 5.7 CF Develop and strengthen writing as needed, in consultation with peers or adults, by planning, revising, editing, or rewriting.
6. With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.	Computer/Technology SOL 3-5.8 The student will use a variety of media and formats to communicate information and ideas effectively to multiple audiences. • Produce documents demonstrating the ability to edit, reformat, and integrate various software tools. • Use technology tools for individual and collaborative writing, communication, and publishing activities. • Use telecommunication tools to communicate and share information with others.
Research to Build and Present Knowledge	

CCSS Grade 5	English SOL
7. Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	5.9 The student will find, evaluate, and select appropriate resources for a research product. 5.9 a) Construct questions about a topic. 5.9 b) Collect information from multiple resources including online, print, and media.
8. Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.	5.9 The student will find, evaluate, and select appropriate resources for a research product. 5.9 b) Collect information from multiple resources including online, print, and media. 5.9 c) Use technology as a tool to research, organize, evaluate, and communicate information. 5.9 d) Organize information presented on charts, maps, and graphs. 5.9 e) Develop notes that include important concepts, summaries, and identification of information sources. 5.9 f) Give credit to sources used in research. 5.9 CF Summarize or paraphrase information in notes and finished work.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]”).	4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 j) Identify cause and effect relationships. 5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 a) Describe the relationship between text and previously read materials. 5.5 b) Describe character development. 5.5 c) Describe the development of plot and explain the resolution of conflict(s). 5.5 e) Describe how an author's choice of vocabulary contributes

CCSS Grade 5	English SOL
	to the author's style. 5.5 f) Identify and ask questions that clarify various points of view. 5.5 g) Identify main idea. 5.5 h) Summarize supporting details from text. 5.5 i) Draw conclusions and make inferences from text. 5.5 j) Identify cause and effect relationships.
b. Apply grade 5 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]").	4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 j) Identify new information gained from reading. 5.6 The student will read and demonstrate comprehension of nonfiction texts. 5.6 a) Use text organizers, such as type, headings, and graphics, to predict and categorize information in both print and digital texts. 5.6 b) Use prior knowledge and build additional background knowledge as context for new learning. 5.6 c) Skim materials to develop a general overview of content and to locate specific information. 5.6 d) Identify the main idea of nonfiction texts. 5.6 e) Summarize supporting details in nonfiction texts. 5.6 f) Identify structural patterns found in nonfiction. 5.6 g) Locate information to support opinions, predictions, and conclusions. 5.6 h) Identify cause and effect relationships following transition words signaling the pattern. 5.6 i) Differentiate between fact and opinion. 5.6 j) Identify, compare, and contrast relationships. 5.6 k) Identify new information gained from reading.

CCSS Grade 5	English SOL
	5.6 l) Use reading strategies throughout the reading process to monitor comprehension. 5.6 m) Read with fluency and accuracy.
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	5.8 CF Students should have practice writing on demand, for shorter time frames, and over extended periods of time.
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacherled) with diverse partners on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly.	5.1 The student will listen, draw conclusions, and share responses in subject-related group learning activities. 5.1 a) Participate in and contribute to discussions across content areas. 5.1 b) Organize information to present in reports of group activities. 5.1 c) Summarize information gathered in group activities. 5.1 d) Communicate new ideas to others. 5.1 e) Demonstrate the ability to collaborate with diverse teams.
a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.	11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.
b. Follow agreed-upon rules for discussions and carry out assigned roles.	5.1 CF Follow rules for discussions and assigned group roles.
c. Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.	5.1 CF Participate as informed contributors in subject-related group learning activities by responding to specific questions by making comments that contribute to the discussion and elaborating on the remarks of others.

CCSS Grade 5	English SOL
d. Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.	4.1 CF Participate in a variety of partner and/or group discussions by reviewing key ideas expressed in discussions and explaining their own ideas and understanding. 5.2 The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations. 5.2 g) Summarize main points as they relate to main idea or supporting details.
2. Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	5.1 CF Students will refine their organizational skills in preparing, presenting, and summarizing information gathered in group activities. Students will also become able to summarize their own material prior to delivering a presentation.
3. Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.	5.2 The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations. 5.2 g) Summarize main points as they relate to main idea or supporting details.
Presentation of Knowledge and Ideas	
4. Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.	4.2 CF Reporting on a topic or text, telling a story, or recounting an experience in an organized manner, using specific vocabulary, appropriate facts and descriptive details to support main ideas or themes. 5.2 The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations. 5.2 a) Maintain eye contact with listeners. 5.2 b) Use gestures to support, accentuate, and dramatize verbal message. 5.2 c) Use facial expressions to support and dramatize verbal message. 5.2 d) Use posture appropriate for communication setting. 5.2 e) Determine appropriate content for audience.

CCSS Grade 5	English SOL
	5.2 f) Organize content sequentially around major ideas. 5.2 g) Summarize main points as they relate to main idea or supporting details. 5.2 h) Incorporate visual media to support the presentation. 5.2 i) Use language and style appropriate to the audience, topic, and purpose.
5. Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.	3.2 The student will present brief oral reports using visual media. 3.2 h) Incorporate visual media to support the presentation. 5.2 h) Incorporate visual media to support the presentation.
6. Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.	5.2The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations. 5.2 i) Use language and style appropriate to the audience, topic, and purpose.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.	5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 c) Identify and use interjections. 5.8 k) Identify and use conjunctions. 5.8 CF Students will effectively use the following parts of speech: nouns, pronouns, verbs, adjectives, adverbs, prepositions, and interjections.
b. Form and use the perfect (e.g., *I had walked; I have walked; I will have walked*) verb tenses.	5.8 CF Form and use the perfect (e.g., I had walked; I have walked; I will have walked) verb tenses.
c. Use verb tense to convey various times, sequences, states, and conditions.	5.8 CF Use verb tense to convey various times, sequences, states, and conditions.
d. Recognize and correct inappropriate shifts in verb tense.	6.8 The student will edit writing for correct grammar,

CCSS Grade 5	English SOL
	capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 d) Maintain consistent verb tense across paragraphs. 6.8 CF Maintain a consistent verb tense within sentences and throughout and across paragraphs. 7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 e) Edit for verb tense consistency and point of view.
e. Use correlative conjunctions (e.g., *either/or, neither/nor*).	8.8 CF Use correct conjunctions, such as *either/or* and *neither/nor*.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation to separate items in a series.	3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling. 3.10 f) Use commas in a simple series.
b. Use a comma to separate an introductory element from the rest of the sentence.	5.7 CF Use a comma to separate an introductory element from the rest of the sentence.
c. Use a comma to set off the words yes and no (e.g., *Yes, thank you*), to set off a tag question from the rest of the sentence (e.g., *It's true, isn't it?*), and to indicate direct address (e.g., *Is that you, Steve?*).	5.7 CF Use a comma to indicate direct address (e.g., Is that you, Chloe?). 5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 f) Use commas to indicate interrupters. 5.8 CF Punctuate correctly ◦ commas [e.g., items in a series, to set off the words *yes* and *no*; and to indicate direct address (e.g., *Is that you, Chloe?*)]
d. Use underlining, quotation marks, or italics to indicate titles of	5.8 CF Use underlining, quotation marks, or italics to indicate

CCSS Grade 5	English SOL
works.	titles of works.
e. Spell grade-appropriate words correctly, consulting references as needed.	5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 j) Use correct spelling of commonly used words.
Knowledge of Language	
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.	5.2 CF Expand, combine, and reduce sentences for meaning, interest, and style.
b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.	5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 e) Describe how an author's choice of vocabulary contributes to the author's style.
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 5 reading and content,* choosing flexibly from a range of strategies. a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.	5.4 The student will expand vocabulary when reading. 5.4 a) Use context to clarify meaning of unfamiliar words and phrases. 5.4 b) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words. 5.4 f) Develop vocabulary by listening to and reading a variety of texts. 5.4 g) Study word meanings across content areas. 5.4 The student will expand vocabulary when reading.
b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph, photosynthesis*).	6.4 CF Use common, grade-appropriate Greek or Latin affixes and roots as clues to determine meanings of common English words.
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation	5.4 The student will expand vocabulary when reading. meanings and differentiate among multiple meanings of words.

CCSS Grade 5	English SOL
and determine or clarify the precise meaning of key words and phrases.	5.4 e) Use dictionary, glossary, thesaurus, and other word-reference materials. ~~6.4 CF Students will develop independence with reference books to determine meaning, pronunciation, and origin of words.~~
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context.	5.4 The student will expand vocabulary when reading. 5.4 d) Identify an author's use of figurative language. 6.4 CF Identify figurative language in text, including: ◦ simile – figures of speech that use the words *like* or *as* to make comparisons; ◦ hyperbole – intentionally exaggerated figures of speech; and ◦ metaphor – a comparison equating two or more unlike things without using "like" or "as."
b. Recognize and explain the meaning of common idioms, adages, and proverbs.	9.3, 10.3, 11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 d), 10.3 d), 11.3d), 12.3 d) Identify the meaning of common idioms.
c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.	3.4 The student will expand vocabulary when reading. 3.4 a) Use knowledge of homophones. 4.4 CF use their knowledge of synonyms (words with similar meanings) and antonyms (words with opposite meanings) to understand the meanings of unfamiliar words. 5.4 CF Apply knowledge of roots affixes (prefixes and suffixes), synonyms, antonyms, and homophones. 5.4 CF Homographs are words that are pronounced differently and share the same spelling (e.g., We saw the dove fly, or She dove into the swimming pool).
6. Acquire and use accurately grade-appropriate general	5.4 The student will expand vocabulary when reading.

CCSS Grade 5	English SOL
academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., *however, although, nevertheless, similarly, moreover, in addition*).	5.4 f) Develop vocabulary by listening to and reading a variety of texts. 5.4 g) Study word meanings across content areas.

English SOL for grade 5 aligned with the CCSS at other grade levels	
Grade 7 Reading for Literature 5. Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to the meaning.	5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry. 5.5 d) Describe the characteristics of free verse, rhymed, and patterned poetry.
Grade 3 Language 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. d. Form and use possessives.	5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing. 5.8 a) Use plural possessives.
Grade 3 Language 1. g. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.	5.8 b) Use adjective and adverb comparisons.
Grade 3 Language 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. c. Use commas and quotation marks in dialogue.	5.8 e) Use quotation marks with dialogue.
Grades 11-12 Language 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Observe hyphenation conventions.	5.8 g) Use a hyphen to divide words at the end of a line.
Grade 4 Language	5.8 h) Edit for fragments and run-on sentences.

English SOL for grade 5 aligned with the CCSS at other grade levels	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.	
Grade 4 Language 2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use correct capitalization.	5.8 i) Eliminate double negatives.
Grade 6 Writing 8. Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	5.9 The student will find, evaluate, and select appropriate resources for a research product. 5.9 g) Define the meaning and consequences of plagiarism.

English SOL for grade 5 not explicitly stated in the CCSS at any grade level	
	5.1 The student will listen, draw conclusions, and share responses in subject-related group learning activities. 5.1 f) Demonstrate the ability to work independently.
	5.3 The student will learn how media messages are constructed and for what purposes. 5.3 a) Differentiate between auditory, visual, and written media messages.
	5.3 b) Identify the characteristics and effectiveness of a variety of media messages.

Grade 6

CCSS Grade 6	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
Reading Standards for Literature 1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 f) Use information in the text to draw conclusions and make inferences.
2. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 a) Identify the elements of narrative structure, including setting, character, plot, conflict, and theme. 6.5 h) Identify the main idea. 6.5 i) Identify and summarize supporting details. 6.5 CF Determine a central idea or theme of a fictional text and how it is developed through specific details.
3. Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 g) Explain how character and plot development are used in a selection to support a central conflict or story line. 6.5 CF Describe how a fictional plot is often episodic, and how characters develop as the plot moves toward a resolution. 6.5 CF Understand plot as: the development of the central conflict and resolution; the sequence of events in the story; and the writer's map for what happens, how it happens, to whom it happens, and when it happens.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.	6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic text. 6.4 d) Identify and analyze figurative language.

CCSS Grade 6	English SOL
	6.4 CF Recognize that figurative language enriches text. 6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 c) Describe how word choice and imagery contribute to the meaning of a text.
5. Analyze how a particular sentence, chapter, scene, or stanza fits into the overall structure of a text and contributes to the development of the theme, setting, or plot.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support. 8.5 j) Identify an author's organizational pattern using textual clues, such as transitional words and phrases. 8.5 k) Identify cause and effect relationships.
6. Explain how an author develops the point of view of the narrator or speaker in a text.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
Integration of Knowledge and Ideas	
7. Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they "see" and "hear" when reading the text to what they perceive when they listen or watch.	6.3 The student will understand the elements of media literacy. 6.3 a) Compare and contrast auditory, visual, and written media messages. 6.3 CF Compare and contrast reading to, listening, or viewing an audio, video, or live version of the same text.
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics.	7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 7.5 b) Compare and contrast various forms and genres of fictional text. 7.5 c) Identify conventional elements and characteristics of a variety of genres.

CCSS Grade 6	English SOL
	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 c) identify the characteristics that distinguish literary forms. 9.4 d) Use literary terms in describing and analyzing selections. 9.4 f) Compare and contrast the use of rhyme, rhythm, sound, imagery, and other literary devices to convey a message and elicit the reader's emotions. 9.4 h) Explain the relationship between the author's style and literary effect.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	6 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.
Reading for Informational Texts	
Key Ideas and Details	
1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 e) Draw conclusions and make inferences based on explicit and implied information. 6.6 CF Read beyond the printed text to understand the message stated or implied by an author. 6.6 CF Give evidence from the text to support conclusions.
2. Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 f) Differentiate between fact and opinion. 6.6 g) Identify main idea. 6.6 h) Summarize supporting details

CCSS Grade 6	English SOL
	6.6 CF Determine a central idea of a text and recognize how details support that idea. 6.6 CF Summarize the text without providing a personal opinion.
3. Analyze in detail how a key individual, event, or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes).	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. a) Identify the elements of narrative structure, including setting, character, plot, conflict, and theme. 7.5 CF Identify **characterization** as the way an author presents a character and reveals character traits by: what a character says; what a character thinks; what a character does; and how other characters respond to the character.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.	6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic texts. 6.4 c) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words. 6.4 d) Identify and analyze figurative language 6.6 CF Identify clue words and phrases that help unlock meaning of unfamiliar and technical terms. 7.4 CF Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic, condescending*), recognizing that some words have technical meanings based on context such as *stern*.
5. Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.	8.6 CF analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas.

CCSS Grade 6	English SOL
6. Determine an author's point of view or purpose in a text and explain how it is conveyed in the text.	3.5 The student will read and demonstrate comprehension of fictional text and poetry. 3.5 e) Identify the author's purpose. 3.6 The student will continue to read and demonstrate comprehension of nonfiction texts. 3.6 a) Identify the author's purpose. 4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry. 4.5 a) Explain the author's purpose. 4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 c) Explain the author's purpose. 8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning.
Integration of Knowledge and Ideas	
7. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.	6.3 The student will understand the elements of media literacy. 6.3 CF Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue. 6.3 CF Access media message to compare and contrast information presented in different media and/or formats.
8. Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not.	6.2 CF Recognize that facts can be verified and that opinions cannot. 9.5 The student will read and analyze a variety of nonfiction texts. 9.5 e) Identify a position/argument to be confirmed, disproved, or modified.

CCSS Grade 6	English SOL
	9.5 CF Identify an author's position/argument within informational text.
9. Compare and contrast one author's presentation of events with that of another (e.g., a memoir written by and a biography on the same person).	6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 i) Compare and contrast information about one topic, which may be contained in different selections.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	6 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.
CCSS Writing Standards	
Text Types and Purposes	
1. Write arguments to support claims with clear reasons and relevant evidence.	6.7 The student will write narration, description, exposition, and persuasion. 11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 b) Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions. 11 CF Writing Focus Statement: Students will produce arguments in writing that demonstrate knowledgeable judgments and address counterclaims.
a. Introduce claim(s) and organize the reasons and evidence clearly.	11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 c) Organize ideas in a sustained and logical manner. 11.6 d. Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately.
b. Support claim(s) with clear reasons and relevant evidence, using credible sources and demonstrating an understanding of	6.7 CF Develop the topic using relevant facts, definitions, details, quotations, and/or examples.

CCSS Grade 6	English SOL
the topic or text.	
c. Use words, phrases, and clauses to clarify the relationships among claim(s) and reasons.	6.7 CF Use transitional words or phrases to connect parts of sentences in order to: show relationships between ideas; signal a shift or change in the writer's thoughts; signal levels of importance; suggest a pattern of organization; and make sentences clearer.
d. Establish and maintain a formal style.	6.7 CF Establish and maintain a formal style of writing when appropriate.
e. Provide a concluding statement or section that follows from the argument presented.	6.7 CF Provide an appropriate conclusion for the purpose and mode of writing.
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 f) Write multiparagraph compositions with elaboration and unity.
a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.	3.2 The student will present brief oral reports using visual media. 3.2 d) Organize ideas sequentially or around major points of information. 4.2 The student will make and listen to oral presentations and reports. 4.2 c) Organize information for clarity. 6.7 The student will write narration, description, exposition, and persuasion. 6.7 c) Organize writing structure to fit mode or topic. 6.7 CF Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information. 6.7 CF Write using strategies such as definition, classification comparison/contrast, and cause/effect. 6.7 CF Include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when appropriate.

CCSS Grade 6	English SOL
b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.	6.7 CF Develop the topic thoroughly by selecting facts, details, quotations, and appropriate examples for the audience and purpose.
c. Use appropriate transitions to clarify the relationships among ideas and concepts.	6.7 CF Use transitional words or phrases to connect parts of sentences in order to: show relationships between ideas; signal a shift or change in the writer's thoughts; signal levels of importance; suggest a pattern of organization; and make sentences clearer.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 g) Select vocabulary and information to enhance the central idea, tone, and voice. 6.7 CF Craft writing purposefully with attention to: deliberate word choice; precise information and vocabulary; sentence variety; and tone and voice.
e. Establish and maintain a formal style.	6.7 CF Establish and maintain a formal style of writing when appropriate.
f. Provide a concluding statement or section that follows from the information or explanation presented.	6.7 CF Provide an appropriate conclusion for the purpose and mode of writing.
3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 CF Develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences when writing narratives.
a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 d) Establish a central idea and organization. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational.

CCSS Grade 6	English SOL
	8.7 CF Engage and orient the reader by establishing a context and introducing a narrator and/or characters.
b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.	6.7 CF Develop the topic using relevant facts, definitions, details, quotations, and/or examples. 6.7 CF Use transitional words or phrases to connect parts of sentences in order to: show relationships between ideas; signal a shift or change in the writer's thoughts; signal levels of importance; suggest a pattern of organization; and make sentences clearer. 6.7 CF Use appropriate transitions to clarify the relationships among ideas and concepts. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 CF Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.
c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.	6.7 CF Use transitional words or phrases to connect parts of sentences in order to: show relationships between ideas; signal a shift or change in the writer's thoughts; signal levels of importance; suggest a pattern of organization; and make sentences clearer. 6.7 CF Use appropriate transitions to clarify the relationships among ideas and concepts.
d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events.	6.7 CF Write using descriptive details.
e. Provide a conclusion that follows from the narrated experiences or events.	6.7 CF Provide an appropriate conclusion for the purpose and mode of writing.
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and	6.7 The student will write narration, description, exposition, and persuasion.

CCSS Grade 6	English SOL
audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	6.7 a) Identify audience and purpose. 6.7 CF The intent of this standard is that students will demonstrate an awareness of audience and use a process for writing as they produce narrative, descriptive, expository, and persuasive pieces. 6.7 CF Identify audience and purpose for any piece of writing.
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 6 on page 52.)	6.7 The student will write narration, description, exposition, and persuasion. 6.7 b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas. 6.7 i) Revise sentences for clarity of content including specific vocabulary and information. 6 .7 CF Revise drafts for improvement, using teacher assistance, peer collaboration, and growing independence. 6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 c) Use pronoun-antecedent agreement to include indefinite pronouns. 6.8 h) Use correct spelling for frequently used words. 6.8 CF The intent of this standard is that students will understand and apply all the conventions of language learned at the elementary school level.
6. Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three pages in a single sitting.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 j) Use computer technology to plan, draft, revise, edit, and publish writing.
Research to Build and Present Knowledge	
7. Conduct short research projects to answer a question, drawing	6.9 The student will find, evaluate, and select appropriate

CCSS Grade 6	English SOL
on several sources and refocusing the inquiry when appropriate.	resources for a research product. 6.9 a) Collect information from multiple sources including online, print, and media. 8.9 CF Conduct short research projects to answer a question drawing on several sources and generating questions.
8. Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	6.9 The student will find, evaluate, and select appropriate resources for a research project. 6.9 a) Collect information from multiple sources including online, print, and media. 6.9 b) Evaluate the validity and authenticity of texts. 6.9 c) Use technology as a tool to research, organize, evaluate, and communicate information. 6.9 d) Cite primary and secondary sources. 6.9 e) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information. 6.9 CF Prevent plagiarism and its consequences by giving credit to authors when idea and/or words are used in research. 6.9 CF Differentiate between a primary and secondary source. 6.9 CF Provide a list of sources using a standard form for documenting primary and secondary sources.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	6.6 CF Give evidence from the text to support conclusions. 6 CF Research Focus Statement: At the sixth-grade level, students will find, evaluate, and select appropriate resources for a research product. They will evaluate the validity and authenticity of texts, and they will use technology to research, organize, evaluate, and communicate information. In addition, they will learn to cite sources, define the meaning and consequences of plagiarism, and follow ethical and legal

CCSS Grade 6	English SOL
	guidelines for gathering and using information.
a. Apply grade 6 Reading standards to literature (e.g., "Compare and contrast texts in different forms or genres [e.g., stories and poems; historical novels and fantasy stories] in terms of their approaches to similar themes and topics").	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 f) Use information in the text to draw conclusions and make inferences. 7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 7.5 b) Compare and contrast various forms and genres of fictional text.
b. Apply grade 6 Reading standards to literary nonfiction (e.g., "Trace and evaluate the argument and specific claims in a text, distinguishing claims that are supported by reasons and evidence from claims that are not").	11.5 CF Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. 11.5 CF Compare and contrast how two or more texts treat two or more of the same ideas and analyze the development of those ideas including how they interact and build on one another to provide a complex analysis.
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	6.7 CF Students should have practice writing on demand, for shorter time frames, and over extended periods of time.
CCSS Speaking and Listening Standards Grade	
Comprehension and Collaboration	
1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on *grade 6 topics, texts, and issues*, building on others' ideas and expressing their own clearly.	6.1 The student will participate in and contribute to small-group activities. 6.1 a) Communicate as leader and contributor. 6.1 b) Evaluate own contributions to discussions. 6.1 c) Summarize and evaluate group activities. 6.1 d) Analyze the effectiveness of participant interactions.

CCSS Grade 6	English SOL
	6 CF Communication Focus Statement: At the sixth-grade level, students will participate in small group and classroom discussions. They will express personal opinions and come to understand not only differing points of view but also the differences between facts and opinions. Small-group analysis and self-analysis of the effectiveness of communication will be introduced. When students speak formally and informally in small groups or individual presentations, they will be expected to use grammatically correct English. In addition, students will understand the basic elements of media literacy.
a. Come to discussions prepared having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.	11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.
b. Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.	4.2 The student will make and listen to oral presentations and reports. 4.2 d) Use language and style appropriate to the audience, topic, and purpose. 7.1 CF The intent of this standard is that students will participate effectively in formal and informal classroom conversations and understand the requirements and uses of standard social conventions in conversations and presentations. 10.1 CF Work with peers to set rules for group presentations and discussions, set clear goals and deadlines, and define individual roles as needed.
c. Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.	6.1 CF Pose and respond to questions. 7.1 CF Ask clarifying questions and respond appropriately to others' questions in order to encourage discussion, foster understanding, and bring the discussion back to the topic when

CCSS Grade 6	English SOL
	needed.
d. Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.	6.2 The student will present, listen critically, and express opinions in oral presentation. 6.2 d) Paraphrase and summarize what is heard. 6.2 CF Paraphrase by putting into their own words what has been said by others. 6.2 CF restate paraphrase or summarize what others have said.
2. Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.	6.3 The student will understand the elements of media literacy. 6.3 a) Compare and contrast auditory, visual, and written media messages. 6.3 b) Identify the characteristics and effectiveness of a variety of media messages.
3. Delineate a speaker's argument and specific claims, distinguishing claims that are supported by reasons and evidence from claims that are not.	4.6 The student will read and demonstrate comprehension of nonfiction texts. 4.6 h) Distinguish between fact and opinion 6.2 The student will present, listen critically, and express opinions in oral presentations. 6.2 a) Distinguish between fact and opinion. 6.2 b) Compare and contrast viewpoints. 6.2 c) Present a convincing argument. 6.2 CF The intent of this standard is that students will refine and apply critical listening skills while participating in oral presentations as both the speaker and members of the audience.
Presentation of Knowledge and Ideas	
4. Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.	6.2 The student will present, listen critically, and express opinions in oral presentations. 6.2 e) Use language and vocabulary appropriate to audience, topic, and purpose.

CCSS Grade 6	English SOL
	6.2 CF The intent of this standard is that students will refine and apply critical listening skills while participating in oral presentations as both the speaker and members of the audience. 6.2 CF Plan and deliver an oral presentation, using the following steps: determine topic and purpose; identify the intended audience; gather information; organize the information; use multimedia to clarify presentation information; choose vocabulary appropriate to topic, purpose, and audience; phrase with grammatically correct language; and practice delivery.
5. Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.	6.3 The student will understand the elements of media literacy. 6.3 c) Craft and publish audience specific media messages. 6.2 CF Use multimedia to clarify presentation information. 7.3 The student will understand the elements of media literacy. 7.3 e) Craft and publish audience-specific media messages.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards 1 and 3 on page 52 for specific expectations.)	6 CF Communication Focus Statement: When students speak formally and informally in small groups or individual presentations, they will be expected to use grammatically correct English.
CCSS Language Standards	**English SOL**
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	6.2 The student will present, listen critically, and express opinions in oral presentations. 6.2 e) Use language and vocabulary appropriate to audience, topic, and purpose. 6.8 CF The intent of this standard is that students will understand and apply all the conventions of language learned at the elementary school level. 6.8 CF Students will maintain correct use of language to enhance writing and to avoid confusing or distracting the reader.

CCSS Grade 6	English SOL
a. Ensure that pronouns are in the proper case (subjective, objective, possessive).	6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 c) Use pronoun-antecedent agreement to include indefinite pronouns.
b. Use intensive pronouns (e.g., *myself, ourselves*).	6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 c) Use pronoun-antecedent agreement to include indefinite pronouns.
c. Recognize and correct inappropriate shifts in pronoun number and person.	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 c) Use pronoun-antecedent agreement to include indefinite pronouns. 8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 8.8 c) Choose the correct case and number for pronouns in prepositional phrases with compound objects.
d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).	6.8 CF Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents.
e. Recognize variations from standard English in their own and others' writing and speaking, and identify and use strategies to improve expression in conventional language.	6.2 The student will present, listen critically, and express opinions in oral presentations. 6.2 e) Use language and vocabulary appropriate to audience, topic, and purpose. 6.7 The student will write narration, description, exposition, and persuasion. 6.7 g) Select vocabulary and information to enhance the central

CCSS Grade 6	English SOL
	idea, tone, and voice. 6.8 CF Students will maintain correct use of language to enhance writing and to avoid confusing or distracting the reader. 6.8 CF Students will understand that the conventions of correct language are an integral part of the writing process and their proper use is a courtesy to the reader.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.	6.8 CF Students will understand that the conventions of correct language are an integral part of the writing process and their proper use is a courtesy to the reader. 6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.
a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.	7.8 CF Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.
b. Spell correctly.	6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 h) Use correct spelling for frequently used words.
Knowledge of Language	
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.	6.2 The student will present, listen critically, and express opinions in oral presentations. 6.2 e) Use language and vocabulary appropriate to audience, topic, and purpose. 6.8 CF Students will understand that the conventions of correct language are an integral part of the writing process and their proper use is a courtesy to the reader.
a. Vary sentence patterns for meaning, reader/ listener interest, and style.	7.7 CF Use written expression to draft and revise compositions with attention to: voice; tone; selection of information;

CCSS Grade 6	English SOL
	embedded phrases and clauses that clarify meaning; vivid and precise vocabulary; figurative language; and sentence variety.
b. Maintain consistency in style and tone.	7.7 CF Use written expression to draft and revise compositions with attention to: voice; tone; selection of information; embedded phrases and clauses that clarify meaning; vivid and precise vocabulary; figurative language; and sentence variety. 6.7 CF Craft writing purposefully with attention to: deliberate word choice; precise information and vocabulary; sentence variety; and tone and voice. 5.2 The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations. 5.2 i) Use language and style appropriate to the audience, topic, and purpose.
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 6 reading and content*, choosing flexibly from a range of strategies.	6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic texts. 6.4 a) Identify word origins and derivations. 6.4 c) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words. 6.4 CF Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on reading and content.
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	6.4 CF Use context (e.g., the overall meaning of a sentence or paragraph; a word's function in a sentence) as a clue to the meaning.
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *audience, auditory, audible*).	6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic texts. 6.4 a) Identify word origins and derivations.

CCSS Grade 6	English SOL
	6.4 b) Use roots, cognates, affixes, synonyms, and antonyms to expand vocabulary. 6.4 CF Use common, grade-appropriate Greek or Latin affixes and roots as clues to determine meanings of common English words. 6.4 CF Identify Latin and Greek roots of common English words as clues to the meaning of the word. 6.4 CF Use common Greek or Latin affixes and roots as clues to the meaning of a word (e.g., aud – hearing, listening, or sound *audience, auditory, audible.*
c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.	6.4 CF Consult use word reference materials (e.g., dictionaries, glossaries, thesauruses, both print and online) to find the pronunciation of a word or determine or clarify its meaning. 6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic texts. e. Use word-reference materials.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	6.4 CF Students will develop independence with reference books to determine meaning, pronunciation, and origin of words.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	6.4 The student will read and learn the meaning of unfamiliar words and phrases within authentic texts. 6.4 d) Identify and analyze figurative language. 6.4 CF Students will be introduced to word relationships and nuances in word meanings. 6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 j) Identify and analyze the author's use of figurative language. 8.4 The student will apply knowledge of word origins, analogies,

CCSS Grade 6	English SOL
	and figurative language to extend vocabulary development within authentic texts. 8.4 b) Use context, structure, and connotations to determine meaning and differentiate among multiple meanings of words and phrases.
a. Interpret figures of speech (e.g., personification) in context.	6.4 The student will read and learn the meaning of unfamiliar words and phrases within authentic texts. 6.4 d) Identify and analyze figurative language. 6.4 CF Determine the meaning of words and phrases as they are used as figurative language. 7.4 CF Recognize, understand, and use figurative language figures of speech, including: personification – figure of speech that applies human characteristics to nonhuman objects.
b. Use the relationship between particular words (e.g., cause/effect, part/whole, item/category) to better understand each of the words.	6.4 CF Recognize relationships common to analogy construction, such as: synonyms – small: little; antonyms – up: down; object/action – ear: hear; source/product – tree: lumber; part/whole – paw: dog; and animal/habitat – bee: hive.
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *stingy, scrimping, economical, unwasteful, thrifty*).	7.4 CF Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic, condescending*), recognizing that some words have technical meanings based on context such as *stern*. 7.4 CF Recognize that synonyms may have connotations (e.g., *elderly* and *mature*; *youthful* and *juvenile*). 7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 d) Identify connotations.
6. Acquire and use accurately grade-appropriate general	6.4 The student will read and learn the meanings of unfamiliar

CCSS Grade 6	English SOL
academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	words and phrases within authentic texts. 6.4 f) Extend general and specialized vocabulary through speaking, listening, reading, and writing. 6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 b) Make, confirm, and revise predictions. 6.5 e) Use prior and background knowledge as context for new learning. 6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 b) Use prior knowledge and build additional background knowledge as context for new learning.

English SOL for grades 6 aligned with the CCSS at other grade levels	
Grade 3 Reading for Informational Texts 5. Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.	6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 a) Use text structures such as type, headings, and graphics, to predict and categorize information in both print and digital texts.
Grade 3 Reading for Informational Texts 1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.	6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 c) Identify questions to be answered.
Grade 3 Reading for Informational Texts 8. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).	6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 k) Identify cause and effect relationships.
Partially addressed in Grade 3, Language 1. f. Ensure subject-verb and pronoun-antecedent agreement.	6.8 b) Use subject-verb agreement with intervening phrases and clauses.

English SOL for grades 6 aligned with the CCSS at other grade levels	
Grade 5 Language 1. d. Recognize and correct inappropriate shifts in verb tense.	6.8 d) Maintain consistent verb tense across paragraphs.
Grade 3 Language 2. c. Use commas and quotation marks in dialogue. Grade 4 Language 2. b. Use commas and quotation marks to mark direct speech and quotations from a text.	6.8 f) Use quotation marks with dialogue.
Grade 3 Language 1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. 1. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.	6.8 g) Choose adverbs to describe verbs, adjectives, and other adverbs**.**
Partial Match: Grade 5 Reading Foundational Skills 4. c. Read with sufficient accuracy and fluency to support comprehension. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 6.5 l) Use reading strategies to monitor comprehension throughout the reading process. 6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 6.6 l) Use reading strategies to monitor comprehension throughout the reading process.

English SOL for grade 6 not explicitly stated in the CCSS at any grade level	
	6.6 d) Make, confirm, or revise predictions.
	6.7 The student will write narration, description, exposition, and persuasion. 6.7 e) Compose a topic sentence or thesis statement if

English SOL for grade 6 not explicitly stated in the CCSS at any grade level	
	appropriate.
	6.7 h) expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences.
	6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.

Grade 7

CCSS Grade 7	English SOL
Reading Standards for Literature	
Key Ideas and Details	
1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 7.5 g) Make inferences and draw conclusions based on the text.
2. Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.	7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 7.5 a) Describe the elements of narrative structure including setting, character development, plot structure, theme, and conflict. 7.5 h) Identify the main idea. 7.5 i) Summarize text relating supporting details. 7.5 CF Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.
3. Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning. 7.5 CF Students will understand the interrelationship of setting, plot, theme, style, and form and recognize how an author's craft makes an impact on readers.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 c) Identify and analyze figurative language. d. Identify connotations. 7.5 The student will read and demonstrate comprehension of a

CCSS Grade 7	English SOL
	variety of fictional texts, narrative nonfiction, and poetry. 7.5 d) Describe the impact of word choice, imagery, and literary devices including figurative language. 7.5 CF Recognize and analyze the impact of an author's choice of poetic devices, including: ◦ **rhyme** – recurring identical or similar final word sounds within or at the ends of lines of verse; ◦ **rhythm** – the recurring pattern of strong and weak syllabic stresses; ◦ **meter** – a fixed pattern of accented and unaccented syllables in lines of fixed length to create rhythm; ◦ **repetition** – repeated use of sounds, words, or ideas for effect and emphasis; ◦ **alliteration** – repetition of initial sounds, e.g., *picked a peck of pickled peppers*; and ◦ **onomatopoeia** – the use of a word whose sound suggests its meaning, e.g., *clatter*. 11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
5. Analyze how a drama's or poem's form or structure (e.g., soliloquy, sonnet) contributes to the meaning.	7.5 CF Students will understand the interrelationship of setting, plot, theme, style, and form and recognize how an author's craft makes an impact on readers. 9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 c) Identify the characteristics that distinguish literary form.

CCSS Grade 7	English SOL
	9.4 CF Identify and analyze elements of dramatic literature: soliloquy. 7.5 CF Distinguish between narrative prose and poetic forms, including: ◦ haiku – a 17-syllable, delicate, unrhymed Japanese verse, usually about nature; ◦ limerick – a 5-line, rhymed, rhythmic verse, usually humorous; ◦ ballad – a songlike narrative poem, usually featuring rhyme, rhythm, and refrain; ◦ free verse – poetry with neither regular meter nor rhyme scheme ◦ couplet – a pair of rhyming lines; and ◦ quatrain – a stanza containing four lines. 7.5 CF Recognize and analyze the impact of an author's choice of poetic devices, including: rhyme, rhythm, meter, repetition, alliteration, onomatopoeia. 7.5 CF Explain how poetic devices of form, rhyme, rhythm, repetition, line structure, and punctuation convey the mood and meaning of a poem.
6. Analyze how an author develops and contrasts the points of view of different characters or narrators in a text.	7.5 CF Analyze elements of an author's style, including: contrasting points of view. 7.5 CF Identify characterization as the way an author presents a character and reveals character traits by: what a character says; what a character thinks; what a character does; and how other characters respond to the character.
Integration of Knowledge and Ideas	
7. Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the	7.3 The student will understand the elements of media literacy. 7.3 d) Compare and contrast the techniques in auditory, visual,

CCSS Grade 7	English SOL
effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film).	and written media messages. 7.3 CF Deconstruct and analyze the elements of a variety of media including layout, pictures, and text features in print media, and camera shots, angles, lighting, editing and sound in TV, radio, and film.
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history	9.4 CF Students will enhance their understanding of the characteristics of various literary forms through the reading and analysis of a variety of genres, such as poetry, prose, essays, short stories, historical fiction, and narrative nonfiction. 9.4 CF Students will understand that literary texts can fulfill a social or cultural function depending on the time, location, and purpose of the author.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	7 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.
Reading for Informational Texts	
Key Ideas and Details	
1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 d) Draw conclusions and make inferences on explicit and implied information.
2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.	7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 h) Identify the main idea. 7.6 i) Summarize text identifying supporting details. 7.6 CF Determine two or more central ideas in a text and analyze

CCSS Grade 7	English SOL
	their development over the course of the text. 7.6 CF Provide an objective summary of the text by recording the development of the central ideas.
3. Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).	8.5 CF Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.	7.4 CF Recognize that words have nuances of meaning (figurative, connotative, and technical), which help determine the appropriate meaning. 7.5 CF Students will understand how authors use keywords and images to craft a message and establish tone. 7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 c) Identify and analyze figurative language. d. Identify connotations. 7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 g) Describe how word choice and language structure convey an author's viewpoint.
5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas.	7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 b) Use text structures to aid comprehension. 7.6 c) Identify an author's organizational pattern using textual clues, such as transitional words and phrases.
6. Determine an author's point of view or purpose in a text and analyze how the author distinguishes his or her position from that of others.	7.6 CF Analyze how two or more authors writing about the same topic shape their presentations or viewpoints of key information using facts, opinions, and reasoning.

CCSS Grade 7	English SOL
	7.6 CF An author's viewpoint refers to his or her bias or subjectivity toward the subject. In general, a viewpoint can be positive or negative.
Integration of Knowledge and Ideas	
7. Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).	7.3 The student will understand the elements of media literacy. 7.3 d) Compare and contrast the techniques in auditory, visual, and written media messages.
8. Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 e) Analyze details for relevance and accuracy. 8.6 CF Analyze two or more texts with conflicting information on the same topic and identify how the texts disagree. 9.5 The student will read and analyze a variety of nonfiction texts. 9.5 e) Identify a position/argument to be confirmed, disproved, or modified.
9. Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts.	8.6 CF Analyze two or more texts with conflicting information on the same topic and identify how the texts disagree.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	7 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity.
CCSS Writing Standards	
Text Types and Purposes	
1. Write arguments to support claims with clear reasons and relevant evidence.	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

CCSS Grade 7	English SOL
	11.6 Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions.
a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.	11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 c) Organize ideas in a sustained and logical manner. d. Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately.
b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.	7.7 CF Create multiparagraph compositions focusing on a central idea and using elaborating details, reasons, or examples as appropriate for audience and purpose.
c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.	6.7 CF Use transitional words or phrases to connect parts of sentences in order to: show relationships between ideas; signal a shift or change in the writer's thoughts; signal levels of importance; suggest a pattern of organization; and make sentences clearer. 7.7 CF Choose an appropriate strategy for organizing ideas such as comparison/contrast, personal narrative, cause/effect, etc., and provide transitions between ideas. 7.7 CF Understand and apply the elements of composing: central idea; elaboration; unity; and organization.
d. Establish and maintain a formal style.	7.7 CF Sustain a formal style.
e. Provide a concluding statement or section that follows from and supports the argument presented.	7.7 CF Include an appropriate introduction and satisfying conclusion.
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

CCSS Grade 7	English SOL
a. Introduce a topic; organize ideas, concepts, and information, using strategies such as definition, classification, comparison/contrast, and cause/effect; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 c) Organize writing structure to fit mode or topic. 6.7CF Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information. 6.7 CF Write using strategies such as definition, classification comparison/contrast, and cause/effect. 7.7 CF Explain, analyze, or summarize a topic. 7.7 CF Choose an appropriate strategy for organizing ideas such as comparison/contrast, personal narrative, cause/effect, etc., and provide transitions between ideas. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 c) Distinguish between a thesis statement and a topic sentence.
b. Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples.	7.7 CF Create multiparagraph compositions focusing on a central idea and using elaborating details, reasons, or examples as appropriate for audience and purpose.
c. Use appropriate transitions to clarify the relationships among ideas and concepts.	6.7 CF Use transitional words or phrases to connect parts of sentences in order to: show relationships between ideas; signal a shift or change in the writer's thoughts; signal levels of importance; suggest a pattern of organization; and make sentences clearer.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 g) Select vocabulary and information to enhance the central idea, tone, and voice. 7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

CCSS Grade 7	English SOL
	g. Select vocabulary and information to enhance the central idea, tone, and voice. 7.7 CF Use written expression to draft and revise compositions with attention to: voice; tone; selection of information; embedded phrases and clauses that clarify meaning; vivid and precise vocabulary; figurative language; and sentence variety.
e. Establish and maintain a formal style.	7.7 CF Sustain a formal style.
f. Provide a concluding statement or section that follows from the information or explanation presented.	7.7 CF Include an appropriate introduction and satisfying conclusion.
3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	6.7 The student will write narration, description, exposition, and persuasion. 7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.
a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically.	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 c) Organize writing structure to fit mode or topic. 7.7 d) Establish a central idea and organization. 7.7 CF, 8.7 CF Engage and orient the reader by establishing a context and introducing a narrator and/or characters. 7.7 CF, 8.7 CF Organize an event sequence that unfolds naturally and logically.
b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.	6.7 CF Develop the topic using relevant facts, definitions, details, quotations, and/or examples. 7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 f) Write multiparagraph compositions with unity elaborating the central idea. 7.7 g) Select vocabulary and information to enhance the central idea, tone, and voice.

CCSS Grade 7	English SOL
c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another.	6.7 CF Use transitional words or phrases to connect parts of sentences in order to: show relationships between ideas; signal a shift or change in the writer's thoughts; signal levels of importance; suggest a pattern of organization; and make sentences clearer. 7.7 CF Create multiparagraph compositions focusing on a central idea and using elaborating details, reasons, or examples as appropriate for audience and purpose.
d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events.	6.7 The student will write narration, description, exposition, and persuasion. 6.7 g) Select vocabulary and information to enhance the central idea, tone, and voice. 6.7 CF Write using descriptive details. 7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 g) Select vocabulary and information to enhance the central idea, tone, and voice. 7 .7 CF Use written expression to draft and revise compositions with attention to: voice; tone; selection of information; embedded phrases and clauses that clarify meaning; vivid and precise vocabulary; figurative language; and sentence variety. 7 .7 CF Elaboration can occur by using descriptive details and examples within a sentence to give detail and depth to an idea or from paragraph to paragraph.
e. Provide a conclusion that follows from and reflects on the narrated experiences or events	7.7 CF Include an appropriate introduction and satisfying conclusion.
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

CCSS Grade 7	English SOL
audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	7.7 CF Identify intended audience and purpose.
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.	7 .7 CF Students will gradually assume responsibility for revising, proofreading, and editing their own writing. 7.7 CF Students will know the writing process is nonlinear: returning to prewriting or drafting at any point in the process may help the writer clarify and elaborate the drafted piece. 7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 CF Proofread and edit drafts with teacher assistance, peer collaboration, and growing independence.
6. Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.	7.7 The student will write a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 k) Use computer technology to plan, draft, revise, edit, and publish writing. 7.7 CF Use available computer technology to assist throughout the writing process. 7.9 The student will apply knowledge of appropriate reference materials to produce a research product. 7.9 c) Use technology as a tool to research, organize, evaluate, and communicate information. 7.9 d) Site primary and secondary sources.
Research to Build and Present Knowledge	
7. Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.	7.9 The student will apply knowledge of appropriate reference materials to produce a research product. 7.9 a) Collect and organize information from multiple sources including online, print, and media.
8. Gather relevant information from multiple print and digital	7.9 The student will apply knowledge of appropriate reference

CCSS Grade 7	English SOL
sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	materials to produce a research project. 7.9 a) Collect and organize information from multiple sources including online, print and media. 7.9 b) Evaluate the validity and authenticity of sources. 7.9 d) Cite primary and secondary sources. 7.9 e) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information. 7 .9 CF Gather relevant information from multiple print and digital sources; assess the credibility and validity of each source; 7.9 Introduction CF At the seventh-grade level, students will apply knowledge of appropriate reference material to produce a research product including the collection and organization of information from multiple online, print, and media sources. They will extend skills in the evaluation of sources and the use of technology to research, organize, evaluate, and communicate information. In addition, they will continue to cite sources skillfully and thereby avoid plagiarism. 7.9 CF Create a Works Cited page using MLA format for oral and written presentations. 7.9 CF Prevent plagiarism and its consequences by giving credit to authors when ideas and/or words are used in direct quotation or paraphrase.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	7.9 The student will apply knowledge of appropriate reference materials to produce a research project.
a. Apply grade 7 Reading standards to literature (e.g., “Compare and contrast a fictional portrayal of a time, place, or character and a historical account of the same period as a means of understanding how authors of fiction use or alter history”).	7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 7.5 b) Compare and contrast various forms and genres of fictional text.

CCSS Grade 7	English SOL
b. Apply grade 7 Reading standards to literary nonfiction (e.g., "Trace and evaluation the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims").	11.5 CF Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. 11.5 CF Compare and contrast how two or more texts treat two or more of the same ideas and analyze the development of those ideas including how they interact and build on one another to provide a complex analysis.
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	7.7 CF The intent of this standard is that students will become independent and proficient in composing a variety of types of writing. 7.9 CF Students will have the opportunity to practice writing over shorter time frames as well as for extended ones.
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 a) Communicate ideas and information orally in an organized and succinct manner. 7.1 b) Ask probing questions to seek elaboration and clarification of ideas. 7.1 c) Make statements to communicate agreement or tactful disagreement with others' ideas. 7.1 CF Communication Focus Statement: At the seventh-grade level, students will continue to develop oral communication skills and will become more aware of the effects of verbal and nonverbal behaviors in oral communications. Students will also demonstrate knowledge and understanding of persuasive/informative techniques used in media messages,

CCSS Grade 7	English SOL
	including viewpoints expressed in nonprint media. 7.1 CF Contribute relevant ideas, opinions, and feelings in large and small diverse groups.
a. Come to discussions prepared having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.	11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.
b. Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.	7.1 CF The intent of this standard is that students will participate effectively in formal and informal classroom conversations and understand the requirements and uses of standard social conventions in conversations and presentations. 7.1 CF Understand and demonstrate appropriate audience behavior. 7.1 CF Show awareness of audience, topic, and purpose. 8.2 The student will develop and deliver oral presentations in a group and individually. 8.2 g) Assume shared responsibility for collaborative work. 9.1 CF Work with peers to set rules for group presentations and discussions, set clear goals and deadlines, and define individual roles as needed.
c. Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.	7.1 CF Ask clarifying questions and respond appropriately to others' questions in order to encourage discussion, foster understanding, and bring the discussion back to the topic when needed.
d. Acknowledge new information expressed by others and, when warranted, modify their own views.	7.1 CF Provide feedback to other group members, acknowledge new insights expressed by others, and when justified, modify their own views.
2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally)	7.3 The student will understand the elements of media literacy. 7.3 a) Identify persuasive/informative techniques used in

CCSS Grade 7	English SOL
and explain how the ideas clarify a topic, text, or issue under study.	nonprint media including television, radio, video, and Internet. 7.3 CF The intent of this standard is that students will identify and evaluate a variety of media elements and persuasive techniques used in the media. They will recognize that all media messages are constructed and that to understand the whole meaning of the message they can *deconstruct* it.
3. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and the relevance and sufficiency of the evidence.	8.3 The student will analyze, develop, and produce creative or informational media messages. 8.3 b) Examine how values and viewpoints are included or excluded and how the media can influence beliefs, behaviors, and interpretations. 8.3 d) Evaluate sources for relationships between intent and factual content.
Presentation of Knowledge and Ideas	
4. Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 a) Communicate ideas and information orally in an organized and succinct manner. 7.1 d) Use language and style appropriate to audience, topic, and purpose. 7.1 CF Select vocabulary, tone, and style with audience and purpose in mind. 7.2 The student will identify and demonstrate the relationship between a speaker's verbal and nonverbal messages. 7.2 a) Use verbal communication skills, such as word choice, pitch, feeling, tone, and voice appropriate for the intended audience. 7.2 b) Use nonverbal communication skills, such as eye contact, posture, and gestures to enhance verbal communication skills.

CCSS Grade 7	English SOL
	7.2 CF Use appropriate facial expressions and gestures or motions to add to what is being said. 7.2 CF Use proper posture and stance when speaking. 7.1 CF State points clearly and directly. 7.2 CF Match vocabulary, tone, and volume to the audience, purpose, and topic of the message.
5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.	7.1 CF Include multimedia in presentations.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 7 Language standards 1 and 3 on page 52 for specific expectations.)	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 d) Use language and style appropriate to audience, topic, and purpose. 7.2 The student will identify and demonstrate the relationship between a speaker's verbal and nonverbal messages. 7.2 a) Use verbal communication skills, such as word choice, pitch, feeling, tone, and voice appropriate for the intended audience. 7.2 CF Students will use grammatically correct language.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 d) Use language and style appropriate to audience, topic, and purpose. 7.8 CF Students will maintain correct use of language to enhance writing and to avoid confusing or distracting the reader. 7.8 CF Students will understand that the conventions of correct language are an integral part of the writing process.

CCSS Grade 7	English SOL
a. Explain the function of phrases and clauses in general and their function in specific sentences.	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 i) Use clauses and phrases for sentence variety. 7.7 CF Use written expression to draft and revise compositions with attention to: embedded phrases and clauses that clarify meaning.
b. Choose among simple, compound, complex, and compound-complex sentences to signal differing relationships among ideas.	7.7 CF Incorporate variety into sentences using simple, compound, and compound-complex sentences.
c. Place phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 h) Expand and embed ideas by using modifiers, standard coordination, and subordination in complete sentences. 7.7 i) Use clauses and phrases for sentence variety. 7.7 CF Incorporate variety into sentences using simple, compound, and compound-complex sentences, including, but not limited to: ◦ coordination – joining words, phrases, clauses, or sentences by using appropriate coordinating conjunctions; ◦ subordination – establishing the relationship between an independent and a dependent clause by using appropriate subordinate conjunctions; ◦ modifier – an adjective, an adverb, or a phrase or clause acting as an adjective or adverb.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.
a. Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,] green	5.8 CF Use a comma to separate coordinate adjectives (e.g., It was a fascinating, enjoyable movie but not He wore an old[,]

CCSS Grade 7	English SOL
shirt).	green shirt).
b. Spell correctly.	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 h) Use correct spelling for commonly used words.
Knowledge of Language	
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 d) Use language and style appropriate to audience, topic, and purpose. 7.8 CF Students will understand that the conventions of correct language are an integral part of the writing process.
a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.	8.7 CF Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 7 reading and content, choosing flexibly from a range of strategies.	7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 CF The intent of this standard is that students will become independent learners of vocabulary by choosing from a variety of strategies to determine or clarify the meaning of unknown and multiple meaning words. 7.4 CF Use synonyms and antonyms to determine the meaning of unfamiliar words. 7.4 CF Use the relationship between particular words (e.g., synonym/antonym, cause/effect, degree, etc.) to better understand words.
a. Use context (e.g., the overall meaning of a sentence or	7.4 The student will read to determine the meanings and

CCSS Grade 7	English SOL
paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	pronunciations of unfamiliar words and phrases within authentic texts. 7.4 e) Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., belligerent, bellicose, rebel).	7.4 CF Use common Greek or Latin affixes and roots to predict the meaning of unfamiliar words and make connections with word families (e.g. –phobia, and –ology). 7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 a) Identify word origins and derivations. 7.4 b) Use roots, cognates, affixes, synonyms, and antonyms to expand vocabulary.
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.	7.4 CF Consult word reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital to find the pronunciation of a word or determine/clarify meanings.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	7.4 CF Consult word reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital to find the pronunciation of a word or determine/clarify meanings.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 c) Identify and analyze figurative language. 7.4 CF Students will continue the study of figurative language and analogies, and continue to use the context to help determine the meaning of words. 7.4 CF Recognize that words have nuances of meaning (figurative, connotative, and technical), which help determine

CCSS Grade 7	English SOL
	the appropriate meaning. 7.4 CF Recognize, understand, and use figurative language including: ◦ simile – figure of speech that uses the words *like* or *as* to make comparisons; ◦ metaphor – figure of speech that makes a comparison equating two or more unlike things without using *like* or *as*; ◦ personification – figure of speech that applies human characteristics to nonhuman objects; and ◦ hyperbole – intentionally exaggerated figure of speech.
a. Interpret figures of speech (e.g., literary, biblical, and mythological allusions) in context.	9.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 e) Identify literary and classical allusions and figurative language in text.
b. Use the relationship between particular words (e.g., synonym/antonym, analogy) to better understand each of the words.	7.4 CF Recognize relationships used to create analogies. 7.4 CF Recognize that figurative language and analogy enrich text. 7.4 CF Use the relationship between particular words (e.g., synonym/antonym, cause/effect, degree, etc.) to better understand words.
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., refined, respectful, polite, diplomatic, condescending).	7.4 CF Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic, condescending*), recognizing that some words have technical meanings based on context such as *stern*. 7.4 CF Recognize that words have nuances of meaning (figurative, connotative, and technical), which help determine

CCSS Grade 7	English SOL
	the appropriate meaning. 7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 d) Identify connotations.
6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts. 7.4 f) Extend general and specialized vocabulary through speaking, listening, reading, and writing. 7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 a) Use prior and background knowledge as a context for new learning.

English SOL for grade 7 aligned with the CCSS at other grade levels	
Grade 9-10 Speaking and Listening 1. d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 e) Use a variety of strategies to listen actively.
Reading Standards for Literacy in History/Social Studies Grade 6-8 8. Distinguish among fact, opinion, and reasoned judgment in a text.	7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 e) Differentiate between fact and opinion.

English SOL for grade 7 aligned with the CCSS at other grade levels	
Partially addressed in Grade 6 Language 1.c. Recognize and correct inappropriate shifts in pronoun number and person.*	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 c) Use pronoun-antecedent agreement to include indefinite pronouns.
Grade 3 Language 1. f. Addresses s-v agreement. Ensure subject-verb and pronoun-antecedent agreement. Grade 8 Language 1. d. Recognize and correct inappropriate shifts in verb voice and mood.	7.8 d) Use subject-verb agreement with intervening phrases and clauses.
Grade 5 Language 1. d. Recognize and correct inappropriate shifts in verb tense.	7.8 e) Edit for verb tense consistency and point of view.
Grade 3 Language 2. c. Use commas and quotation marks in dialogue.	7.8 g) Use quotation marks with dialogue.
Grade 6-8 Reading Standards for Literacy in History/Social Studies Distinguish among fact, opinion, and reasoned judgment in a text.	7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 e) Differentiate between fact and opinion.
Grade 2 Language 1.2 Use adjectives and adverbs, and choose between them depending on what is to be modified.	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 b) Choose appropriate adjectives and adverbs to enhance writing.
Partial Match: Grade 5 Reading Foundational Skills 4. c. Read with sufficient accuracy and fluency to support comprehension. c. Use context to confirm or self-correct word recognition and	7.5 The student will demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry. 7.5 l) Use reading strategies to monitor comprehension throughout the reading process. 7.6 The student will read and demonstrate comprehension of a

English SOL for grade 7 aligned with the CCSS at other grade levels	
understanding, rereading as necessary.	variety of nonfiction texts. 7.6 l) Use reading strategies to monitor comprehension throughout the reading process.

English SOL for grade 7 not explicitly stated in the CCSS at any grade level	
	7.2 The student will identify and demonstrate the relationship between a speaker's verbal and nonverbal messages. 7.2 c) Compare/contrast a speaker's verbal and nonverbal messages.
	7.3 The student will understand the elements of media literacy. 7.3 c) Describe how word choice and visual images convey a viewpoint.
	7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts. 7.6 f) Identify the source, viewpoint, and purpose of texts.
	7.6 k) Organize and synthesize information for use in written formats.
	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 b) Use a variety of prewriting strategies including graphic organizers to generate and organize ideas.
	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and paragraph structure.

English SOL for grade 7 not explicitly stated in the CCSS at any grade level	
	7.8 f) Demonstrate understanding of sentence formation by identifying the eight parts of speech and their functions in sentences.

Grade 8

CCSS Grade 8	English SOL
Reading for Literature	
Key Ideas and Details	
1. Cite several pieces of textual evidence that most strongly supports analysis of what the text says explicitly as well as inferences drawn from the text.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
2. Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.	7.6 CF Provide an objective summary of the text by recording the development of the central ideas. 8.5 CF Determine a theme of a text and analyze its development over the course of the text. 8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 h) Identify the main idea. 8.5 i) Summarize text relating supporting details.
3. Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 d) Understand the author's use of conventional elements and characteristics within a variety of genres. 8.5 e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts. 8.5 CF Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone,	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts.

CCSS Grade 8	English SOL
including analogies or allusions to other texts.	8.4 a) Identify and analyze an author's use of figurative language. 8.4 b) Use context, structure, and connotations to determine meaning and differentiate among multiple meanings of words and phrases. 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 12.3d) Identify the meaning of common idioms, literary and classical allusions in text.
5. Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 e) Compare and contrast the author's use of word choice, dialogue, form, rhyme, rhythm, and voice in different texts. 8.5 f) Compare and contrast authors' styles.
6. Analyze how differences in the points of view of the characters and the audience or reader (e.g., created through the use of dramatic irony) create such effects as suspense or humor.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 c) Explain how authors use characters, conflict, point of view, voice, and tone to create meaning. 8.5 g) Identify and ask questions that clarify various viewpoints. 8.5 CF Analyze how differences in points of view can create such effects as suspense or humor. 8.5 CF Analyze an author's use of literary devices, including: irony.
Integration of Knowledge and Ideas	
7. Analyze the extent to which a filmed or live production of a story or drama stays faithful to or departs from the text or script, evaluating the choices made by the director or actors.	7.3 The student will understand the elements of media literacy. 7.3 d) Compare and contrast the techniques in auditory, visual, and written media messages. 10.4 CF Analyze the representation of a subject or a key scene in two different mediums.

CCSS Grade 8	English SOL
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new.	10.4 CF Compare and contrast read and understand a variety of literary works from different cultures. 10.4 CF Identify universal themes. 10.4 CF Analyze works of literature for historical information about the period in which they were written.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6–8 text complexity band independently and proficiently.	8 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity. Text complexity is addressed through teacher-selected texts.
Reading for Informational Texts	
Key Ideas and Details	
1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support.
2. Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.	7.6 CF Provide an objective summary of the text by recording the development of the central ideas. 8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 g) Identify the main idea. 8.6 h) Summarize text identifying supporting details. 8.6 CF Analyze an author's choice of details by examining: accuracy; placement; thoroughness; relevance; and effectiveness. 8.5 CF Determine a theme of a text and analyze its development over the course of the text.
3. Analyze how a text makes connections among and distinctions	8.5 CF Analyze how a text makes connections among and

CCSS Grade 8	English SOL
between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).	distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.	7.4 CF Recognize that words have nuances of meaning (figurative, connotative, and technical), which help determine the appropriate meaning. 8.4 The student will apply knowledge of word origins, analogies, figurative language to extend vocabulary development within authentic texts. 8.4 CF Analyze the impact of specific word choices on meaning and tone, including analogies to other texts. 8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 d) Analyze the author's use of text structure and word choice. 8.4 CF Recognize an author's use of connotations and persuasive language, to convey a viewpoint.
5. Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 i) Identify an author's organizational pattern using textual clues, such as transitional words and phrases. 8.6 CF Analyze an author's choice of details by examining: accuracy; placement; thoroughness; relevance; and effectiveness.
6. Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	7.6 CF Analyze how two or more authors writing about the same topic shape their presentations or viewpoints of key information using facts, opinions, and reasoning. 7.6 CF An author's viewpoint refers to his or her bias or subjectivity toward the subject. In general, a viewpoint can be

CCSS Grade 8	English SOL
	positive or negative. 8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 c) Analyze the author's qualifications, viewpoint, and impact. 8.6 CF Analyze two or more texts with conflicting information on the same topic and identify how the texts disagree. 8.6 CF Determine an author's point of view or purpose in a text. 8.6 CF Analyze how the author acknowledges and responds to conflicting evidence or viewpoints.
Integration of Knowledge and Ideas	
7. Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.	8.3 The student will analyze, develop, and produce creative or informational media messages. 8.3 c) Use media and visual literacy skills to create products that express new understandings. 8.3 CF Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to express new understandings.
8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 e) Analyze details for relevance and accuracy. 8.6 CF Analyze an author's choice of details by examining: accuracy; placement; thoroughness; relevance; and effectiveness. 8.6 CF Distinguish between subjective and objective writing.
9. Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.	8.6 CF Analyze two or more texts with conflicting information on the same topic and identify how the texts disagree.
Range of Reading and Level of Text Complexity	
10. By the end of the year, read and comprehend literary	8 CF Reading Focus Statement: When selecting texts, teachers

CCSS Grade 8	English SOL
nonfiction at the high end of the grades 6–8 text complexity band independently and proficiently.	will consider appropriateness of subject and theme as well as text complexity. Text complexity is addressed through teacher-selected texts.
CCSS Writing Standards Grade 8	
Text Types and Purposes	
1. Write arguments to support claims with clear reasons and relevant evidence.	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 11.6 Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions.
a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 d) Organize details to elaborate the central idea and provide unity. 8.7 e) Select specific vocabulary and information for the audience and purpose. 11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 c) Organize ideas in a sustained and logical manner. 11.6 d) Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately. 11.6 CF Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, 11.6 CF Organize the reasons and evidence logically.
b. Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.	8.7 CF Elaborate the central idea providing sustained unity throughout the writing. 8.9 The student will apply knowledge of appropriate reference materials to produce a research project. 8.9 d) Make sense of information gathered from diverse sources

CCSS Grade 8	English SOL
	by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), counterclaims, reasons, and evidence.	8.7 CF Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. 9.6 CF Arrange paragraphs into a logical progression using appropriate words or phrases to signal organizational pattern and transitions between ideas. 11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 a)Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
d. Establish and maintain a formal style.	8.7 CF Sustain a formal style.
e. Provide a concluding statement or section that follows from and supports the argument presented.	8.7 CF Develop a conclusion. 8.7 CF Elaborate the central idea providing sustained unity throughout the writing.
2. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 d) Organize details to elaborate the central ideal and provide unity.
a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.	6.7 CF Write using strategies such as definition, classification comparison/contrast, and cause/effect. 6.7 CF Include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when appropriate. 7.7 CF Choose an appropriate strategy for organizing ideas such as comparison/contrast, personal narrative, cause/effect, etc., and provide transitions between ideas. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 b) Use prewriting strategies to generate and organize ideas.

CCSS Grade 8	English SOL
	8.7 d) Organize details to elaborate the central idea and provide unity.
b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 d) Organize details to elaborate the central idea and provide unity. 8.7 e) Select specific vocabulary and information for audience and purpose. 8.7 CF Understand that a topic sentence supports an essay's thesis statement; it unifies a paragraph and directs the order of the sentences. 8.7 CF Elaborate the central idea providing sustained unity throughout the writing. 8.7 CF Understand that good writing has been elaborated 8.9 CF Embed quotations from other sources with skill and accuracy. 9.7 CF Develop the topic with appropriate information, details, and examples.
c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 g) Revise writing for clarity of content, word choice, sentence variety, and transitions among paragraphs. 8.7 CF Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. 8.7 CF Use written expression to draft and revise compositions explain, analyze, or summarize a topic with attention to: purpose and audience; a central or controlling idea; voice; tone (such as serious, sarcastic, objective, enthusiastic, solemn, humorous, hostile, personal, impersonal); coherent selection of information

CCSS Grade 8	English SOL
	and details; embedded phrases and clauses that clarify meaning and increase variety; vivid and precise vocabulary; figurative language; sentence variety; and transitional words and phrases.
d. Use precise language and domain-specific vocabulary to inform about or explain the topic.	7.7 CF Use written expression to draft and revise compositions with attention to: voice; tone; selection of information; embedded phrases and clauses that clarify meaning; vivid and precise vocabulary; figurative language; and sentence variety. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 e) Select specific vocabulary and information for audience and purpose.
e. Establish and maintain a formal style.	8.7 CF Sustain a formal style.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	7.7 CF Include an appropriate introduction and satisfying conclusion. 8.7 CF Develop a conclusion. 8.7 CF Elaborate the central idea providing sustained unity throughout the writing.
3. Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.	6.7 CF Write using descriptive details. 7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 c) Organize writing structure to fit mode or topic. 7.7 f) Write multiparagraph compositions with unity elaborating the central idea. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 CF Write in a variety of forms, including: narrative – writing to tell a story.
a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters;	6.7 The student will write narration, description, exposition, and persuasion.

CCSS Grade 8	English SOL
organize an event sequence that unfolds naturally and logically.	6.7 d) Establish a central idea and organization. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 d) Organize details to elaborate the central idea and provide unity. 8.7 e) Select specific vocabulary and information for audience and purpose.
b. Use narrative techniques, such as dialogue, pacing, description, and reflection to develop experiences, events, and/or characters.	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 c) Organize writing structure to fit mode or topic. 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 CF Use narrative techniques, such as dialogue, pacing, description, and reflection to develop experiences, events, and/or characters. 8.8 The student will edit writing for correct grammar, punctuation, spelling, sentence structure, and paragraphing. 8.8 f) Use quotation marks with dialogue and direct quotations.
c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another and show the relationships among experiences and events.	6.7 CF Use transitional words or phrases to connect parts of sentences in order to: ◦ show relationships between ideas; ◦ signal a shift or change in the writer's thoughts; ◦ signal levels of importance; ◦ suggest a pattern of organization; ◦ and make sentences clearer. 8.7 CF Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey	7.7 CF Use descriptive details and examples within a sentence to give detail and depth to an idea or from paragraph to paragraph.

CCSS Grade 8	English SOL
experiences and events.	8.7 CF Use written expression to draft and revise compositions explain, analyze, or summarize a topic with attention to: ◦ purpose and audience; a central or controlling idea; ◦ voice; ◦ tone (such as serious, sarcastic, objective, enthusiastic, solemn, humorous, hostile, personal, impersonal); ◦ coherent selection of information and details; ◦ embedded phrases and clauses that clarify meaning and increase variety; ◦ vivid and precise vocabulary; ◦ figurative language; ◦ sentence variety; and ◦ transitional words and phrases.
e. Provide a conclusion that follows from and reflects on the narrated experiences or events.	6.7 CF Provide an appropriate conclusion for the purpose and mode of writing. 7.7 CF Include an appropriate introduction and satisfying conclusion. 8.7 CF Develop a conclusion.
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	6.7 CF The intent of this standard is that students will demonstrate an awareness of audience and use a process for writing as they produce narrative, descriptive, expository, and persuasive pieces. 6.7 CF Identify audience and purpose for any piece of writing. 7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 CF Identify intended audience and purpose. 8.7 The student will write in a variety of forms, including

CCSS Grade 8	English SOL
	narration, exposition, persuasion, and informational. 8.7 a) Identify intended audience. 8.7 e) Select specific vocabulary and information for audience and purpose.
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 8 on page 52.)	6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 6.8 e) Eliminate double negatives. 7.7 CF Students will know the writing process is nonlinear: returning to prewriting or drafting at any point in the process may help the writer clarify and elaborate the drafted piece. 7.8 CF Students will gradually assume responsibility for revising, proofreading, and editing their own writing. 7.8 CF Proofread and edit drafts with teacher assistance, peer collaboration, and growing independence. 8.8 CF Proofread and edit drafts with teacher assistance, peer collaboration, and growing independence. 8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 8.8 CF The intent of this standard is that students will understand and apply all the conventions of language learned at the elementary and middle school levels.
6. Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 h) Use computer technology to plan, draft, revise, edit, and publish writing. 8.9 The student will apply knowledge of appropriate reference materials to produce a research product.

CCSS Grade 8	English SOL
	8.9 c) Use technology as a tool to research, organize, evaluate, and communicate information.
Research to Build and Present Knowledge	
7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 a) Draw on background knowledge and knowledge of text structure to understand selections. 8.6 k) Evaluate, organize, and synthesize information for use in written and oral formats. 8.9 The student will apply knowledge of appropriate reference materials to produce a research product. 8.9 a) Collect and synthesize information from multiple sources including online, print and media. 8.9 CF Conduct short research projects to answer a question drawing on several sources and generating questions.
8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.	8.9 The student will apply knowledge of appropriate reference materials to produce a research product. 8.9 b) Evaluate the validity and authenticity of texts. 8.9 e) Cite primary and secondary sources using Modern Language Association (MLA) or American Psychological Association (APA) style. 8.9 g) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information. 8.9 CF The intent of this standard is that students will collect resources, evaluate their usefulness, conduct research, and appropriately cite reliable sources of information. 8.9 CF Students will evaluate the accuracy and authenticity of multiple sources.

CCSS Grade 8	English SOL
	8.9 CF Students will evaluate the intent of the author, which may include misinformation, bias, and unsupported assertions. 8.9 CF Document using a standard form such as MLA or APA. 8.9 CF Avoid plagiarism, give credit whenever using another person's idea or opinion, facts, statistics, graphs, drawings, quotations, or paraphrases of another person's words.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	8.9 The student will apply knowledge of appropriate reference materials to produce a research product.
a. Apply grade 8 Reading standards to literature (e.g., "Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new").	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 g) Analyze the cultural or social function of a literary text. 9.4 i) Explain the influence of historical context on the form, style, and point of view of a written work.
b. Apply grade 8 Reading standards to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced").	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 b) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support. 8.9 The student will apply knowledge of appropriate reference materials to produce a research product. 8.9 b) Evaluate the validity and authenticity of texts. 8.9 CF Students will evaluate the intent of the author, which may include misinformation, bias, and unsupported assertions.
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	8.7 CF Students should have practice writing on demand, for shorter time frames, and over extended periods of time.
CCSS Speaking and Listening Standards	

CCSS Grade 8	English SOL
Comprehension and Collaboration	
1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grade 8 topics, texts, and issues,* building on others' ideas and expressing their own clearly.	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 a) Communicate ideas and information orally in an organized and succinct manner. 7.1 b) Ask probing questions to seek elaboration and clarification of ideas. 7.1 c) Make statements to communicate agreement or tactful disagreement with others' ideas. 8.2 The student will develop and deliver oral presentations in groups and individually. 8.2 g) Assume shared responsibility for collaborative work.
a. Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.	11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.
b. Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.	10.1 CF Work with peers to set rules for group presentations and discussions, set clear goals and deadlines, and define individual roles as needed.
c. Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.	7.1 CF Ask clarifying questions and respond appropriately to others' questions in order to encourage discussion, foster understanding, and bring the discussion back to the topic when needed.
d. Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.	7.1 CF Provide feedback to other group members, acknowledge new insights expressed by others, and when justified, modify their own views.
2. Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind	8.3 The student will analyze, develop, and produce creative or informational medial messages. 8.3 a) Evaluate the persuasive/informational technique being

CCSS Grade 8	English SOL
its presentation.	used in nonprint media including television, radio, video, and Internet. 8.3 b) Examine how values and viewpoints are included or excluded and how the media can influence beliefs, behaviors, and interpretations. 8.3 CF Identify and analyze the motives (social, commercial, political, etc.) and factual content of media messages including print and nonprint resources.
3. Delineate a speaker's argument and specific claims, evaluating the soundness of the reasoning and relevance and sufficiency of the evidence and identifying when irrelevant evidence is introduced.	7.3 CF Recognize that evidence is fact and a valid inference is the interpretation of fact. 8.3 The student will analyze, develop, and produce creative or informational media messages. 8.3 d) Evaluate sources for relationships between intent and factual content. 8.3 CF Analyze the use of opinions in the media. 8.3 CF Analyze the use of facts in the media.
Presentation of Knowledge and Ideas	
4. Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.	8.2 The student will develop and deliver oral presentations in groups and individually. 8.2 a) Choose topic and purpose appropriate to the audience. 8.2 b) Choose vocabulary and tone appropriate to the audience, topic, and purpose. 8.2 c) Use appropriate verbal and nonverbal presentation skills. 8.2 d) Respond to audience questions and comments. 8.2 e) Differentiate between standard English and informal language.
5. Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.	8.3 The student will analyze, develop, and produce creative or informational medial messages. 8.3 c) Use media and visual literacy skills to create products that

CCSS Grade 8	English SOL
	express new understandings. 8.3 CF Create and publish media messages, such as public service announcements aimed at a variety of audiences with different purposes. 8.3 CF Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to express new understandings. 8.3 CF Include multimedia to clarify presentation information.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 8 Language standards 1 and 3 on page 52 for specific expectations.)	8.2 The student will develop and deliver oral presentations in groups and individually. 8.2 e) Differentiate between standard English and informal language. 8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 k) Evaluate, organize, and synthesize information for use in written and oral formats.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	6.8 e) Eliminate double negatives. 8.2 CF Use grammatically correct language. 8 CF Writing Focus Statement: Students will continue the process of becoming independent with sentence formation, usage, and mechanics and understand that the conventions of language help convey the message from the writer to the reader.
a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 7.8 f) Demonstrate understanding of sentence formation by identifying the eight parts of speech and their functions in

CCSS Grade 8	English SOL
	sentences. 8.7 CF Explain the function of verbals (gerunds, participles, infinitives). 11.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 11.7 b) Use verbals and verbal phrases to achieve sentence conciseness and variety.
b. Form and use verbs in the active and passive voice.	9.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 9.7 e) Distinguish between active and passive voice. 9.7 CF Understand that active voice means that the subject of a verb *performs* the action and passive voice means that the subject of a verb *receives* the action. 10.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 10.7 a) Distinguish between active and passive voice. 11.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 11.7 b) Use verbals and verbal phrases to achieve sentence conciseness and variety.
c. Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.	8.8 CF Form and use verbs in the indicative, imperative, interrogative, conditional, and subjunctive mood.
d. Recognize and correct inappropriate shifts in verb voice and mood.	7.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

CCSS Grade 8	English SOL
	7.8 d) Use subject-verb agreement with intervening phrases and clauses. 8.8 CF Recognize and correct inappropriate shifts in verb voice and mood.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 8.8 b) Use and punctuate correctly varied sentence structures to include conjunctions and transition words. 8.8 c) Choose the correct case and number for pronouns in prepositional phrases with compound objects. 8.8 e) Use comparative and superlative degrees in adverbs and adjectives. 8.8 g) Use correct spelling for frequently used words.
a. Use punctuation (comma, ellipsis, dash) to indicate a pause or break.	8.8 CF Use punctuation (comma, ellipsis, dash) to indicate a pause or break.
b. Use an ellipsis to indicate an omission.	8.8 CF Use an ellipsis to indicate an omission.
c. Spell correctly.	8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 8.8 g) Use correct spelling for commonly used words.
Knowledge of Language	
3. Use knowledge of language and its conventions when writing, speaking, reading, or listening.	7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion. 7.7 g) Select vocabulary and information to enhance the central idea, tone, and voice. 8.2 The student will develop and deliver oral presentations in groups and individually. 8.2 b) Choose vocabulary and tone appropriate to the audience,

CCSS Grade 8	English SOL
	topic, and purpose.
a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).	8.8 CF Use verbs in the indicative, imperative, interrogative, conditional, and subjunctive form. 9.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 9.7 e) Distinguish between active and passive voice. 9.7 CF Students will use verbs in the conditional and subjunctive mood to achieve particular effects.
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on *grade 8 reading and content*, choosing flexibly from a range of strategies.	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 b) Use context, structure, and connotations to determine meaning and differentiate among multiple meanings of words and phrases.
a. Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	8.4 CF The intent of this standard is that students will become independent learners of vocabulary by choosing from a variety of strategies to determine or clarify the meaning of unknown and multiple-meaning words. 8.4 CF use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede, recede, secede*).	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 c) Use roots, affixes, cognates, synonyms, and antonyms to determine the meaning of unfamiliar words and technical vocabulary.

CCSS Grade 8	English SOL
	8.4 CF Use common roots to determine the meaning of unfamiliar words and make connections with word families (e.g.,-phobia, and -ology). 9.3, 10.3, 11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 a) 10.3 a) 11.3 a) 12.3a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 d) Use dictionaries, thesauruses, and glossaries to determine definition, pronunciation, etymology, spelling, and usage of words.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 d) Use dictionaries, thesauruses, and glossaries to determine definition, pronunciation, etymology, spelling, and usage of words.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	6.4 CF Students will be introduced to word relationships and nuances in word meanings. 8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 a) Explain the use of symbols and figurative language.

CCSS Grade 8	English SOL
a. Interpret figures of speech (e.g. verbal irony, puns) in context.	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 a) Identify and analyze an author's use of figurative language. 8.4 CF Understand, evaluate, and use figurative language. 9.4 CF Identify and analyze an author's use of diction (word choice) and syntax to convey ideas and content, including: rhetorical question; cliché; connotation; denotation; hyperbole; understatement; irony (dramatic, situational, verbal); dialect; and pun.
b. Use the relationship between particular words to better understand each of the words.	9.4 CF Identify and analyze an author's use of diction (word choice) and syntax to convey ideas and content, including: rhetorical question; cliché; connotation; denotation; hyperbole; understatement; irony (dramatic, situational, verbal); dialect; and pun.
c. Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *bullheaded, willful, firm, persistent, resolute).*	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 e) Discriminate between connotative and denotative meanings and interpret the connotation. 8.4 CF Distinguish among the connotations (associations) of words with similar denotations (definitions) (e.g., *refined, respectful, polite, diplomatic, condescending*), recognizing that some words have technical meanings based on context such as *stern.*
6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 f) Extend general and specialized vocabulary through

CCSS Grade 8	English SOL
	speaking, listening, reading, and writing. 8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 l) Use prior and background knowledge as a context for new learning.

English SOL for grade 8 aligned with the CCSS at other grade levels	
Reading Standards for Literacy in History/Social Studies Grades 6-8 8. Distinguish among fact, opinion, and reasoned judgment in a text.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 f) Differentiate between fact and opinion.
Partially addressed in Grades 9-10 Writing. 7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	8.6 k) Evaluate, organize, and synthesize information for use in written and oral formats.
Only partially addressed under Grade 7 Writing. 2. a. Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 c) Distinguish between a thesis statement and a topic sentence.

English SOL for grade 8 aligned with the CCSS at other grade levels	
Partial Match: Grade 5 Reading Foundational Skills 4. c. Read with sufficient accuracy and fluency to support comprehension. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	8.5 m), 8.6 l) Use reading strategies to monitor comprehension throughout the reading process.
Partial Match: Grade 8 Speaking and Listening 6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 k) Evaluate, organize, and synthesize information for use in written and oral formats.

English SOL for grade 8 not explicitly stated in the CCSS at any grade level	
	8.1 The student will use interviewing techniques to gain information. 8.1 a) Prepare and ask relevant questions for the interview
	8.1 b) Make notes of responses.
	8.1 c) Compile, accurately report, and publish responses.
	8.1 d) Evaluate the effectiveness of the interview.
	8.2 The student will develop and deliver oral presentations in groups and individually. 8.2 h) Use a variety of strategies to listen actively.
	8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational. 8.7 f) Use interview quotations as evidence.
	8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 8.8 a) Use a variety of graphic organizers, including sentence diagrams, to analyze and improve sentence formation and

English SOL for grade 8 not explicitly stated in the CCSS at any grade level	
	paragraph structure.
	8.9 f) Publish findings and respond to feedback.

Grades 9-10

CCSS Grades 9-10	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 l) Make predictions, inferences, draw conclusions, and connect prior knowledge to support reading comprehension. 10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras. 10.4 b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension.
2. Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	9.4 CF Determine a theme of a text and analyze its development over the course of the text. 9.4 CF Provide a summary of the text.
3. Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.	9.4 CF Analyze how characters with multiple or conflicting motivations develop over the course of a text, interact with other characters, and advance the plot or develop theme.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).	9.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 b) Use context, structure, and connotations to determine meanings of words and phrases. 9.3 c) Discriminate between connotative and denotative meanings and interpret the connotation. 9.3 CF Analyze connotations of words with similar denotations.

CCSS Grades 9-10	English SOL
	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme. 9.4 CF Identify and analyze an author's use of diction (word choice) and syntax to convey ideas and content.
5. Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme. 9.4 CF Students will understand that parallel plots are plots in which each main character has a separate but related story line that merges together (e.g., *A Tale of Two Cities*).
6. Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 m) Use reading strategies to monitor comprehension throughout the reading process. 10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras. a) Identify main and supporting ideas. b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension. c) Explain similarities and differences of techniques and literary forms represented in the literature of different cultures and eras.

CCSS Grades 9-10	English SOL
	d) Analyze the cultural or social function of literature. e) Identify universal themes prevalent in the literature of different cultures. f) Examine a literary selection from several critical perspectives. g) Explain the influence of historical context on the form, style, and point of view of a literary text. h) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose. i) Compare and contrast literature from different cultures and eras. j) Distinguish between a critique and a summary. k) Compare and contrast how rhyme, rhythm, sound, imagery, style, form, and other literary devices convey a message and elicit a reader's emotions. l) Compare and contrast character development in a play to characterization in other literary forms. m) Use reading strategies to monitor comprehension throughout the reading process. 10.4 CF Analyze a particular point of view or cultural experience reflected in a literary work.
Integration of Knowledge and Ideas	
7. Analyze the representation of a subject or a key scene in two different artistic mediums, including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Breughel's Landscape with the Fall of Icarus).	10.4 CF Analyze the representation of a subject or a key scene in two different mediums.
8. (Not applicable to literature) *No standard stated for CCSS.*	
9. Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme	9.4 CF Understand that an author draws on and transforms source material in a specific work (e.g. how a later author draws

CCSS Grades 9-10	English SOL
or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).	on a play by Shakespeare).
Range of Reading and Level of Text Complexity	
10. By the end of grade 9, read and comprehend literature, including stories, dramas, and poems, in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 9–10 text complexity band independently and proficiently.	9 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity. (The same Reading Focus Statement is present in the 10 CF.)
Reading for Informational Texts	
Key Ideas and Details	
1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	9.5 The student will read and analyze a variety of nonfiction texts. 9.5 h) Draw conclusions and make inferences on explicit and implied information using textual support as evidence. 10.5 The student will read, interpret, analyze, and evaluate nonfiction texts. 10.5 f) Draw conclusions and make inferences on explicit and implied information using textual support as evidence.
2. Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.	9.5 The student will read and analyze a variety of nonfiction texts. 9.5 a) Recognize an author's intended purpose for writing and identify the main idea. 9.5 CF Provide a summary of the text. 9.5 CF Identify and summarize essential details that support the main idea of informational text. 10.5 CF Identify the main idea(s) in informational text.

CCSS Grades 9-10	English SOL
	10.5 CF Identify essential details in complex informational passages.
3. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.	9.5 CF Analyze text structures (organizational pattern), including: cause and effect; comparison/contrast; enumeration or listing; sequential or chronological; concept/definition; generalization; and process. 9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 g) Use transitions between paragraphs and ideas.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).	9.3, 10.4 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 b),10.3 b) Use context, structure, and connotations to determine meanings of words and phrases. 9.3 c), 10.3 c) Discriminate between connotative and denotative meanings and interpret the connotation. 9.3 CF Analyze connotations of words with similar denotations.
5. Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter).	9.5 The student will read and analyze a variety of nonfiction texts. 9.5 h) Draw conclusions and make inferences on explicit and implied information using textual support as evidence. 10.5 CF Know that informational and technical writing is often non-linear, fragmented, and graphic-supported. 10.5 CF Understand how format and style in informational text differ from those in narrative and expository texts.
6. Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose.	10.5 The student will read, interpret, analyze, and evaluate nonfiction texts. 10.5 b) Recognize an author's intended audience and purpose for

CCSS Grades 9-10	English SOL
	writing. 10.5 CF Analyze how authors use rhetoric to advance their point of view.
Integration of Knowledge and Ideas	
7. Analyze various accounts of a subject told in different mediums (e.g., a person's life story in both print and multimedia), determining which details are emphasized in each account.	9.2 CF Students will also recognize that all media messages are constructed and that to understand the whole meaning of the message they can *deconstruct* it, looking at the following attributes: ◦ Authorship (Who constructed the message?) ◦ Format (This is not just the medium being used but also how the creators used specific elements for effect, i.e., color, sound, emphasis on certain words, amateur video, kids' voices.) ◦ Audience (Who is the person or persons meant to see the message? How will different people *see* the message?) ◦ Content (This is not just the visible content but the embedded content as well which includes underlying assumptions of values or points of view; facts and opinions may be intermixed.) ◦ Purpose (Why is the message being sent—is it meant to persuade, inform, entertain, sell, or a combination of these?) 10.4 CF Analyze the representation of a subject or a key scene in two different media. 11.5 The student will read and analyze a variety of nonfiction texts. 11.5 e) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.

CCSS Grades 9-10	English SOL
8. Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.	11.4 CF Students should recognize persuasive techniques such as: ◦ ad hominem – means "to the man" does not argue the issue, instead it argues the person; ◦ red herring – is a deliberate attempt to divert attention; ◦ straw man – creates the illusion of having refuted a proposition by substituting a similar yet weaker proposition (the "straw man"); and ◦ begging the question – assumes the conclusion is true without proving it; circular argument.
9. Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts.	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.5 CF Compare and contrast how two or more texts treat two or more of the same ideas and analyze the development of those ideas including how they interact and build on one another to provide a complex analysis.
Range of Reading and Level of Text Complexity	
10. By the end of grade 9, read and comprehend literary nonfiction in the grades 9–10 text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 10, read and comprehend literary nonfiction at the high end of the grades 9–10 text complexity band independently and proficiently.	9 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity. (The same Reading Focus Statement is present in 10 CF.)
CCSS Writing Standards	
Text Types and Purposes	*Note: Argumentative writing is emphasized in grades 11-12 in the SOL.*
1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 11.6 The student will write in a variety of forms, with an

CCSS Grades 9-10	English SOL
	emphasis on persuasion. 11.6 b) Produce arguments in writing that develop a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions.
a. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence. b. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns.	11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 b) Produce arguments in writing that develop a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions. 11.6 CF Anticipate and address the counter evidence, counterclaims, and counterarguments. 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings. 12.6 b) Produce arguments in writing that develop a thesis to demonstrate knowledgeable judgments, address counterclaims, and provide effective conclusions.
c. Use words, phrases, and clauses to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 g) Use transitions between paragraphs and ideas. 10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis. 10.6 e) Organize ideas into a logical sequence using transitions. 11.6 CF Use appropriate and varied transitions to link sentences and paragraphs.
d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.	8.7 CF Sustain a formal style. 8.7 CF Elaborate the central idea providing sustained unity throughout the writing. 9.6 CF Recognize the importance of maintaining a formal style

CCSS Grades 9-10	English SOL
	and objective tone in academic writing.
e. Provide a concluding statement or section that follows from and supports the argument presented.	8.7 CF Develop a conclusion. 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings. 12.6 b) Produce arguments in writing that develop a thesis to demonstrate knowledgeable judgments, address counterclaims, and provide effective conclusions.
2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis.
a. Introduce a topic; organize complex ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 b) Plan and organize writing to address a specific audience and purpose. 9.6 CF Provide an engaging introduction and a clear thesis statement that introduces the information presented. 10.6 CF Plan and organize their ideas for writing.
b. Develop the topic with well-chosen, relevant, and sufficient facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 b) Plan and organize writing to address a specific audience and purpose. 9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product. 9.8 f) Credit the sources of quoted, paraphrased, and summarized ideas. 9.6 CF Develop the topic with appropriate information, details,

CCSS Grades 9-10	English SOL
	and examples. 10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis. 10.6 a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
c. Use appropriate and varied transitions to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 g) Use transitions between paragraphs and ideas. 10.6 The student will develop a variety of writing to explain, interpret, analyze, and evaluate with an emphasis on exposition and analysis. 10.6 e) Organize ideas into a logical sequence using transitions.
d. Use precise language and domain-specific vocabulary to manage the complexity of the topic.	9.6 CF Use specific vocabulary and information. 9.6 CF Use precise language to convey a vivid picture.
e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.	9.6 CF Use specific vocabulary and information. 9.6 CF Use precise language to convey a vivid picture. 9.6 CF Understand the importance of maintaining a formal style and objective tone in academic writing.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	*Note: The English SOL do not address individual parts of a piece of writing after grade 8, with the exception of a strong thesis statement.* 8.7 CF Develop a conclusion.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes.
a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes.

CCSS Grades 9-10	English SOL
smooth progression of experiences or events.	
b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 b) Plan and organize writing to address a specific audience and purpose.
c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 f) Arrange paragraphs into a logical progression.
d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 g) Use transitions between paragraphs and ideas. 9.6 e) Elaborate ideas clearly through word choice and vivid description.
e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	8.7 CF Develop a conclusion.
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 a) Generate, gather, and organize ideas for writing. 9.6 b) Plan and organize writing to address a specific audience and purpose. 10.6 The student will develop a variety of writing to explain, interpret, analyze, and evaluate with an emphasis on exposition and analysis. 10.6 a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose. 10.8 The student will collect, evaluate, organize, and present information to create a research product.

CCSS Grades 9-10	English SOL
	10.8 b) Develop the central idea or focus.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 h) Revise writing for clarity of content, accuracy and depth of information. 9.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 9.7 f) Proofread and edit writing for intended audience and purpose. 10.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 10.7 e) Analyze the writing of others. 10.7 f) Describe how the author accomplishes the intended purpose of a piece of writing. 10.7 g) Suggest how writing might be improved. 10.7 h) Proofread and edit final product for intended audience and purpose. 10 CF Use peer- and self-evaluation to edit writing.
6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 i) Use computer technology to plan, draft, revise, edit, and publish writing. 9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product. 9.8 a) Use technology as a tool for research to organize, evaluate, and communicate information.

CCSS Grades 9-10	English SOL
	10.6 The student will develop a variety of writing to explain, interpret, analyze, and evaluate with an emphasis on exposition and analysis. 10.6 g) Use computer technology to plan, draft, revise, edit, and publish writing. 10.8 The student will collect, evaluate, organize, and present information to create a research product. 10.8 a) Use technology as a tool to research, organize, evaluate, synthesize, and communicate information.
Research to Build and Present Knowledge	
7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	8.6 The student will read, comprehend, and analyze a variety of nonfiction texts. 8.6 k) Evaluate, organize, and synthesize information for use in written and oral formats. 9.5 The student will read and analyze a variety of nonfiction texts. 9.5 j) Organize and synthesize information from sources for use in written and oral presentations. 9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product. 9.8 b) Narrow the focus of a search. 10.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. c) Use a style manual, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA), to apply rules for punctuation and formatting of direct quotations.

CCSS Grades 9-10	English SOL
	d) Differentiate between in-text citations and works cited on the bibliography page. 10.8 The student will collect, evaluate, organize, and present information to create a research product.
8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product. 9.8 c) Find, evaluate, and select appropriate sources to access information and answer questions. 9.8 d) Verify the validity and accuracy of all information. 9.8 f) Credit the sources of quoted, paraphrased, and summarized ideas. 9.8 e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias. 9.8 g) Cite sources of information using a standard method of documentation such as that of the Modern Language Association (MLA) or the American Psychological Association (APA). 9.8 h) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information. 9.8 CF Differentiate between reliable and unreliable resources. question the validity and accuracy of information: ◦ Who is the author or sponsor of the page? ◦ Are there obvious reasons for bias? ◦ Is contact information provided? ◦ Is there a copyright symbol on the page? ◦ What is the purpose of the page? ◦ Is the information on the page *primary* or *secondary*?

CCSS Grades 9-10	English SOL
	◦ Is the information current? ◦ Can the information on the Web page be verified? 9.8 CF Distinguish one's own ideas from information created or discovered by others. 9.8 CF Use a style sheet, such as MLA or APA, to cite sources. 10.8 The student will collect, evaluate, organize, and present information to create a research product. 10.8 c) Verify the accuracy, validity, and usefulness of information. 10.8 e) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA). 10.8 f) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information. 10.8 CF Evaluate sources for their credibility, reliability, strengths, and limitations. 10.8 CF Demonstrate ability to distinguish between reliable and unreliable sources.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 c) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support. 9.5 The student will read and analyze a variety of nonfiction texts. 9.5 h) Draw conclusions and make inferences on explicit and implied information using textual support as evidence.

CCSS Grades 9-10	English SOL
a. Apply *grades 9–10 Reading standards* to literature (e.g., "Analyze how an author draws on and transforms source material in a specific work [e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare]").	9.4 CF Understand that an author draws on and transforms source material in a specific work (e.g. how a later author draws on a play by Shakespeare).
b. Apply *grades 9–10 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning").	8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry. 8.5 c) Make inferences and draw conclusions based on explicit and implied information using evidence from text as support. 9.2 CF Recognize that persuasive techniques are used to convince viewers to make decisions, change their minds, take a stand on an issue, or predict a certain outcome, such as: ◦ ad hominem – means "to the man" does not argue the issue, instead it argues the person; ◦ red herring – is a deliberate attempt to divert attention; ◦ straw man – creates the illusion of having refuted a proposition by substituting a similar yet weaker proposition (the "straw man"); ◦ begging the question – assumes the conclusion is true without proving it; circular argument; ◦ testimonial – uses famous people to endorse the product or idea; ◦ ethical appeal – establishes the writer as knowledgeable; ◦ emotional appeal – appeals strictly to emotions often used with strong visuals; and ◦ logical appeal – is the strategic use of logic, claims, and evidence. 9.5 The student will read and analyze a variety of nonfiction texts.

CCSS Grades 9-10	English SOL
	9.5 h) Draw conclusions and make inferences on explicit and implied information using textual support as evidence. 10.5 The student will read, interpret, analyze, and evaluate nonfiction texts. 10.5 f) Draw conclusions and make inferences on explicit and implied information using textual support as evidence.
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.	9.6 CF Students should have practice writing for shorter time frames as well as extended time frames. The same statement appears in 10.6 CF.
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 9–10 topics, texts, and issues,* building on others' ideas and expressing their own clearly and persuasively.	9.1 l) Assume shared responsibility for collaborative work. 10.1 The student will participate in, collaborate in, and report on small-group learning activities. 10.1 e) Demonstrate the ability to work effectively with diverse teams to accomplish a common goal.
a. Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.	11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.
b. Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentation of alternate views), clear goals and deadlines, and individual roles as needed.	10.1 CF Work with peers to set rules for group presentations and discussions, set clear goals and deadlines, and define individual roles as needed. 10.1 The student will participate in, collaborate in, and report on small-group learning activities. 10.1 a) Assume responsibility for specific group tasks

CCSS Grades 9-10	English SOL
	b) Collaborate in the preparation or summary of the group activity. c) Include all group members in oral presentation. d) Choose vocabulary, language, and tone appropriate to the topic, audience, and purpose. e) Demonstrate the ability to work effectively with diverse teams to accomplish a common goal. f) Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems. g) Access, critically evaluate, and use information accurately to solve problems. h) Evaluate one's own role in preparation and delivery of oral reports. i) Use a variety of strategies to listen actively. j) Analyze and interpret other's presentations. k) Evaluate effectiveness of group process in preparation and delivery of oral reports.
c. Propel conversations by posing and responding to questions that relate the current discussion to broader themes or larger ideas; actively incorporate others into the discussion; and clarify, verify, or challenge ideas and conclusions.	10.1 CF Move conversations ahead by posing and responding to questions, actively involve others in the discussion, and challenge ideas.
d. Respond thoughtfully to diverse perspectives, summarize points of agreement and disagreement, and, when warranted, qualify or justify their own views and understanding and make new connections in light of the evidence and reasoning presented.	7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations. 7.1 c) Make statements to communicate agreement or tactful disagreement with others' ideas. 7.1 e) Use a variety of strategies to listen actively. 9.1 k) Summarize and evaluate information presented orally by others. 10.1 CF Respond thoughtfully by summarizing points of

CCSS Grades 9-10	English SOL
	agreement and disagreement, qualifying views and understanding.
2. Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.	9.2 The student will produce, analyze, and evaluate auditory, visual, and written media messages. 9.2 d) Evaluate sources including advertisements, editorial, and feature stories for relationships between intent and factual content. 9.2 e) Monitor, analyze, and use multiple streams of simultaneous information. 12.1 The student will make a formal oral presentation in a group or individually. 12.1 d) Use media, visual literacy, and technology skills to create and support the presentation.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, identifying any fallacious reasoning or exaggerated or distorted evidence.	9.1 Evaluate impact and purpose of the presentation. 10.1 The student will participate in, collaborate in, and report on small-group learning activities. 10.1 j) Analyze and interpret other's presentations. 10.5 CF Analyze how authors use rhetoric to advance their point of view. 11.1 CF Evaluate the use of persuasive techniques, such as: ◦ introduction (for securing interest and establishing unity); ◦ organization; ◦ proof/support; ◦ logic; ◦ loaded language; ◦ rhetorical devices, such as: – call to action – elevated language

CCSS Grades 9-10	English SOL
	– rhetorical question – appeals to emotion – repetition – figurative language – addressing counterclaims ° conclusion. 11.5 CF Determine an author's point of view or purpose in a rhetorically rich text, analyzing how ambiguity, contradiction, paradox, irony, hyperbole, overstatement, and understatement contribute to text.
Presentation of Knowledge and Ideas	
4. Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.	9.1 The student will make planned oral presentations independently and in small groups. 9.1 a) Include definitions to increase clarity. 9.1 b) Use relevant details to support main ideas. 9.1 c) Illustrate main ideas through anecdotes and examples. 9.1 d) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose. 9.1 e) Use verbal and nonverbal techniques for presentatio 9.1 f) Evaluate impact and purpose of presentation. 9.1 g) Credit information sources. 9.1 h) Give impromptu responses to questions about presentation. 9.1 i) Give and follow spoken directions to perform specific tasks, answer questions, or solve problems. 9.1 j) Use a variety of strategies to listen actively. 9.1 k) Summarize and evaluate information presented orally by others. 9.1 l) Assume shared responsibility for collaborative work.

CCSS Grades 9-10	English SOL
5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.	10.2 The student will analyze, produce, and examine similarities and differences between visual and verbal media messages. a) Use media, visual literacy, and technology skills to create products. 11.1 The student will make informative and persuasive presentations. 11.1 g) Use presentation technology. 11.1 CF Develop effective multi-media presentations.
6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grades 9–10 Language standards 1 and 3 on pages 54 for specific expectations.)	9.1 CF Organize presentation in a structure appropriate to the audience, topic, and purpose (problem-solution, comparison-contrast, cause-effect, etc.). 10.1 CF Use grammatically correct language.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	9.1 The student will make planned oral presentations independently and in small groups. 9.1 d) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose. 9.7 CF Students will focus on editing and the application of grammatical conventions in writing. 10.1 CF Use grammatically correct language.
a. Use parallel structure.	9.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 9.7 b) Use parallel structures across sentences and paragraphs.
b. Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or	9.7 CF Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, absolute) and clauses (independent, dependent; noun, relative, adverbial) to convey specific meanings and add variety and interest to writing or

CCSS Grades 9-10	English SOL
presentations.	presentations.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	9.7 Self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 9.7 CF Students will focus on editing and the application of grammatical conventions in writing.
a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses.	9.7 CF Use a semicolon, or a conjunctive adverb to link two or more closely related independent clauses.
b. Use a colon to introduce a list or quotation.	10.7 b) apply rules governing uses of the colon. 10.7 CF Know and apply the rules for the use of a colon: ◦ before a list of items; ◦ before a long, formal statement or quotation; and ◦ after the salutation of a business letter.
c. Spell correctly.	9.7 Self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.
Knowledge of Language	
3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.	9.3, 10.3, 11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 g), 10.3 g), 11.3 g), 12.3 g) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.
a. Write and edit work so that it conforms to the guidelines in a style manual (e.g., MLA Handbook, Turabian's Manual for writers) appropriate for the discipline and writing type.	9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product. 9.8 g) Cite sources of information using a standard method of documentation such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).

CCSS Grades 9-10	English SOL
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 9–10 reading and content*, choosing flexibly from a range of strategies.	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 b) Use context, structure, and connotations to determine meaning and differentiate among multiple meanings of words and phrases. 9.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 b) Use context, structure, and connotations to determine meanings of words and phrases.
a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	9.3 CF, 10.3 CF Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *analyze, analysis, analytical; advocate, advocacy*).	10.3 CF Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception, conceivable*).
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, or its etymology.	9.3 CF, 10.3 CF Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses, both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary)	9.3, 10.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 b), 10.3 b) Use context, structure, and connotations to determine meanings of words and phrases.
5. Demonstrate understanding of figurative language, word	9.3 CF, 10.3 CF Recognize that words have nuances of meaning

CCSS Grades 9-10	English SOL
relationships, and nuances in word meanings.	and that understanding the connotations may be necessary to determine the appropriate meaning.
a. Interpret figures of speech (e.g., euphemism, oxymoron) in context and analyze their role in the text.	9.3, 10.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 e), 10.3 e) Identify literary and classical allusions and figurative language in text. 9.3 CF, 10.3 CF Interpret figures of speech (e.g., *euphemism, oxymoron*) in context and analyze their role in the text.
b. Analyze nuances in the meaning of words with similar denotations.	9.3, 10.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 c), 10.3 c) Discriminate between connotative and denotative meanings and interpret the connotation.
6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	9.3, 10.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 CF, 10.3 CF The intent of this standard is that students will increase their independence as learners of vocabulary. 10.3 f) Extend general and specialized vocabulary through speaking, reading, and writing.

English SOL for grades 9-10 aligned with the CCSS at other grade levels	
Partially addressed in Grade 8 Language 4. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede, recede, secede*).	9.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 9.3 a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
Grade 5 Language 5. b. Recognize and explain the meaning of common idioms,	9.3 d) Identify the meaning of common idioms.
Note on range and content of student reading College and Career Anchor Standards for Reading Through extensive reading of stories, dramas, poems, and myths from diverse cultures and different time periods, students gain literary and cultural knowledge as well as familiarity with various text structures and elements.	9.4 g) Analyze the cultural or social function of a literary text.
Reading Standards for Literacy in History/Social Studies Grade 6-8 8. Distinguish among fact, opinion, and reasoned judgment in a text.	9.5 The student will read and analyze a variety of nonfiction texts. 9.5 i) Differentiate between fact and opinion.
Grade 8 Language 3. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).	9.7 e) Distinguish between active and passive voice.
Grade 8 Language 4. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede, recede, secede*).	10.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 10.3 a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.

English SOL for grades 9-10 aligned with the CCSS at other grade levels	
Grade 5 Language 5. b. Recognize and explain the meaning of common idioms, adages, and proverbs.	10.3 d) Identify the meaning of common idioms.
Reading Standards for Literacy in Science and Technical Subjects Grades 11-12 Reading 5. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.	10.5 The student will read, interpret, analyze, and evaluate nonfiction texts. 10.5 a) Identify text organization and structure.
Reading Standards for Literacy in Science and Technical Subjects Grades 9-10 Reading 9. Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.	10.5 d) Compare and contrast informational texts.
Reading Standards for Literacy in History/Social Studies Grades 9-10 Reading 7. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.	10.5 e) Interpret and use data and information in maps, charts, graphs, timelines, tables, and diagrams.
The modes of writing are addressed in separate standards. Grades 9-10 Writing 1 – arguments. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. 2 – informative/expository. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective election, organization, and analysis of content. 3 – narrative. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen	10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis. 10.6 b) Synthesize information to support the thesis.

English SOL for grades 9-10 aligned with the CCSS at other grade levels	
details, and well-structured event sequences.	
Grade 8 Language 1. b. Form and use verbs in the active and passive voice. 3. a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).	10.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 10.7 a) Distinguish between active and passive voice.
Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects Grades 9-10 8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	10.7 d) Differentiate between in-text citations and works cited on the bibliography page.
Reading Standards for Literacy in Science and Technical Subjects Grades 11-12 8. Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.	10.8 d) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.

English SOL for grades 9-10 not explicitly stated in the CCSS at any grade level	
	9.2 The student will produce, interpret, and analyze auditory, visual, and written media messages. 9.2 a) Analyze and interpret special effects used in media

English SOL for grades 9-10 not explicitly stated in the CCSS at any grade level	
	messages including television, film, and Internet.
	9.2 b) Determine the purpose of the media message and its effect on the audience.
	9.2c) Describe possible cause and effect relationships between mass media coverage and public opinion trends.
	9.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. a) Use and apply rules for the parts of a sentence, including subject/verb, direct/indirect object, and predicate nominative/predicate adjective, and coordinating conjunctions.
	10.2 c) Determine the author's purpose and intended effect on the audience for media messages.
	10.2 d) Identify the tools and techniques used to achieve the intended focus.
	10.5 The student will read, interpret, analyze, and evaluate nonfiction texts. 10.5 c) Skim manuals or informational sources to locate information.

Grades 11-12

CCSS Grades 11-12	English SOL
Reading	
Reading for Literature	
Key Ideas and Details	
1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	10.4 The student will read, comprehend, and analyze literary texts of different cultures and eras. 10.4 b) Make predictions, draw inferences, and connect prior knowledge to support reading comprehension. 11.5 The student will read and analyze a variety of nonfiction texts. 11.5 d) Draw conclusions and make inferences on explicit and implied information using textual support.
2. Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.	9.4 CF Determine a theme of a text and analyze its development over the course of the text. 9.4 CF Provide a summary of the text.
3. Analyze the impact of the author's choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).	11.4 CF Analyze the impact of the author's choices in developing the elements of a story or drama (e.g., setting, plot structure, and character development).
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)	11.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 b) Use context, structure, and connotations to determine meanings of words and phrases. 11.3 CF Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as

CCSS Grades 11-12	English SOL
	a clue to the meaning of a word or phrase. 11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose.
5. Analyze how an author's choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.	9.4 The student will read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. 9.4 e) Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme. 11.4 CF Analyze the impact of the author's choices in developing the elements of a story or drama (e.g., setting, plot structure, and character development).
6. Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 j) Analyze the use of literary elements and dramatic conventions including verbal, situational and dramatic irony used in American literature. 11.4 CF Analyze a case in which a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, irony, sarcasm, understatement).
Integration of Knowledge and Ideas	
7. Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)	11.4 CF Compare and evaluate adaptations and interpretations of a script for stage, film, television or other media. 12.4 CF Analyze the representation of a subject or a key scene in two different media.
8. (Not applicable to literature) *No standard stated for CCSS.*	

CCSS Grades 11-12	English SOL
9. Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 b) Compare and contrast the development of American literature in its historical context. 11.4 CF Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics. 12.5 The student will read and analyze a variety of nonfiction texts. 12.5 c) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.
Range of Reading and Level of Text Complexity	
10. By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literature, including stories, dramas, and poems, at the high end of the grades 11–CCR text complexity band independently and proficiently.	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 i) Read and analyze a variety of American dramatic selections. 11 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity. *Note: The same statement appears in the Grade 12 Curriculum Framework*
Reading for Informational Texts	
Key Ideas and Details	
1. Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	11.5 The student will read and analyze a variety of nonfiction texts. 11.5 d) Draw conclusions and make inferences on explicit and implied information using textual support.

CCSS Grades 11-12	English SOL
	12.5 The student will read and analyze a variety of nonfiction texts. 12.5 f) Draw conclusions and make inferences on explicit and implied information using textual support. 12.5 CF Make frequent references to texts in order to verify conclusions and support logical inferences.
2. Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.	11.5 CF Compare and contrast how two or more texts treat two or more of the same ideas and analyze the development of those ideas including how they interact and build on one another to provide a complex analysis. 11.5 CF Provide an objective summary of the text.
3. Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.	11.5 CF Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.
Craft and Structure	
4. Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines *faction* in *Federalist* No. 10).	11.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 b) Use context, structure, and connotations to determine meanings of words and phrases. 11.3 c) Discriminate between connotative and denotative meanings and interpret the connotation. 11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 e) Analyze how context and language structures convey an author's intent and viewpoint. 11.5 The student will read and analyze a variety of nonfiction texts. 11.5 g) Recognize and analyze use of ambiguity, contradiction,

CCSS Grades 11-12	English SOL
	paradox, irony, overstatement, and understatement in text. 12.5 The student will read and analyze a variety of nonfiction texts. 12.5 d) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text.
5. Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.	11.5 CF Evaluate the relevance and quality of evidence used to support a claim. 11.6 CF Show how evidence supports each main point of the argument and justify why the evidence credibly supports the claims.
6. Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness, or beauty of the text.	11.5 CF Determine an author's point of view or purpose in a rhetorically rich text, analyzing how ambiguity, contradiction, paradox, irony, hyperbole, overstatement, and understatement contribute to text.
Integration of Knowledge and Ideas	
7. Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.	10.2 The student will analyze, produce, and examine similarities and differences between visual and verbal media messages. 10.2 b) Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion. 10.5 The student will read, interpret, analyze, and evaluate nonfiction texts. 10.5 g) Analyze and synthesize information in order to solve problems, answer questions, and generate new knowledge. 11.2 CF Organize knowledge and display learning using visual images, text, graphics, and/or music to create media messages with visual, audio, and graphic effects. 11.2 c) Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between

CCSS Grades 11-12	English SOL
	intent, factual content, and opinion. 11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 d) Critically evaluate quality, accuracy, and validity of information. 12.5 The student will read and analyze a variety of nonfiction texts. 12.5 b) Analyze and synthesize information in order to solve problems, answer questions, and generate new knowledge
8. Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., *The Federalist,* presidential addresses).	11.5 CF Understand how an organizational pattern enhances the meaning of a text. *Note: The majority of seminal U.S. texts are studied within the context of U.S. Government as follows* *Government.4 The student will demonstrate knowledge of the Constitution of the United States by:* *GOVT.4 a) examining the ratification debates and The Federalist;* *GOVT.4 b) identifying the purposes for government stated in the Preamble;* *GOVT.4 c) examining the fundamental principles upon which the Constitution of the United States is based, including the rule of law, consent of the governed, limited government, separation of powers, and federalism;* *GOVT.4 d) illustrating the structure of the national government outlined in Article I, Article II, and Article III;* *GOVT.4 e) describing the amendment process.*
9. Analyze seventeenth-, eighteenth-, and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the	11.5 The student will read and analyze a variety of nonfiction texts. 12.5 The student will read and analyze a variety of nonfiction

CCSS Grades 11-12	English SOL
Preamble to the Constitution, the Bill of Rights, and Lincoln's Second Inaugural Address) for their themes, purposes, and rhetorical features.	texts. 12.5 CF Determine an author's point of view or purpose in a text in which the rhetoric is particularly effective. *Note: The majority of seminal U.S. texts are studied within the context of U.S. History and U.S. Government as follows* *Government 4 The student will demonstrate knowledge of the Constitution of the United States by:* *GOVT.4 a) examining the ratification debates and The Federalist;* *GOVT.4 b) identifying the purposes for government stated in the Preamble;* *GOVT.4 c) examining the fundamental principles upon which the Constitution of the United States is based, including the rule of law, consent of the governed, limited government, separation of powers, and federalism;* *GOVT.4 d) illustrating the structure of the national government outlined in Article I, Article II, and Article III;* *GOVT.4 e) describing the amendment process.*
Range of Reading and Level of Text Complexity	
10. By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range. By the end of grade 12, read and comprehend literary nonfiction at the high end of the grades 11–CCR text complexity band independently and proficiently.	11 CF Reading Focus Statement: When selecting texts, teachers will consider appropriateness of subject and theme as well as text complexity. *Note: The same statement appears in the Grade 12 Curriculum Framework.*
CCSS Writing Standards	
Text Types and Purposes	
1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant	11.6 The student will write in a variety of forms, with an emphasis on persuasion.

CCSS Grades 11-12	English SOL
and sufficient evidence.	11CF Writing Focus Statement: Students will produce arguments in writing that demonstrate knowledgeable judgments and address counterclaims 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings. 12.6 f) Create arguments free of errors in logic and externally supported.
a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.	11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 b) Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses, counterclaims, and provides effective conclusions. 11.6 c) Organize ideas in a sustained and logical manner. 11.6 CF Anticipate and address the counterevidence, counterclaims, and counterarguments. 12.6 CF Construct arguments that: introduce precise, substantive claims; establish the significance of the claims; distinguish them from opposing claims; and sequence information logically (e.g., problem-solution, cause and effect). 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings. 12.6 b) Produce arguments in writing that develop a thesis to demonstrate knowledgeable judgments, address counterclaims, and provide effective conclusions. 12.6 c) Clarify and defend a position with precise and relevant evidence. 12.6 f) Create arguments free of errors in logic and externally supported.
b. Develop claim(s) and counterclaims fairly and thoroughly,	11.5 The student will read and analyze a variety of nonfiction

CCSS Grades 11-12	English SOL
supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.	texts. 11.5 The student will read and analyze a variety of nonfiction texts. 11.5 f) Identify false premises in persuasive writing. 11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 d) Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately. 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings. 12.6 b) Produce arguments in writing that develop a thesis to demonstrate knowledgeable judgments, address counterclaims, and provide effective conclusions. 12.6 CF Develop claim(s) and counterclaims thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both.
c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.	12.6 CF Use words, phrases, and clauses to link the major sections of the text. 12.6 d) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation. 12.6 e) Use a variety of rhetorical strategies to accomplish a specific purpose. 12.6 CF Create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.
d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.	12.6 CF Establish and maintain a style and tone.
e. Provide a concluding statement or section that follows from	11.6 The student will write in a variety of forms, with an emphasis

CCSS Grades 11-12	English SOL
and supports the argument presented.	on persuasion. 11.6 b) Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions. 12.6 CF Provide a clear and effective conclusion.
2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.	11.6 CF Develop the topic thoroughly by selecting facts, details, quotations, and appropriate examples for the audience and purpose. 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings.
a. Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.	11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 a) Generate, gather, and organize ideas for writing to address a specific audience and purpose. 11.6 c) Organize ideas in a sustained and logical manner. 11.6 e) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.	11.6 CF Develop the topic thoroughly by selecting facts, details, quotations, and appropriate examples for the audience and purpose.
c. Use appropriate and varied transitions and syntax to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.	11.6 CF Use appropriate and varied transitions to link sentences and paragraphs. 12.6 CF Use transition words and phrases to signal progression of ideas within and between paragraphs, and use appropriate words and phrases to signal organizational patterns (e.g., description, question-answer, compare-contrast, problem-solution, cause and effect). 12.6 CF Use words, phrases, and clauses to link the major sections

CCSS Grades 11-12	English SOL
	of the text.
d. Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.	10.6 The student will develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis. 10.6 c) Elaborate ideas clearly through word choice and vivid description. 11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 e) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
e. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.	12.6 CF Establish and maintain a style and tone.
f. Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).	12. 6 CF Provide a clear and effective conclusion.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 e) Elaborate ideas clearly through word choice and vivid description.
a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 f) Arrange paragraphs into a logical progression. 9.6 g) Use transitions between paragraphs and ideas. 9.6 CF Understand the importance of audience, and purpose and point of view when writing. 11.6 The student will write in a variety of forms, with an emphasis on persuasion. a) Generate, gather, plan, and organize ideas for writing to

CCSS Grades 11-12	English SOL
	address a specific audience and purpose.
b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.	8.7 CF, 9.6 CF Use narrative techniques, such as dialogue, description, and pacing, to develop experiences or characters. 9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes.
c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution).	11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 c) Organize ideas in a sustained and logical manner. 11.6 e) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters.	9.6 The student will develop narrative, expository, and persuasive writings for a variety of audiences and purposes. 9.6 CF Use precise language to convey a vivid picture. 9.6 CF Develop the topic with appropriate information, details, and examples. 10.6 CF Use visual and sensory language as needed for effect.
e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	12.6 CF Provide a clear and effective conclusion.
Production and Distribution of Writing	
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	11.6 The student will write in a variety of forms with emphasis on persuasion. 11.6 a) Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose. 11.6 h) Write and revise correspondence to a standard acceptable both in the workplace and in postsecondary education. 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings. 12.6 a) Generate, gather, plan, and organize ideas for writing to

CCSS Grades 11-12	English SOL
	address a specific audience and purpose. 12.6 d) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	11.6 The student will write in a variety of forms with emphasis on persuasion. 11.6 e) Adapt content, vocabulary, voice, and tone to audience, purpose, and situation. 11.6 f) Revise writing for clarity of content, accuracy and depth of information. 11.7 The student will self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 11.7 e) Adjust sentence and paragraph structures for a variety of purposes and audiences. 11.7 f) Proofread and edit writing for intended audience and purpose. 11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 h) Revise writing for clarity of content, accuracy, and depth of information. 12.6 The student will develop expository and informational, analyses, and persuasive/argumentative writings. 12.6 g) Revise writing for clarity of content, depth of information and technique of presentation. 12.7 The student will write, revise, and edit writing. 12.7 a) Edit, proofread, and prepare writing for intended audience and purpose. 12.8 The student will write documented research papers.

CCSS Grades 11-12	English SOL
	12.8 f) Revise writing for clarity, depth of information, and technique of presentation.
6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.	11.6 The student will write in a variety of forms with emphasis on persuasion. 11.6 g) Use computer technology to plan, draft, revise, edit, and publish writing. 11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 a) Use technology as a tool to research, organize, evaluate, and communicate information. 12.6 The student will develop expository, informational, analyses, and persuasive/argumentative writings. 12.6 h) Use computer technology to plan, draft, revise, edit, and publish writing. 12.7 The student will write, revise and edit writing. 12.8 a) Use technology as a tool to research, organize, evaluate, and communicate information.
Research to Build and Present Knowledge	
7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 b) Narrow a topic and develop a plan for research. 11.8 c) Collect information to support a thesis. 11.8 d) Critically evaluate quality, accuracy, and validity of information. 11.8 e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view, or bias.

CCSS Grades 11-12	English SOL
	11.8 f) Synthesize and present information in a logical sequence. 12.8 The student will write documented research papers. 12.8 a) Use technology as a tool to research, organize, evaluate, and communicate information. 12.8 b) Frame, analyze, and synthesize information to solve problems, answer questions, and generate new knowledge. 12.8 d) Synthesize information to support the thesis and present information in a logical manner.
8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation	11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 g) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA). 11.8 j) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information. 12.7 The student will write, revise, and edit writing. 12.7 c) Use a style manual, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA), to apply rules for punctuation and formatting of direct quotations. 12.8 The student will write documented research papers. 12.8 c) Critically evaluate the accuracy, quality, and validity of the information. 12.8 e) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological

CCSS Grades 11-12	English SOL
	Association (APA). 12.8 h) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply *grades 11–12 Reading standards* to literature (e.g., "Demonstrate knowledge of eighteenth-, nineteenth- and early-twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics"). b. Apply *grades 11–12 Reading standards* to literary nonfiction (e.g., "Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning [e.g., in U.S. Supreme Court Case majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., The Federalist, presidential addresses]").	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.5 The student will read and analyze a variety of nonfiction texts. 11.5 e) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions. 11.5 f) Identify false premises in persuasive writing. 11.5 g) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text. 11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 c) Collect information to support a thesis. 11.8 d) Critically evaluate quality, accuracy, and validity of information. 11.8 e) Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view, or bias. 11.8 f) Synthesize and present information in a logical sequence. 12.5 The student will read and analyze a variety of nonfiction texts. 12.5 d) Recognize and analyze use of ambiguity, contradiction, paradox, irony, overstatement, and understatement in text.

CCSS Grades 11-12	English SOL
	12.5 e) Identify false premises in persuasive writing. 12.5 f) Draw conclusions and make inferences on explicit and implied information using textual support. 12.8 The student will write documented research papers. 12.8 b) Frame, analyze, and synthesize information to solve problems, answer questions, and generate new knowledge.
Range of Writing	
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.	10.6 CF Students should have practice writing for shorter time frames as well as extended time frames. *Note: The same statement appears in 12.6 CF.*
CCSS Speaking and Listening Standards	
Comprehension and Collaboration	
1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on *grades 11–12 topics, texts, and issues,* building on others' ideas and expressing their own clearly and persuasively.	10.1 The student will participate in, collaborate in, and report on small-group learning activities. 10.1 e) Demonstrate the ability to work effectively with diverse teams to accomplish a common goal. 11.1 The student will make informative and persuasive presentations. 11.1 h) Collaborate and report on small-group learning activities. 12.1 The student will make a formal oral presentation in a group or individually. 12.1 f) Collaborate and report on small group learning activities.
a. Come to discussions prepared having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.	11.1 CF Define a position and select evidence to support that position through reading, writing, and discussion.
b. Work with peers to promote civil, democratic discussions and	10.1 CF Work with peers to set rules for group presentations and

CCSS Grades 11-12	English SOL
decision making, set clear goals and deadlines, and establish individual roles as needed.	discussions, set clear goals and deadlines, and define individual roles as needed. 12.1 CF Work together to establish group goals, define individual roles, and report on learning activities.
c. Propel conversations by posing and responding to questions that probe reasoning and evidence; ensure a hearing for a full range of positions on a topic or issue; clarify, verify, or challenge ideas and conclusions; and promote divergent and creative perspectives.	10.1 CF Move conversations ahead by posing and responding to questions, actively involve others in the discussion, and challenge ideas.
d. Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.	10.1 CF Respond thoughtfully by summarizing points of agreement and disagreement, qualifying views and understanding.
2. Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.	9.1 CF Give credit in their oral presentations to authors, researchers, and interviewers by citing titles of articles, magazines, newspapers, books, documents, and other reference materials used in the presentations. 9.8 The student will use print, electronic databases, online resources, and other media to access information to create a research product. 9.8 c) Find, evaluate, and select appropriate sources to access information and answer questions. 9.8 d) Verify the validity and accuracy of all information. 9.8 e)Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias. 10.2 CF Identify and analyze the sources and viewpoint of publications.

CCSS Grades 11-12	English SOL
	11.2 The student will examine how values and points of view are included or excluded and how media influences beliefs and behaviors. 11.2 a) Use technology and other information tools to organize and display knowledge in ways others can view, use, and assess. 11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 d) Critically evaluate quality, accuracy, and validity of information. 12.2 The student will examine how values and points of view are included or excluded and how media influences beliefs and behaviors. 12.2 a) Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion.
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.	11.1 The student will make informative and persuasive presentations. 11.1 c) Address counterclaims. 11.1 f) Monitor listening and use a variety of active listening strategies to make evaluations. 11.1 CF Critique the accuracy, relevance, and organization of evidence. 11.1 CF Critique the clarity and effectiveness of delivery. 12.1 The student will make a formal oral presentation in a group or individually. 12.1 g) Evaluate formal presentations including personal, digital, visual, textual, and technological. 12.1 CF Evaluate a formal presentation by analyzing and critiquing

CCSS Grades 11-12	English SOL
	the effectiveness of the speaker's demeanor, voice, language, gestures, clarity of thought, organization of evidence, relevance, and delivery. 12.1 CF Analyze and critique the effectiveness of purpose and content of a presentation with respect to how the audience responds.
Presentation of Knowledge and Ideas	
4. Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range or formal and informal tasks.	9.1 CF Organize presentation in a structure appropriate to the audience, topic, and purpose (problem-solution, comparison-contrast, cause-effect, etc.). 11.1 The student will make informative and persuasive presentations. 11.1 b) Present evidence clearly and convincingly. 11.6 The student will write in a variety of forms, with an emphasis on persuasion. 11.6 b) Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions. 12.1 The student will make a formal presentation in a group or individually. 12.1 a) Choose the purpose of the presentation. 12.1 b) Choose vocabulary, language, and tone appropriate to the audience, topic, and purpose. 12.1 c) Use details, illustrations, statistics, comparisons, and analogies to support the presentation. 12.1 CF Choose appropriate vocabulary, language, and tone for the selected topic, purpose, context, and audience.
5. Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to	11.1 The student will make informative and persuasive presentations.

CCSS Grades 11-12	English SOL
enhance understanding of findings, reasoning, and evidence and to add interest.	11.1 g) Use presentation technology. 11.1 CF Develop effective multimedia presentations. 11.2 b) Use media, visual literacy, and technology skills to create products.
6. Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grades 11–12 Language standards 1 and 3 on page 54 for specific expectations.)	11.1 e), 12.1 e) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose. 12.1 CF Use grammatically correct language and appropriate vocabulary.
CCSS Language Standards	
Conventions of Standard English	
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	11.1 The student will make informative and persuasive presentations. 11.1 e)Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose. 12.1 The student will make a formal oral presentation in a group or individually. 12.1 e) Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
a. Apply the understanding that usage is a matter of convention, can change over time, and is sometimes contested.	11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 g), 12.3 f) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts. 12.7 CF Students will understand that usage is a matter of convention, can change over time, and is sometimes contested.
b. Resolve issues of complex or contested usage, consulting references (e.g., *Merriam-Webster's Dictionary of English Usage, Garner's Modern American Usage*) as needed.	11.3 CF, 12.3 CF Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses, both print and digital, to find the pronunciation of a word or determine or

CCSS Grades 11-12	English SOL
	clarify its precise meaning, its part of speech, its etymology, or its standard usage.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Observe hyphenation conventions. b. Spell correctly.	11.7 CF Use grammatical conventions to adjust sentence and paragraph structures for a variety of purposes and audiences. 11.7 Self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. 11.8 The student will analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. 11.8 i) Edit writing for grammatically correct use of language, spelling, punctuation, capitalization, and sentence/paragraph structure. 12.7 The student will write, revise, and edit writing. 12.7 b) Apply grammatical conventions to edit writing for correct use of language, spelling, punctuation, and capitalization. 12.7 CF Observe hyphenation conventions.
Knowledge of Language	
3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.	11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 g), 12.3 f) Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.
a. Vary syntax for effect, consulting references (e.g., Tufte's *Artful Sentences*) for guidance as needed; apply an understanding of syntax to the study of complex texts when reading.	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 h) Explain how an author's specific word choices, syntax, tone, and voice support the author's purpose. 11.7 CF Use grammatical conventions to vary syntax adjust

CCSS Grades 11-12	English SOL
	sentence and paragraph structures for a variety of purposes and audiences. 12.8 The student will write documented research papers. 12.8 g) Edit writing for language, spelling, punctuation, capitalization, syntax, and paragraphing as appropriate for standard English.
Vocabulary Acquisition and Use	
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 11–12 reading and content*, choosing flexibly from a range of strategies.	11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.
a. Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.	11.3 CF, 12.3 CF Use context (e.g., the overall meaning of a sentence, paragraph, or text; a word's position or function in a sentence) as a clue to the meaning of a word or phrase.
b. Identify and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception, conceivable*).	11.3 CF, 12.3 CF Identify, and correctly use patterns of word changes that indicate different meanings or parts of speech (e.g., *conceive, conception, conceivable*).
c. Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.	11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 CF, 12.3 CF Consult general and specialized reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning, its part of speech, its etymology, or its standard usage.
d. Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).	8.4 The student will apply knowledge of word origins, analogies, and figurative language to extend vocabulary development within authentic texts. 8.4 d) Use dictionaries, thesauruses, and glossaries to determine

CCSS Grades 11-12	English SOL
	definition, pronunciation, etymology, spelling, and usage of words. 11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 b), 12.3 b) Use context, structure, and connotations to determine meanings of words and phrases. 11.3 c), 12.3 c) Discriminate between connotative and denotative meanings and interpret the connotation.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	11.3 CF, 12.3 CF Recognize that words have nuances of meaning and that understanding the connotations may be necessary to determine the appropriate meaning.
a. Interpret figures of speech (e.g., hyperbole, paradox) in context and analyze their role in the text. b. Analyze nuances in the meaning of words with similar denotations.	9.4 CF Identify and analyze an author's use of diction (word choice) and syntax to convey ideas and content, including: rhetorical question; cliché; connotation; denotation; hyperbole; understatement; irony (dramatic, situational, verbal); dialect; and pun. 11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 c), 12.3 c) Discriminate between connotative and denotative meanings and interpret the connotation. 11.3 e), 12.3 e) Identify literary and classical allusions and figurative language in text. 11.3 CF Interpret figures of speech (e.g., euphemism, oxymoron, hyperbole, paradox) in context and analyze their roles in the text. 11.5 The student will read and analyze a variety of nonfiction texts. 11.5 g) Recognize and analyze use of ambiguity, contradiction,

CCSS Grades 11-12	English SOL
	paradox, irony, overstatement, and understatement in text.
6. Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	11.3, 12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 f), 12.3 f) Extend general and specialized vocabulary through speaking, reading, and writing. 11.3 CF, 12.3 CF The intent of this standard is that students will increase their independence as learners of vocabulary.

English SOL for grades 11-12 aligned with the CCSS at other grade levels	
Grade 8 Language 4. b Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede, recede, secede*).	11.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 11.3 a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
Grade 5 Language 5. b Recognize and explain the meaning of common idioms, adages, and proverbs.	11.3 d) Identify the meaning of common idioms.
Not addressed except for alliteration Grade 7 Reading Standards for Literature 4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama.	11.4 f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
Grades 9-10 Reading Standards for Informational Text 7. Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in	11.5 e) Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.

English SOL for grades 11-12 aligned with the CCSS at other grade levels	
words to develop a coherent understanding of a topic or issue.	
Grade 8 Language 1. a. Explain the function of verbals (gerunds, participles, infinitives) in general and their function in particular sentences.	11.7 b) Use verbals and verbal phrases to achieve sentence conciseness and variety.
Grade 8 Language 1. b. Form and use verbs in the active and passive voice. 3. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).	11.7 c) Distinguish between active and passive voice.
Grades 9-10 Speaking and Listening 2. Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.	12.1 The student will make a formal oral presentation in a group or individually. 12.1 d) Use media, visual literacy, and technology skills to create and support the presentation.
Grade 8 Language 4. b. Use common, grade-appropriate Greek or Latin affixes and roots as clues to the meaning of a word (e.g., *precede, recede, secede*).	12.3 The student will apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. 12.3 a) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
Grade 8 Reading Standards for Literature 4. Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. Grade 5 Language	12.3 d) Identify the meaning of common idioms, literary and classical allusions in text.

English SOL for grades 11-12 aligned with the CCSS at other grade levels	
5. b. Recognize and explain the meaning of common idioms, adages, and proverbs.	
Grades 11-12 Writing Standards for Literacy in History/Social Studies, Science, and Technical Subjects Conduct short as well as more sustained research projects to answer a question (including a self generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 k) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts. 11.5 The student will read and analyze a variety of nonfiction texts. 11.5 h) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts. 12.5 The student will read and analyze a variety of nonfiction texts. 12.5 a) Generate and respond logically to literal, inferential, evaluative, synthesizing, and critical thinking questions before, during, and after reading texts.

English SOL for grades 11-12 not explicitly stated in the CCSS at any grade level	
	11.1 The student will make informative and persuasive presentations. 11.1 a) Gather and organize evidence to support a position
	11.1 d) Support and defend ideas in public forums
	11.4 The student will read, comprehend, and analyze relationships among American literature, history, and culture. 11.4 a) Describe contributions of different cultures to the

English SOL for grades 11-12 not explicitly stated in the CCSS at any grade level	
	development of American literature.
	11.4 c) Discuss American literature as it reflects traditional and contemporary themes, motifs, universal characters, and genres.
	11.4 g) Explain how imagery and figures of speech appeal to the reader's senses and experience.
	11.5 The student will read and analyze a variety of nonfiction texts. 11.5 a) Use information from texts to clarify understanding of concepts.
	11.5 b) Read and follow directions to complete an application for college admission, for a scholarship, or for employment.
	11.5 c) Generalize ideas from selections to make predictions about other texts.
	11.7 d) Differentiate between in-text citations and works cited on the bibliography page.
	12.1 h) Use a variety of listening strategies to analyze relationships among purpose, audience, and content of presentations.
	12.1 i) Critique effectiveness of presentations.
	12.2 The student will examine how values and points of view are included or excluded and how media influences beliefs and behaviors. 12.2 b) Determine the author's purpose and intended effect on the audience for media messages.
	12.4 The student will read, comprehend, and analyze the development of British literature and literature of other cultures. 12.4 a) Compare and contrast the development of British literature in its historical context.

English SOL for grades 11-12 not explicitly stated in the CCSS at any grade level	
	12.4 b) Recognize major literary forms and their elements.
	12.4 c) Recognize the characteristics of major chronological eras.
	12.4 d) Relate literary works and authors to major themes and issues of their eras.
	12.4 e) Analyze the social and cultural function of British literature.
	12.4 f) Explain how the sound of a poem (rhyme, rhythm, onomatopoeia, repetition, alliteration, assonance, and parallelism) supports the subject, mood, and theme.
	12.4 g) Compare and contrast traditional and contemporary poems from many cultures.
	12.4 h) Analyze how dramatic conventions including character, scene, dialogue, and staging contribute to the theme and effect.
	12.4 i) Compare and contrast dramatic elements of plays from American, British, and other cultures.

Board of Education Agenda Item

Item: K. **Date:** November 18, 2010

Topic: First Review of a Proposed Supplement to the Curriculum Framework for the 2009 *Mathematics Standards of Learning*

Presenter: Mr. Michael Bolling, Mathematics Coordinator, Office of Standards, Curriculum, and Instruction

Telephone Number: 804-786-6418 **E-Mail Address:** Michael.Bolling@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X__ Board review required by
- _X__ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

____ Action requested at this meeting _X__ Action requested at future meeting: January 13, 2011

Previous Review/Action:

____ No previous board review/action

_X__ Previous review/action
Date: September 23, 2010
Action: Report on the Preliminary Analysis of Virginia's *2009 Mathematics Standards of Learning* Compared to the Common Core State Standards in Mathematics

Background:
In February 2009, the Virginia Board of Education adopted revised *Mathematics Standards of Learning*, followed by adoption of the Mathematics Curriculum Framework on October 22, 2009. As part of the development of the standards, the work of the committee members was informed by reports from Achieve, the College Board, ACT, and other national and international reports. Furthermore, as a member of Achieve's American Diploma Project (ADP) Network, Virginia participated in a rigorous external review process of the 2009 *Mathematics Standards of Learning*, with both ACT and the College Board analyzing Virginia's mathematics standards against their own college- and career-ready benchmarks or standards. Both analyses showed strong alignment between the Virginia Standards of Learning and their respective standards for postsecondary readiness.

In June 2010, the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) released the Mathematics Common Core State Standards. Since Achieve, the College Board, and ACT were partners with NGA and CCSSO, their earlier work with states in the ADP Network provided a foundation upon which the Common Core Standards were developed. As such,

Virginia's 2009 *Mathematics Standards of Learning* and Mathematics Curriculum Framework have a strong alignment to the Mathematics Common Core State Standards.

To ensure alignment of the 2009 *Mathematics Standards of Learning* and Curriculum Framework with the Mathematics Common Core State Standards, Department of Education staff conducted a preliminary analysis of the content from the two sets of standards, and presented a report to the Board of Education on September 23, 2010. In October 2010, the Department convened a committee of mathematics educators to further review and refine the analysis. The review committee identified several concepts in Virginia's Curriculum Framework for the 2009 *Mathematics Standards of Learning* that need to be added or strengthened to ensure that Virginia's standards are equal to or more rigorous in content and scope than the Mathematics Common Core State Standards.

Summary of Major Elements:
The 2009 *Mathematics Standards of Learning* and revised Curriculum Framework, taken together, contain the mathematics content that teachers in Virginia are expected to teach and students are expected to learn. Attachment A contains a crosswalk of the mathematics content for a proposed supplement to the Curriculum Framework for the *2009 Mathematics Standards of Learning.* The committee that reviewed the preliminary analysis indicated that addition of this material would complete and strengthen the content of the Curriculum Framework such that the 2009 *Mathematics Standards of Learning* and Curriculum Framework would equal or exceed the content and rigor of the Mathematics Common Core State Standards.

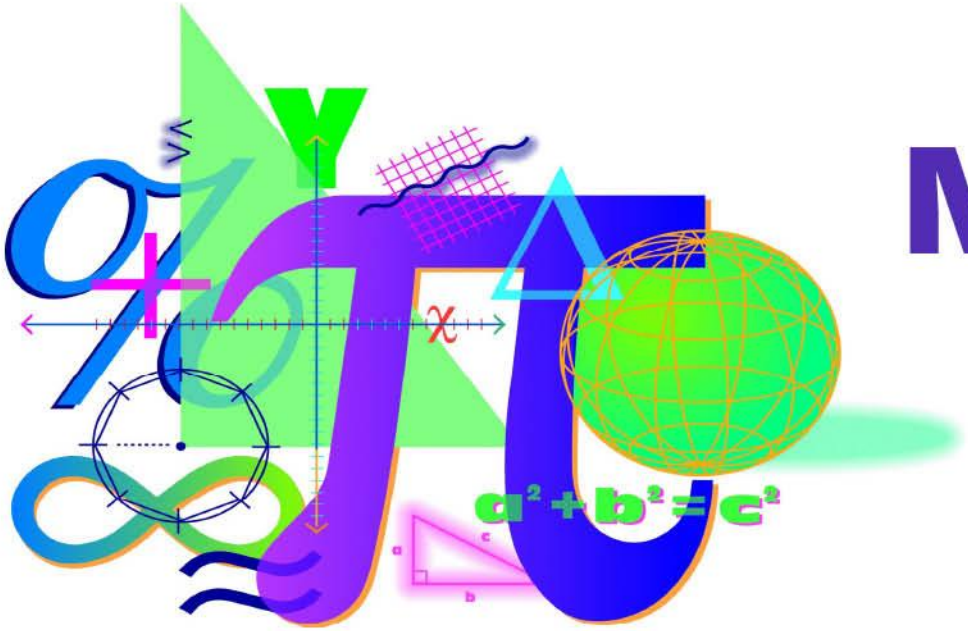
It is important to note that no revisions to the 2009 *Mathematics Standards of Learning* are proposed. Supplemental content would be added only to the Curriculum Framework.

Superintendent's Recommendation:
The Superintendent of Public Instruction recommends that the Board of Education accept for first review the proposed supplement to the Curriculum Framework for the 2009 *Mathematics Standards of Learning*.

Impact on Resources:
This responsibility can be absorbed by the agency's existing resources at this time.

Timetable for Further Review/Action:
Following the Board of Education's acceptance of the proposed supplement to the 2009 *Mathematics Standards of Learning* Curriculum Framework for first review, the Department of Education will receive public comment for at least 30 days before bringing the Supplement to the Board of Education for final review in January 2011.

Attachment A



Mathematics Standards of Learning

Curriculum Framework 2009

Proposed Supplement to the Curriculum Framework for the 2009 *Mathematics Standards of Learning*

First Review – November 18, 2010

Board of Education
Commonwealth of Virginia

Introduction

To ensure alignment of the 2009 *Mathematics Standards of Learning* and Curriculum Framework with the Common Core State Standards for Mathematics, Department of Education staff conducted a preliminary analysis of the content from the two sets of standards, and presented a comparison report to the Board of Education on September 23, 2010. In October 2010, the Department convened a committee of mathematics educators to further review and refine the analysis. The review committee identified several concepts in Virginia's Curriculum Framework for the 2009 *Mathematics Standards of Learning* that need to be added or strengthened to ensure that Virginia's standards are equal to or more rigorous in content and scope than the Common Core State Standards for Mathematics.

There are no changes proposed to the 2009 *Mathematics Standards of Learning*. Supplemental content is proposed only to the Curriculum Framework. The proposed changes to the Curriculum Framework for the 2009 *Mathematics Standards of Learning* have been noted with underlines (additions) and strikethroughs (deletions).

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
Measurement and Data 4.MD	
Geometric measurement: understand concepts of angle and measure angles.	
7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	**5.11 The student will measure right, acute, obtuse, and straight angles.** **5.11 CF** • **Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts.** • **Solve addition and subtraction problems to find unknown angles on a diagram in practical and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.**
Measurement and Data 5.MD	
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	
5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	
a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.	**6.10 The student will** **a) define pi (π) as the ratio of the circumference of a circle to its diameter;** **b) solve practical problems involving circumference and area of a circle, given the diameter or radius;** **c) solve practical problems involving area and perimeter; and** **d) describe and determine the volume and surface area of a rectangular prism.** **6.10 CF** • **Experiences in deriving the formulas for area, ~~and~~ perimeter, and volume using manipulatives such as tiles, one inch cubes, adding machine tape, graph paper, geoboards, or tracing paper, promote an understanding of the**

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
	formulas and facility in their use.
The Number System 6.NS	
Apply and extend previous understandings of numbers to the system of rational numbers.	
8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	**6.11 The student will** **a) identify the coordinates of a point in a coordinate plane; and** **b) graph ordered pairs in a coordinate plane.** **6.11 CF** • **Relate the values of the coordinates to the distance from each axis and then relate the coordinates of a single point to another point on the same horizontal or vertical line.**
Geometry 6.G	
Solve real-world and mathematical problems involving area, surface area, and volume.	
3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	**6.12 The student will determine congruence of segments, angles, and polygons.** **6.12 CF** • **Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving practical and mathematical problems.**
Statistics and Probability 6.SP	
Develop understanding of statistical variability.	
3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	**5.16 The student will** **a) describe mean, median, and mode as measures of center;** **b) describe mean as fair share;** **c) find the mean, median, mode, and range of a set of data; and** **d) describe the range of a set of data as a measure of variation.**

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
	5.16 CF • **Describe the impact on measures of center when a single value of a data set is added, removed, or changed.**
The Number System 7.NS	
Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	
1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.	
c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	**7.3 The student will** **a) model addition, subtraction, multiplication, and division of integers; and** **b) add, subtract, multiply, and divide integers.** **7.3 CF** • **Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle to solve practical problems.**
Geometry 7.G	
Draw, construct, and describe geometrical figures and describe the relationships between them.	
3. Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	**8.7 The student will** **a) investigate and solve practical problems involving volume and surface area of prisms, cylinders, cones, and pyramids; and** **b) describe how changing one measured attribute of a figure affects the volume and surface area.**

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
	8.7 CF • **Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.**
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	
5. Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	**8.6 The student will** **a) verify by measuring and describe the relationships among vertical angles, adjacent angles, supplementary angles, and complementary angles; and** **b) measure angles of less than 360°.** **8.6 CF** • **Use the relationships among supplementary, complementary, vertical, and adjacent angles to solve practical problems.**
Expressions and Equations 8.EE	
Understand the connections between proportional relationships, lines, and linear equations.	
5. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*	**8.16 The student will graph a linear equation in two variables.** **8.16 CF** • **Interpret the unit rate of the proportional relationship graphed as the slope of the graph.**
Expressions and Equations 8.EE	
Analyze and solve linear equations and pairs of simultaneous linear equations.	
7. Solve linear equations in one variable.	

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers).	**A.4 The student will solve multistep linear and quadratic equations in two variables, including** **a) solving literal equations (formulas) for a given variable;** **b) justifying steps used in simplifying expressions and solving equations, using field properties and axioms of equality that are valid for the set of real numbers and its subsets;** **c) solving quadratic equations algebraically and graphically;** **d) solving multistep linear equations algebraically and graphically;** **e) solving systems of two linear equations in two variables algebraically and graphically; and** **f) solving real-world problems involving equations and systems of equations. Graphing calculators will be used both as a primary tool in solving problems and to verify algebraic solutions.** **A.4 CF** • **Determine if a linear equation in one variable has one, an infinite number, or no solutions.**
The Real Number System N-RN	
Use properties of rational and irrational numbers.	
3. Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.	**8.2 The student will describe orally and in writing the relationships between the subsets of the real number system.** **8.2 CF** • **Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.**
Arithmetic with Polynomials and Rational Expressions A-APR	
Use polynomial identities to solve problems	
4. Prove polynomial identities and use them to	**AII.1 The student, given rational, radical, or polynomial expressions, will**

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
describe numerical relationships. *For example, the polynomial identity* $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ *can be used to generate Pythagorean triples.*	**a) add, subtract, multiply, divide, and simplify rational algebraic expressions;** **b) add, subtract, multiply, divide, and simplify radical expressions containing rational numbers and variables, and expressions containing rational exponents;** **c) write radical expressions as expressions containing rational exponents and vice versa; and** **d) factor polynomials completely.** **AII.1 CF** • **<u>Verify polynomial identities including the difference of squares, sum and difference of cubes, and perfect square trinomials.</u>**
Reasoning with Equations and Inequalities A-REI	
Solve equations and inequalities in one variable	
4. Solve quadratic equations in one variable.	
a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.	**AII.4 The student will solve, algebraically and graphically,** **a) absolute value equations and inequalities;** **b) quadratic equations over the set of complex numbers;** **c) equations containing rational algebraic expressions; and** **d) equations containing radical expressions.** **Graphing calculators will be used for solving and for confirming the algebraic solutions.** **AII.4 CF** • **<u>Recognize that the quadratic formula can be derived by applying the completion of squares to any quadratic equation in standard form.</u>**
Trigonometric Functions F-TF	
Prove and apply trigonometric identities	
9. (+) Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems.	**T.9 The student will identify, create, and solve real-world problems involving triangles. Techniques will include using the trigonometric functions, the Pythagorean Theorem, the Law of Sines, and the Law of Cosines.**

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
	T.9 CF • **Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems.**
Congruence G-CO	
Make geometric constructions	
13. Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.	**G.4 The student will construct and justify the constructions of** **a) a line segment congruent to a given line segment;** **b) the perpendicular bisector of a line segment;** **c) a perpendicular to a given line from a point not on the line;** **d) a perpendicular to a given line at a given point on the line;** **e) the bisector of a given angle;** **f) an angle congruent to a given angle; and** **g) a line parallel to a given line through a point not on the given line.** **G.4 CF** • **Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.**
Similarity, Right Triangles, and Trigonometry G-SRT	
Define trigonometric ratios and solve problems involving right triangles	
7. Explain and use the relationship between the sine and cosine of complementary angles.	**G.8 The student will solve real-world problems involving right triangles by using the Pythagorean Theorem and its converse, properties of special right triangles, and right triangle trigonometry.** **G.8 CF** • **Explain and use the relationship between the sine and cosine of complementary angles.**
Circles G-C	
Understand and apply theorems about circles	
3. Construct the inscribed and circumscribed	**G.4 The student will construct and justify the constructions of**

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.	**a) a line segment congruent to a given line segment;** **b) the perpendicular bisector of a line segment;** **c) a perpendicular to a given line from a point not on the line;** **d) a perpendicular to a given line at a given point on the line;** **e) the bisector of a given angle;** **f) an angle congruent to a given angle; and** **g) a line parallel to a given line through a point not on the given line.** **G.4 CF** • **Construct the inscribed and circumscribed circles of a triangle.** **G.9 The student will verify characteristics of quadrilaterals and use properties of quadrilaterals to solve real-world problems.** **G.9 CF** • **Prove properties of angles for a quadrilateral inscribed in a circle.**
4. (+) Construct a tangent line from a point outside a given circle to the circle.	**G.4 The student will construct and justify the constructions of** **a) a line segment congruent to a given line segment;** **b) the perpendicular bisector of a line segment;** **c) a perpendicular to a given line from a point not on the line;** **d) a perpendicular to a given line at a given point on the line;** **e) the bisector of a given angle;** **f) an angle congruent to a given angle; and** **g) a line parallel to a given line through a point not on the given line.** **G.4 CF** • **Construct a tangent line from a point outside a given circle to the circle.**
Expressing Geometric Properties with Equations G-GPE	
Translate between the geometric description and the equation for a conic section	
1. Derive the equation of a circle of given center and radius using the Pythagorean Theorem;	**G.12 The student, given the coordinates of the center of a circle and a point on the circle, will write the equation of the circle.**

CCSS for Mathematics	Supplemental Information to Virginia's Mathematics SOL Curriculum Framework to Align with the Mathematics Common Core State Standards
complete the square to find the center and radius of a circle given by an equation.	**G.12 CF** • **Recognize that the equation of a circle of given center and radius is derived using the Pythagorean Theorem.**

Board of Education Agenda Item

Item: L. **Date:** November 18, 2010

Topic: First Review of Proposed Guidelines for Policies on Concussions in Student-Athletes, Senate Bill 652 Passed by the 2010 General Assembly

Presenter: Dr. Mark Allan, Director, Office of Standards, Curriculum, and Instruction

Telephone Number: (804)786-3925 **E-Mail Address:** Mark.Allan@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

____ Action requested at this meeting _X_ Action requested at future meeting: January 13, 2011

Previous Review/Action:

_X_ No previous board review/action

____ Previous review/action
date _____
action _____

Background Information:

Pursuant to Senate Bill 652, the 2010 General Assembly amended the *Code of Virginia* to include §22.1-271.5 directing the Board of Education to develop and distribute to local school divisions by July 1, 2011, guidelines for policies dealing with concussions in student-athletes, and requiring each local school division to develop policies and procedures regarding the identification and handling of suspected concussions in student-athletes. Senate Bill 652 also requires the Board of Education to define appropriate licensed health care providers authorized to evaluate and provide written clearance for return to play.

The goals of the Student-Athlete Protection Act (SB 652) are to ensure that student-athletes who sustain concussions are properly diagnosed, given adequate time to heal, and are comprehensively supported until they are symptom free. According to the 2008 Consensus Statement on Concussion in Sport (3rd International Conference on Concussion in Sport, Zurich, November 2008), "the cornerstone of concussion management is physical and cognitive rest until symptoms resolve and then a graded program of exertion prior to medical clearance and return to play."

Summary of Major Elements:

As specified in enactment clause three of SB 652, the Board of Education worked with the Virginia High School League, the Department of Health, the Virginia Athletic Trainers Association, representatives of the Children's Hospital of The King's Daughters and the Children's National Medical Center, the Brain Injury Association of Virginia, the American Academy of Pediatrics, the Virginia College of Emergency Physicians and other interested stakeholders in conducting the research necessary for the development of guidelines for concussions in student-athletes. The attachment contains the proposed guidelines and definitions related to policies on concussions in student-athletes.

Superintendent's Recommendation:

The Superintendent of Public Instruction recommends that the Board of Education accept for first review the proposed guidelines for policies on concussions in student-athletes and authorize the Department of Education staff to proceed with a 30-day public comment period.

Impact on Resources:

The impact on the Department of Education to develop and implement these guidelines is not expected to be significant and can be absorbed with existing staff. It is anticipated, however, that the adopted regulation will impact school divisions administratively as they will be required to develop policies and procedures regarding the identification and handling of suspected concussions in student-athletes; ensure each student-athlete and the student athlete's parent review, on an annual basis, information on concussions; and provide annual training for staff and volunteers.

Timetable for Further Review/Action:

Following the Board of Education's acceptance of the Proposed Guidelines for Policies on Concussions in Student-Athletes for first review, the Department of Education will receive public comment for at least 30 days before bringing the proposed guidelines to the Board for final review in 2011.

Virginia Board of Education
Proposed Guidelines For Policies on Concussions in Student-Athletes

Senate Bill 652, the 2010 General Assembly
Code of Virginia § 22.1-271.5

First Review
November 18, 2010

Virginia Board of Education Proposed Guidelines
For Policies on Concussions in Student-Athletes

Introduction

Pursuant to Senate Bill 652, the 2010 General Assembly amended the *Code of Virginia* to include § 22.1-271.5 directing the Board of Education to develop and distribute to school divisions by July 1, 2011, guidelines for policies dealing with concussions in student-athletes, and requiring each school division to develop policies and procedures regarding the identification and handling of suspected concussions in student-athletes. The full text of the legislation is available at the end of this document.

The goals of the Student-Athlete Protection Act (SB 652) are to ensure that student-athletes who sustain concussions are properly diagnosed, given adequate time to heal, and are comprehensively supported until they are symptom free. According to the Consensus Statement on Concussion in Sport (3rd International Conference on Concussion in Sport, Zurich, November 2008), "the cornerstone of concussion management is physical and cognitive rest until symptoms resolve and then a graded program of exertion prior to medical clearance and return to play."

Definitions(s)

A **concussion** is a brain injury that is characterized by an onset of impairment of cognitive and/or physical functioning, and is caused by a blow to the head, face or neck, or a blow to the body that causes a sudden jarring of the head (i.e., a helmet to the head, being knocked to the ground). A concussion can occur with or without a loss of consciousness, and proper management is essential to the immediate safety and long-term future of the injured individual. A concussion can be difficult to diagnose, and failing to recognize the signs and symptoms in a timely fashion can have dire consequences.

Most athletes who experience a concussion can recover completely as long as they do not return to play prematurely. The effects of repeated concussions can be cumulative, and after a concussion, there is a period in which the brain is particularly vulnerable to further injury. If an athlete sustains a second concussion during this period, the risk of permanent brain injury increases significantly and the consequences of a seemingly mild second concussion can be very severe, and even result in death (i.e., "second impact syndrome").

Appropriate licensed health care provider means a physician, physician assistant, osteopath or athletic trainer licensed by the Virginia Board of Medicine; a neuropsychologist licensed by the Board of Psychology; or a nurse practitioner licensed by the Virginia State Board of Nursing.

Return to play means participate in a nonmedically supervised practice or athletic competition.

Virginia Board of Education Guidelines

A. Policies and Procedures

1. Each school division shall develop policies and procedures regarding the identification and handling of suspected concussions in student-athletes.
2. In order to participate in any extracurricular athletic activity, each student-athlete and the student-athlete's parent or guardian shall review, on an annual basis (every 12 months), information on concussions provided by the school division. After having reviewed materials describing the short- and long-term health effects of concussions, each student-athlete and the student-athlete's parent or guardian shall sign a statement acknowledging receipt, review, and understanding of such information. The local school division will determine procedures for ensuring, annually, that statements are distributed to, and collected from each student-athlete and his or her parent or guardian with appropriate signatures.
3. A student-athlete suspected by that student-athlete's coach, athletic trainer, or team physician of sustaining a concussion or brain injury in a practice or game shall be removed from the activity at that time. A student-athlete who has been removed from play, evaluated, and suspected to have a concussion or brain injury shall not return to play that same day nor until (i) evaluated by an appropriate licensed health care provider as determined by the Board of Education and (ii) in receipt of written clearance to return to play from such licensed health care provider. The licensed health care provider evaluating student-athletes suspected of having a concussion or brain injury may be a volunteer.
4. Appropriate licensed health care providers or properly trained individuals evaluating student-athletes at the time of injury will utilize a standardized concussion sideline assessment instrument (e.g., SCAT II, SAC and BESS). Sideline Concussion Assessment Tool (SCAT-II), the Standardized Assessment of Concussion (SAC) and the Balance Error Scoring System (BESS) are examples of sideline concussion assessment tools that test cognitive function and postural stability. A list of assessment tools is located in the Resources section of these guidelines.
5. A concussion policy team that includes a school administrator, athletic administrator, appropriate licensed health care provider, coach, parent, and student shall refine and review local concussion management policies on an annual basis.

B. Protocol for return to play

1. No member of a school athletic team shall participate in any athletic event or practice the same day he or she is injured and:
   a. exhibits signs, symptoms or behaviors attributable to a concussion; or
   b. has been diagnosed with a concussion.
2. No member of a school athletic team shall return to participate in an athletic event or training on the days after he/she experiences a concussion unless all of the following conditions have been met:
   a. the student no longer exhibits signs, symptoms or behaviors consistent with a concussion, at rest or with exertion;
   b. the student is asymptomatic during, or following periods of supervised exercise that is gradually intensifying; and
   c. the student receives a written medical release from a licensed health care provider.

   The Zurich Consensus Statement (November 2008) return to play guidelines and the American Academy of Pediatrics (AAP) Concussion Guidelines (August 2010), are available online to assist healthcare providers, student athletes and their families, and school divisions,

as needed.

C. Helmet replacement and reconditions policies and procedures

1. Helmets must be National Operating Committee on Standards for Athletic Equipment (NOCSAE) certified by the manufacturer at the time of purchase.
2. Reconditioned helmets must be NOCSAE recertified by the reconditioner.

D. Training required for personnel and volunteers

1. Each school division shall develop policies and procedures to ensure school staff, coaches, athletic trainers, team physicians, and volunteers receive current training annually on:
   a. how to recognize the signs and symptoms of a concussion;
   b. strategies to reduce the risk of concussions;
   c. how to seek proper medical treatment for a person suspected of having a concussion; and
   d. when the athlete may safely return to the event or training.
2. The concussion policy management team shall ensure training is current and consistent with best practice protocols.
3. School divisions shall maintain a tracking system to document compliance with the annual training requirement.
4. Annual training on concussion management shall use a reputable program such as, but not limited to, the following:
   a. The Centers for Disease Control's (CDC) tools for youth and high school sports coaches, parents, athletes, and health care professionals provide important information on preventing, recognizing, and responding to a concussion, and are available at http://www.cdc.gov/concussion/HeadsUp/online_training.html. These include *Heads Up to Schools: Know Your Concussion ABCs*; *Heads Up: Concussion in Youth Sports;* and *Heads Up: Concussion in High School Sports*.
   b. The National Federation of State High School Associations' (NFHS) online coach education course – *Concussion in Sports – What You Need to Know*. This CDC-endorsed program provides a guide to understanding, recognizing and properly managing concussions in high school sports. It is available at www.nfhslearn.com.
   c. The Oregon Center for Applied Science (ORCAS) ACTive® course, an online training and certification program that gives sports coaches the tools and information to protect players from sports concussions. Available at http://activecoach.orcasinc.com/, ACTive® is funded by the National Institutes of Health, developed by leading researchers, and validated in a clinical trial.

Community Involvement

Schools should make every effort to provide materials and training opportunities related to concussion management to organizations sponsoring athletic activity for student-athletes on school property. School divisions are not required to enforce compliance with such policies.

Code of Virginia

§ 22.1-271.5. Policies on concussions in student-athletes.

A. The Board of Education shall develop and distribute to each local school division guidelines on policies to inform and educate coaches, student-athletes, and their parents or guardians of the nature and risk of concussions, criteria for removal from and return to play, and risks of not reporting the injury and continuing to play.

B. Each local school division shall develop policies and procedures regarding the identification and handling of suspected concussions in student-athletes. Such policies shall require:

1. In order to participate in any extracurricular physical activity, each student-athlete and the student-athlete's parent or guardian shall review, on an annual basis, information on concussions provided by the local school division. After having reviewed materials describing the short- and long-term health effects of concussions, each student-athlete and the student-athlete's parent or guardian shall sign a statement acknowledging receipt of such information, in a manner approved by the Board of Education; and

2. A student-athlete suspected by that student-athlete's coach, athletic trainer, or team physician of sustaining a concussion or brain injury in a practice or game shall be removed from the activity at that time. A student-athlete who has been removed from play, evaluated, and suspected to have a concussion or brain injury shall not return to play that same day nor until (i) evaluated by an appropriate licensed health care provider as determined by the Board of Education and (ii) in receipt of written clearance to return to play from such licensed health care provider.

The licensed health care provider evaluating student-athletes suspected of having a concussion or brain injury may be a volunteer.

C. In addition, local school divisions may provide the guidelines to organizations sponsoring athletic activity for student-athletes on school property. Local school divisions shall not be required to enforce compliance with such policies.

3. That the Board of Education, in developing the policies pursuant to subsection A of § 22.1-271.5, shall work with the Virginia High School League, the Department of Health, the Virginia Athletic Trainers Association, representatives of the Children's Hospital of the King's Daughters and the Children's National Medical Center, the Brain Injury Association of Virginia, the American Academy of Pediatrics, the Virginia College of Emergency Physicians and other interested stakeholders.

4. That the policies of the Board of Education developed pursuant to subsection A of § 22.1-271.5 shall become effective on July 1, 2011.

Resources

A. Organizations and agencies that provide resources related to concussions

1. American Academy of Pediatrics, http://www.aap.org
2. American Medical Society for Sports Medicine, http://www.amssm.org/
3. Brain Injury Association of Virginia, http://www.biav.net
4. Children's Hospital of the King's Daughters, http://www.chkd.org
5. Children's National Medical Center, http://www.childrensnational.org
6. Consensus Statement on Concussion in Sport (3rd International Conference on Concussion in Sport, Zurich, November 2008), http://www.sportconcussions.com/html/Zurich%20Statement.pdf
7. National Academy of Neuropsychology, http://www.nanonline.org
8. Virginia Athletic Trainers' Association**,** http://www.vata.us
9. Virginia College of Emergency Physicians, https://www.acep.org
10. Virginia Department of Health, http://www.vdh.state.va.us
11. Virginia High School League, http://www.vhsl.org

B. Concussion assessment tools

1. Sports Concussion Assessment Tool (SCAT), Concussion in Sport Group, http://www.amssm.org/MemberFiles/SCAT_v13-_Side_2.doc
2. The Sideline Assessment for Concussions, Brain Injury Association of America, http://www.knowconcussion.org/pdfs/sideline_assessment.pdf and http://www.knowconcussion.org/pdfs/bess.pdf
3. Sports-Related Concussions in Children and Adolescents, Pediatrics, http://pediatrics.aappublications.org/cgi/content/abstract/peds.2010-2005v1?rss=1

Board of Education Agenda Item

Item: M. **Date:** November 18, 2010

Topic: Final Review of the Board of Education's *2010 Annual Report on the Condition and Needs of Public Schools in Virginia*

Presenter: Dr. Margaret N. Roberts, Executive Assistant to the Board of Education

Telephone: 804/225-2924 **E-mail:** Margaret.Roberts@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X__ Board review required by
- _X_ State or federal law or regulation
- ___ Board of Education regulation
- ___ Other:

__X_ Action requested at this meeting

___ Action requested at future meeting:

Previous Review/Action:

___ No previous board review/action

_X_ Previous review/action: First Review
date: October 28, 2010
action: First review and discussion for staff follow up

Background Information: The Board of Education has submitted an annual report each year since 1971, when the requirement was initially adopted by the General Assembly. Section 22.1-18 of the *Code of Virginia* sets forth the requirement that the Board of Education shall submit an annual report on the condition and needs of the public schools in Virginia. This section of the *Code* reads as follows:

> **§ 22.1-18. Report on education and standards of quality for school divisions; when submitted and effective.**
> By November 15 of each year, the Board of Education shall submit to the Governor and the General Assembly a report on the condition and needs of public education in the Commonwealth and shall identify any school divisions and the specific schools therein which have failed to establish and maintain schools meeting the existing prescribed standards of quality. Such standards of quality shall be subject to revision

> only by the General Assembly, pursuant to Article VIII, Section 2 of the Constitution of Virginia. Such report shall include a complete listing of the current standards of quality for the Commonwealth's public schools, together with a justification for each particular standard, how long each such standard has been in its current form, and whether the Board recommends any change or addition to the standards of quality.

The *Code* requires that the annual report contain the following information:

1. A report on the condition and needs of the public schools as determined by the Board of Education;
2. A listing of the school divisions and the specific schools that report noncompliance with any part of the Standards of Quality (SOQ);
3. The full text of the current SOQ;
4. A justification for amendments;
5. The effective date of the current SOQ; and
6. A listing of any amendments, if any, to the SOQ being prescribed by the Board of Education.

Summary of Major Elements: An initial draft of the *2010 Annual Report on the Condition and Needs of Public Schools in Virginia* was presented for first review at the October meeting. During the discussion, the Board asked that certain text and data points be added to the report. Specifically, the Board requested that the following descriptive language be added to the draft:

(1) Description of the Board's vision and mission and what the Board's aspirations are for students (i.e., why we do what we do);
(2) Description of how the Board's vision and mission drive its policy decisions and future plans for action ; and
(3) Highlights of the critically important national test results and data that compare Virginia's student performance with that of their peers across the nation.

The Board also expressed its intent that the report maintain candor in framing the challenges and needs of the public schools as described in the report.

A revised draft is attached for discussion on November 18, 2010. The additions requested by the Board are contained in the attached draft. Also included is the status report on school division compliance with the Standards of Quality, which has been added since the first review in October. Department staff members have continued to edit the text and refine the data and other information in the report.

Please note that the *2010 Annual Report on the Condition and Needs of Public Schools in Virginia* will be delivered to the Governor and members of the General Assembly slightly later than November 15 (the due date specified in § 22.1-18 of the *Code of Virginia*).

Superintendent's Recommendation: The Superintendent of Public Instruction recommends that the Board of Education adopt the *2010 Report on the Condition and Needs of the Public Schools in Virginia* with the understanding that department staff may make additional technical and editorial adjustments as may be necessary.

Impact on Resources: Staff at the Department of Education prepared the attached draft; therefore, there is an administrative impact related to preparing the text of the report and the tables contained therein. In addition, there is a minimal administrative impact for preparing and mailing the report to the intended recipients. The fiscal impact of distributing the report is minimal because Legislative Services guidelines for submitting reports to the legislature require that the reports be submitted online rather than in hard copy.

Timetable for Further Review/Action: Following the Board's final adoption, the report will be transmitted to the Governor and the General Assembly as required by the *Code of Virginia*. It will also be made available to the public on the Board of Education's Web site.

2010
ANNUAL REPORT ON THE CONDITION AND NEEDS OF PUBLIC SCHOOLS IN VIRGINIA

PRESENTED TO
THE GOVERNOR AND
THE GENERAL ASSEMBLY

DRAFT

NOVEMBER ____, 2010
VIRGINIA BOARD OF EDUCATION

Members of the Board of Education as of July 1, 2010

Mrs. Eleanor B. Saslaw, President
5304 Woodland Estates Way
Springfield, VA 22151

Dr. Ella P. Ward, Vice President
1517 Pine Grove Lane
Chesapeake, VA 23321

Mrs. Betsy Beamer
1805 Locust Hill Road
Henrico, VA 23238

Dr. Billy K. Cannaday, Jr.
9005 Ashcroft Way
Richmond, VA 23236

Mrs. Isis M. Castro
2404 Culpeper Road
Alexandria, VA 22308

Mr. David M. Foster
2607 North Wakefield Street
Arlington, VA 22207

Mr. David L. Johnson
3103 B Stony Point Road
Richmond, VA 23235

Mr. K. Rob Krupicka
City Hall Office
301 King Street
Alexandria, VA 22314

Dr. Virginia L. McLaughlin
The College of William and Mary
P.O. Box 8795
Williamsburg, VA 23187-8795

Dr. Patricia I. Wright
Superintendent of Public Instruction
Virginia Department of Education
P.O. Box 2120
Richmond, VA 23218-2120

COMMONWEALTH OF VIRGINIA
BOARD OF EDUCATION
P.O. BOX 2120
RICHMOND, VIRGINIA 23218-2120

November____, 2010

The Honorable Robert F. McDonnell, Governor
Members of the Virginia General Assembly
Commonwealth of Virginia
Richmond, Virginia 23219

Dear Governor McDonnell and Members of the Virginia General Assembly:

On behalf of the Board of Education, I am pleased to transmit the *2010 Annual Report on the Condition and Needs of Public Schools in Virginia*, submitted pursuant to § 22.1-18 of the *Code of Virginia*. The report contains information on Virginia's public schools, including an analysis of student academic performance and a report on the school divisions' compliance with the requirements of the Standards of Quality and the Standards of Accreditation.

Increasing academic achievement for all students is the core of the Board of Education's mission. This means that every student is expected to graduate from high school prepared to move on to productive work and further study.

The report contains compelling evidence that our schools and our students are achieving at higher levels. The progress shown by our public schools is the result of ongoing collaboration, dedication, workable strategies, and wise use of resources, both human and financial. It is the result of the hard work of students, teachers, administrators, support staff, parents, and supporters throughout the Commonwealth.

The report also points to evidence that persistent challenges remain to be tackled, and there is a challenging year ahead as localities face the economic headwinds that have developed in recent months.

The Board of Education is grateful for the support that the Governor and General Assembly continue to give to Virginia's school improvement efforts. As we look to the future, the members of the Board of Education pledge to remain focused on providing the best educational opportunities and the brightest future for the young people enrolled in Virginia's public schools.

Sincerely,

Eleanor B. Saslaw
President
Board of Education

Statutory Requirement for the Annual Report

The *Code of Virginia*, § 22.1-18, states:

> By November 15 of each year, the Board of Education shall submit to the Governor and the General Assembly a report on the condition and needs of public education in the Commonwealth and shall identify any school divisions and the specific schools therein which have failed to establish and maintain schools meeting the existing prescribed standards of quality. Such standards of quality shall be subject to revision only by the General Assembly, pursuant to Article VIII, Section 2 of the Constitution of Virginia. Such report shall include a complete listing of the current standards of quality for the Commonwealth's public schools, together with a justification for each particular standard, how long each such standard has been in its current form, and whether the Board recommends any change or addition to the standards of quality.

For Additional Copies

Additional copies of the report are available by contacting Dr. Margaret Roberts, executive assistant to the Board of Education, P.O. Box 2120, Richmond, VA 23218; phone: 804/ 225-2924; or e-mail Margaret.Roberts@doe.virginia.gov.

The report may be viewed online at: http://www.doe.virginia.gov/boe/reports/index.shtml

Table of Contents

Members of the Board of Education as of July 1, 2010…….…….. Page 5

Letter of Transmittal…….…… Page 6

Statutory Requirements Regarding the Board of Education's Annual Report……..…... Page 7

Executive Summary……..….…. .. Page 9

A Message from the Board of Education: Why We Do What We Do…… Page 15

Summary of the Academic Progress of Virginia's Students……. Page 16

Critical Needs of the Public Schools in Virginia……...……..… Page 18

New Initiatives for 2010 and Support for Virginia Department of Education Initiatives…….. ……. Page 22

The Board's Performance Measures: Addressing the Needs of Public Schools..…….. . Page 25

Compliance with the Requirements of the Standards of Quality……. . Page 37

Compliance with the Standards of Accreditation…….……. Page 38

Closing Statement by the Board of Education……. Page 39

Appendices…….…… Page 40

Appendix A: List of School Divisions Reporting Full Compliance with the SOQ: 2009-2010: Page 41

Appendix B: School Divisions Reporting Noncompliance with SOQ: Page 42

Appendix C: Divisions with All Schools Fully Accredited, Schools Granted Conditional Accreditation, Schools Rated Accredited with Warning, Schools Rated Accreditation Denied: 2010-2011: Page 50

Appendix D: Standards of Quality: Effective July 1, 2010: Page 53

EXECUTIVE SUMMARY

A MESSAGE FROM THE BOARD OF EDUCATION:

WHY WE DO WHAT WE DO

> *In Virginia:*
> *One million-two hundred thousand students enter the doors of Virginia's 1,850 public schools every school day. They are taught by 100,000 classroom teachers, who are assisted by an additional 40,000 teacher aides, school secretaries, principals, counselors, librarians, custodians, cafeteria workers, school bus drivers, and instructional specialists, and supervisors.*

For the members of the Board of Education, this is why we do what we do: We work to ensure that every one of those 1.2 million children receives the best education and is taught by excellent, well-prepared, and highly qualified teachers who work in safe, orderly schools.

These are not idle words; rather these words form the foundation of everything the Board of Education does---every policy, every regulation, every program put in place.

Increasing academic achievement for all students is the core of our mission. This means that every student is expected to graduate from high school prepared to move on to productive work and further study. Ultimately, all of our students must have the necessary academic skills to become lifelong learners and function in the global economy. The Board of Education's core mission embraces the student-centered approach that is so important in helping all children make great strides in achievement.

As stated in the Board of Education's *Comprehensive Plan: 2011-2016*:

> Virginia intends to be the best. The Board of Education's vision and mission statements and goals for public education provide the framework for a world-class statewide system of public schools for Virginia. The statements are forward-looking and acknowledge the programs and services provided by Virginia's public schools to meet the increasingly diverse needs of students who will live, compete, and work in an expanding and complex global, high tech economy.

The Board of Education's Vision for Virginia's Public Schools

The vision of the Board of Education and Superintendent of Public Instruction, in cooperation with their partners, is to create an excellent statewide system of public education that derives strength from our diversity and that ensures equality of opportunity for each student in a safe and healthy learning environment that prepares all students to be capable, responsible, and self-reliant citizens in the global society.

The Board's Mission: What We Want to Accomplish

The mission of the Board of Education and Superintendent of Public Instruction, in cooperation with their partners, is to set education policies that support the lifelong academic and career achievement of all students by establishing high standards and expectations for learning, utilizing evidence and research, measuring and effectively analyzing systemwide performance, as well as ensuring transparency and accountability to parents and the public.

Academic Progress of Virginia's Students

The achievements shown by students in Virginia's public schools have been substantial, strengthening foundations for learning and positioning Virginia's teachers and school leaders to continue to build a better future for all students. The following objective indicators illustrate the progress Virginia's public schools are making in an era when all students must be challenged to reach their highest potential.

- Ninety-eight percent of Virginia's public schools are fully accredited and meeting current state standards for achievement in English, mathematics, history and science based on 2009-2010 assessment results. Another one percent received conditionally accredited ratings because they are new schools. The 2010-2011 ratings represent the second consecutive year in which all but two percent of Virginia's public schools are fully accredited.

- Virginia's 2010 public school graduates increased their achievement and outperformed their peers nationwide on all three sections of the SAT college-admissions test, according to the College Board. In the last ten years, average scores of Virginia public school students on the SAT have increased by five points in reading and 15 points in mathematics. This compares with a national decline of four points in reading and a gain of one point in mathematics. Also, black and Hispanic Virginia public school graduates increased their achievement and outperformed their peers nationwide on all three SAT subsections.

- More than 85 percent of the students in the class of 2010 graduated on time with a diploma. The 2010 graduation rate is more than two points higher than the four-year rate of 83.3 percent for the class of 2009 and more than three points higher than the four-year rate of 82.1 percent for the class of 2008. Moreover, the graduation rates of black and Hispanic students continued to improve.

- For a sixth consecutive year, the number of Virginia students graduating with an Advanced Studies Diploma increased, and the number of advanced diplomas awarded exceeded the number of Standard Diplomas.

- The College Board's February 2010 *Advanced Placement Report to the Nation* ranked Virginia third in the nation in achievement on AP examinations.

- Virginia public high school graduates achieved significantly higher scores on the ACT this year, and the number of public school seniors taking the college-admissions examination continued to grow. Public school students in Virginia improved in all subjects. The percentage of Virginia public school students meeting ACT college-readiness benchmarks was seven or more points higher than the percentage nationwide.

- Results from national reading tests show that Virginia elementary and middle school students continue to outperform their peers nationwide and are among the nation's strongest readers. The average reading scores of Virginia students on the 2009 National Assessment of Education Progress (NAEP) – also known as *The Nation's Report Card* – were significantly higher than the average scores of their national and regional peers.
    - While Virginia students again ranked among the nation's highest achievers, the 2009 NAEP results show that overall achievement among Virginia fourth graders is similar to achievement in 2002, while the overall average reading score for eighth graders has declined.

- Six out of 10 Virginia schools exceeded or met all No Child Left Behind (NCLB) objectives during 2009-2010 despite new accountability provisions related to high school graduation and the testing of students with disabilities.
    - Sixty percent of Virginia's public schools made "adequate yearly progress" (AYP) by surpassing objectives in reading and mathematics and meeting other indicators of academic progress, compared with 71 percent last year.
    - The aggressive objective for graduation set by the Board of Education and the change in federal special education policy were factors as the number of schools and school divisions making AYP declined – even though overall achievement was steady in reading and up in mathematics.

Critical Needs of the Public Schools in Virginia

As captured in this report, Virginia's public schools have made great progress, but they undoubtedly still have a long way to go. The Board's priorities for action—and the performance measures used to gauge the Board's progress in meeting those priorities—focus on the most critical needs of the public schools now and for the foreseeable future. The most critical needs include the following:

- Funding for the Standards of Quality (SOQ) and other valued initiatives and programs in the current fiscal and economic climate.

- Continuing to examine and improve Virginia's academic standards in order to lead the country in the rigor and quality of standards. This priority is especially important in light of the national discussion on Common Core State Standards. Virginia will continue to monitor work at the national level related to the Common Core State Standards and the Common Assessments.

- Dealing effectively with schools that do not meet full accreditation because of difficulty in meeting the aggressive objective for graduation rates set by the Board of Education. As the Board of Education ratchets up its expectations and the rigor of the Standards of Accreditation, some schools will struggle and need additional technical assistance.

- Helping divisions through policies and initiatives that will help eliminate gaps in graduation rates and student achievement, which—although improving— persist among Virginia's black and Hispanic students and their white and Asian counterparts.

- Setting sound policies and guidelines to help divisions provide additional learning opportunities for students, such as charter schools, college partnership laboratory schools, STEM programs, and online learning programs.

- Anticipating the impact of the fiscal climate that is destined to become even more difficult as the flow of federal stimulus funds ends.

- Continuing the technical assistance and interventions by the Virginia Department of Education to assist divisions previously identified as low-performing, especially in this time of agency budget and staffing restrictions.

- Keeping up with increasingly burdensome and time-consuming federal reporting and accountability requirements, especially those related to the Elementary and Secondary Education Act (previously known as No Child Left Behind), the Individuals with Disabilities Education Act, and the State Fiscal Stabilization Fund.

- Maintaining emphasis on quality programs for at-risk four-year-olds across the state in an era of reduced resources.

- Providing programs that address the instructional needs of gifted students, students with disabilities and the students with limited English proficiency, all of whom may need additional instructional support to be successful in school.

- Seeking new and efficient ways to use technology to reduce the testing burden on teachers and students, but to do so in a way that will not reduce accountability standards and that can be accomplished with available funding.

- Dealing effectively with the realities of schooling for some children who face difficult personal circumstances such as high poverty, high crime in their neighborhoods, high rates of unhealthy behaviors, poor nutrition, and other circumstances that obstruct their learning at school. This includes the need for the Board's continued advocacy for programs that keep children safe and teach positive behavior, such as anti-bullying programs.

- Finding new and effective ways to help colleges and universities and school divisions in the preparation, recruitment, and retention of highly qualified teachers and other educational personnel.

- Making a concerted effort to develop and promote policies to help divisions recruit and maintain minority teachers and educational personnel.

- Finding and promoting new and effective ways to involve parents in their child's education, a critical need that must be addressed if Virginia is to promote safe and healthy school environments and eliminate achievement gaps.

- Helping teachers and administrators at all levels to gather, analyze, and use data to continuously improve teaching and learning—the data analysis work that can lead their schools to understand what needs to change to get better results. A further challenge is to create new resources for professional development that put usable information into the hands of those directly responsible for students' learning.

Board of Education Priorities for Action

The Board of Education's *Comprehensive Plan: 2007-2012* established objectives for action. Contained in the comprehensive plan are highlights of recent actions to meet the objectives. The Board of Education's priorities for action acknowledge the challenges of living and working in our global economy now and in the foreseeable future—the rapid growth in technology, the changing demographics of our schools, and greater demands for higher-level skills for all citizens. Meeting the needs of our public schools calls for more political, financial, legislative, and programmatic will than ever before to ensure the success of all Virginia's students.

The Board of Education's objectives, which are reviewed and updated biennially, directly address the imperative to improve student achievement, as follows:

> Objective 1: The Board of Education will continue to enhance the quality standards for all public schools in Virginia.

Objective 2: The Board of Education will provide leadership to help schools and school divisions eliminate the achievement gap between groups of students and increase the academic success of all students.

Objective 3: The Board of Education will support accountability for all schools, focusing on assisting chronically low-performing schools and school divisions while recognizing all schools and school divisions as they move towards excellence.

Objective 4: The Board of Education will work cooperatively with partners to help ensure that all young children are ready to enter kindergarten with the skills they need for success.

Objective 5: The Board of Education will establish policies that support the attainment of literacy skills of all students, kindergarten through grade 12.

Objective 6: The Board of Education will establish policies and standards that enhance the preparation, recruitment, and retention of educational personnel, including their meaningful, ongoing professional development.

Objective 7: The Board of Education will provide leadership in implementing the provisions of state and federal laws and regulations.

Objective 8: The Board of Education will provide leadership to help schools and school divisions ensure a safe and secure environment conducive to facilitating the teaching and learning process.

Compliance with the Standards of Quality

Ninety-four divisions (listed in Appendix A) reported full compliance with the provisions of the Standards of Quality (SOQ) in the 2009-2010 school year. Appendix B contains a list of school divisions that reported noncompliance with certain provisions of the SOQ.

Compliance with the Standards of Accreditation

Ninety-eight percent of Virginia's public schools are fully accredited and meeting state standards for achievement in English, mathematics, history and science based on 2009-2010 assessment results. Schools failing to meet the accreditation requirements are listed in Appendix C.

2010 Annual Report on the Condition and Needs of Public Schools in Virginia

The Board of Education's Main Job: Why We Do What We Do

The Board of Education's main job is to ensure that the 1.2 million children enrolled in Virginia's public schools receive the best education and are taught by excellent, well-prepared, and highly qualified teachers who work in safe, orderly schools.

These are not idle words; rather these words form the foundation of everything the Board of Education does---every policy, every regulation, every program put in place.

Increasing academic achievement for all students is the core of our mission. This means that every student is expected to graduate from high school prepared to move on to productive work and further study. Ultimately, all of our students must have the necessary academic skills to become lifelong learners and function in the global economy. The Board of Education's core mission embraces the student-centered approach that is so important in helping all children— every one of them— make great strides in achievement. As stated in the Board of Education's *Comprehensive Plan: 2011-2016*:

> Virginia intends to be the best. The Board of Education's vision and mission statements and goals for public education provide the framework for a world-class statewide system of public schools for Virginia. The statements are forward-looking and acknowledge the programs and services provided by Virginia's public schools to meet the increasingly diverse needs of students who will live, compete, and work in an expanding and complex global, high tech economy.
>
> **The Board of Education's Vision for Virginia's Public Schools**
> The vision of the Board of Education and Superintendent of Public Instruction, in cooperation with their partners, is to create an excellent statewide system of public education that derives strength from our diversity and that ensures equality of opportunity for each student in a safe and healthy learning environment that prepares all students to be capable, responsible, and self-reliant citizens in the global society.

The Board's Mission: What We Want to Accomplish

The mission of the Board of Education and Superintendent of Public Instruction, in cooperation with their partners, is to set education policies that support the lifelong academic and career achievement of all students by establishing high standards and expectations for learning, utilizing evidence and research, measuring and effectively analyzing systemwide performance, as well as ensuring transparency and accountability to parents and the public.

Academic Progress of Virginia's Students

With its vision and mission clearly in mind, the Board of Education has focused its efforts on raising student achievement. Virginia's public schools and our students continue to show overall academic gains and receive national recognition for achievement and innovation. This can be seen in the positive national test results that show Virginia students' academic performance compared with that of their peers across the country. The high expectations of the Standards of Learning, effective accountability, and a statewide system of support for public education are creating new opportunities for advanced learning at every grade level. The following objective indicators illustrate the progress Virginia's public schools are making in an era when all students must be challenged to reach their highest potential.

High Percent of Schools are Fully Accredited

Ninety-eight percent of Virginia's public schools are fully accredited and meeting current state standards for achievement in English, mathematics, history and science based on 2009-2010 assessment results. Another one percent received conditionally accredited ratings because they are new schools. The 2010-2011 ratings represent the second consecutive year in which all but two percent of Virginia's public schools are fully accredited.

Virginia On-Time Graduation Rate Rises

More than 85 percent of the students in the class of 2010 graduated on time with a diploma. The 2010 graduation rate is more than two points higher than the four-year rate of 83.3 percent for the class of 2009 and more than three points higher than the four-year rate of 82.1 percent for the class of 2008. For a sixth consecutive year, the number of Virginia students graduating with an Advanced Studies Diploma increased, and the number of advanced diplomas awarded exceeded the number of Standard Diplomas.

The graduation rates of black and Hispanic students continued to improve. The rate for black students increased 3.2 points to 78.9 percent and on-time graduation for Hispanic students increased 3.8 points to 76.1 percent. The on-time graduation rates for black and Hispanic students have each risen by 4.9 points since 2008, the first year Virginia reported cohort graduation rates.

Important National Comparisons: Virginia Students Increase Achievement in Critical Reading, Mathematics, and Writing

Results from national reading tests show that Virginia elementary and middle school students continue to outperform their peers nationwide and are among the nation's strongest readers. The average reading scores of Virginia students on the 2009 National Assessment of Education Progress (NAEP) – also known as "The Nation's Report Card" – were significantly higher than the average scores of their national and regional peers.

While Virginia students again ranked among the nation's highest achievers, the 2009 NAEP results show that overall achievement among Virginia fourth graders is similar to achievement in 2002, while the overall average reading score for eighth graders has declined.

Virginia Students Outperform Peers Nationwide on SAT

Virginia's 2010 public school graduates increased their achievement and outperformed their peers nationwide on all three sections of the SAT college-admissions test, according to the College Board. In the last ten years, average scores of Virginia public school students on the SAT have increased by five points in reading and 15 points in mathematics. This compares with a national decline of four points in reading and a gain of one point in mathematics. Black and Hispanic Virginia public school graduates increased their achievement and outperformed their peers nationwide on all three SAT subsections.

Virginia Ranks Among the Top on Advanced Placement Results

The College Board's February 2010 Advanced Placement Report to the Nation ranked Virginia third in the nation in achievement on AP examinations. This compares with a national decline of four points in reading and a gain of one point in mathematics. Moreover since 2006, the number of black public school students in Virginia participating in AP testing has increased by 74.4 percent, and the number of Hispanic students taking AP tests has increased by 70.2 percent.

Virginia Students Score Higher than Peers on ACT

Virginia public high school graduates achieved significantly higher scores on the ACT this year, and the number of public school seniors taking the college-admissions examination continued to grow. Public school students in Virginia improved in all subjects. The percentage of Virginia public school students meeting ACT college-readiness benchmarks was seven or more points higher than the percentage nationwide.

Six out of 10 Virginia Schools Exceed NCLB Objectives

Six out of 10 Virginia schools exceeded or met all No Child Left Behind (NCLB) objectives during 2009-2010 despite new accountability provisions related to high school graduation and the testing of students with disabilities.

Sixty percent of Virginia's public schools made "adequate yearly progress" (AYP) by surpassing objectives in reading and mathematics and meeting other indicators of academic progress, compared with 71 percent last year.

The aggressive objective for graduation set by the Board of Education and the change in federal special education policy were factors as the number of schools and school divisions making AYP declined – even though overall achievement was steady in reading and up in mathematics.

Critical Needs of the Public Schools in Virginia

The Board's vision and mission reflect the overarching need to ensure that all of Virginia's young people achieve high standards of excellence, no matter what community they reside in or what challenges they face. The Board's objectives form priorities for action, and the performance measures used to gauge progress in meeting those goals focus on the most critical needs of the public schools. These needs include the following:

Funding the Standards of Quality (SOQ)

There can be no doubt that a challenging year is ahead as Virginia's public schools face the economic headwinds that have developed in recent months. The difficult fiscal situation will be exacerbated if the flow of federal stimulus funds ends, as expected.

In Virginia, Direct Aid to localities for public education is the single largest General Fund expenditure. The current fiscal climate at the state and federal levels challenges the stability of public education, social services, and other supports for children and families. Resources are limited for students who require extra help or special attention. The challenge requires that fiscal and human resources be focused on the instruction students receive in the classroom and on making sure every student is successful.

Maintaining the Rigor of Virginia's Academic Standards

The Board wishes to be clear in its intent to lead the country in the rigor and quality of standards. This clarity of intent is especially important in light of the national discussion on Common Core State Standards. Virginia will continue to monitor work at the national level related to the Common Core State Standards and the Common Assessments.

Implementing New Learning Opportunities for Students

The Board of Education is putting in place new policies and guidelines for initiatives that expand learning opportunities for all children. These policies relate to high-quality charter schools, college partnership laboratory schools, and online learning programs. This also includes science, technology, engineering, and mathematics (STEM) education programs. The Board's challenge is to ensure that its policies and the manner in which they are implemented are student-centered, effective, cost-efficient, and practical.

Assisting Chronically Low-Performing Schools

What to do about chronically low-performing schools is a central issue in the Board of Education's school improvement efforts and accountability system. Its urgency is underscored by the federal Elementary and Secondary Education Act (ESEA), which mandates an aggressive system of corrective measures for schools receiving federal assistance that fail to meet progress goals.

It is anticipated that more schools will struggle to meet full accreditation because of difficulty in meeting the aggressive objective for graduation rates and other key measures set by the Board of Education. As the Board moves to increase the rigor for full accreditation, continuing the technical assistance and interventions by the Virginia Department of Education to assist divisions previously identified as low-performing may become increasingly difficult, especially in this time of agency budget and staffing restrictions.

Dealing with Increasingly Burdensome Federal Reporting Requirements

At a time in which the Virginia Department of Education is actively seeking ways to cut reporting requirements on local divisions, the department must itself keep up with increasingly burdensome and time-consuming federal reporting and accountability requirements, especially those related to the Elementary and Secondary Education Act (previously known as No Child Left Behind), the Individuals with Disabilities Education Act, and the State Fiscal Stabilization Fund.

Promoting High-Quality Preschool Programs

The number of school divisions participating in the Virginia Preschool Initiative has grown from 75 in the 2001-2002 school year, to 114 in the 2008-2009 school year. Also, the number of children served has grown from 5,966 in 2001-2002 to 15,900 children in 2010. Despite this growth, the number of at-risk four-year-olds in Virginia continues to be a concern. Without providing high quality preschool to all at-risk four-year-olds, many at-risk five-year-old children will continue to enter kindergarten without adequate preparation to be fully ready to learn.

Providing Programs to Narrow Persistent Achievement Gaps

This is one of the most pressing challenges that states across this nation face. Virginia is no exception. Gaps in graduation rates exist between Virginia's black and Hispanic students and their white and Asian counterparts. This is equally true for students who are economically disadvantaged. Although improving, gaps also persist on the statewide assessments among Virginia's black and Hispanic students and their white and Asian counterparts. Recent changes in federal education policy have put the spotlight on the achievement gap issue, and schools are struggling to bring all students' achievement up to high levels.

The good news is Virginia is making progress. For example, Virginia boasts one of the nation's smallest achievement gaps between whites and Hispanics. Here, eighth-grade Hispanic students had the highest NAEP writing scores for Hispanic students in any state. The persistent challenge is to accelerate this progress and raise the achievement of all students.

Dealing with Changing Demographics

As reported by the Virginia's Poverty Reduction Task Force: "More than 10 percent of Virginians currently live below the poverty level. They are highly concentrated in inner cities and along the state's southern and southwest borders, with growing clusters in suburban areas. Analysts believe that the rate will increase rapidly in the next few years because of the recession, and then gradually rebound to current levels around 2022."(*Poverty in Virginia: Recommendations from the Commonwealth of Virginia's Poverty Reduction Task Force*, 2010)

As a general indicator of low-income among the families of Virginia's school-age population, in 2009-2010, more than 37 percent of the students in Virginia's public schools were eligible for free and reduced-price lunch. This compares to 34.6 percent eligible in 2008-2009. The percent varies widely across the school divisions, from a high of more than 75 percent to a low of 8 percent. Children living in poverty are more likely to be sick as toddlers, unprepared for kindergarten, fall behind in grade school or drop out of high school, and are less likely to be economically successful as adults. (Weldon Cooper Center, 2009)

Virginia's population of Limited English Proficient (LEP) students continues to grow. In 1999, Virginia's public schools enrolled fewer than 32,000 LEP students. A decade later (2009) the number had risen to almost 87,000. This growth is expected to continue for the foreseeable future, placing a significant need for resources for these students.

Using Information and Research to Improve Student Learning

The members of the Board of Education understand the need to take a leadership role to strengthen the bridge that connects research to the practice of teaching and learning. Dr. Victoria Bernhardt, a nationally recognized authority in the use of research to improve student learning, asserts: "The more all staff are involved in collecting and analyzing data, the more they will get involved in implementing the changes demanded by the results." The members of the Board of Education agree. Finding ways to help teachers and administrators know how to properly interpret and use data will go a long way in ensuring that each child succeeds in the classroom.

At the state level, the Board must use information and research to guide policy decisions that support improvements in teaching and learning. At the division and school level, classroom teachers and school personnel have lots of information on student academic performance and classroom methods and practices. The challenge is to help teachers and administrators at all levels to gather, analyze, and use data to continuously improve teaching and learning—the data analysis work that can lead their schools to understand what needs to change to get better results. A further challenge is to create new resources for professional development that put usable information into the hands of those directly responsible for students' learning.

Safe and Healthy Environments for Students and Teachers

A high priority for the Board is dealing effectively with the realities of schooling for some children who face difficult personal circumstances such as high poverty, high crime in their neighborhoods, high rates of unhealthy behaviors, poor nutrition, and other circumstances that obstruct their learning at school. The Board of Education must help school divisions by providing solid, workable guidelines and policies to assist those who are responsible for the health and safety of students and staff while they are at school, on school grounds, on their way to or from school, and involved in school-sponsored activities. The Board must continue to stress the importance of successful, communitywide partnerships in the development of procedures and policies that most effectively support healthy, safe, orderly and disciplined school environments.

Preparation, Recruitment, and Retention of Educational Personnel

The current economic down-turn for the state and the localities will impact teacher recruitment and retention. Due to budget limitations, many localities are proceeding with slimmed-down teacher recruitment and hiring. For some divisions, teacher and staff layoffs may be unavoidable. At least in part a result of economic hard times, hiring new teachers will likely decrease because current classroom teachers will stay put by holding on to their jobs or by deferring retirement. Thus, for the next several years the reality for teacher supply and demand is two-fold: available teaching positions will become scarce except for some chronic shortage areas, and divisions will struggle to close looming budget gaps, making teacher and staff layoffs unavoidable for some.

Digging deeper for the long term, additional underlying demographics will impact teacher recruitment and retention. Finding and retaining qualified teachers in chronic shortage areas have been persistent problems for many local divisions. Shortage areas include special education, mathematics, some foreign languages, and teachers of English as a Second Language. Also, the number of completers of Virginia's teacher preparation programs is around 3,200 each year, far short of the 5,100 new and beginning teachers hired in 2008 (latest available data).

Moreover, the latest available data (2008) show that Virginia's annual teacher turnover rate is slightly more than nine percent. For principals and assistant principals, the annual turnover rate is higher, at 10 percent. Approximately one-fifth of our teaching force and one-fourth of the principals and assistant principals are aged 55 or older —a significant number of teachers and principals now at or nearing full retirement age. Antidotal evidence shows a higher-than-normal turnover rate for division superintendents, as well. When considered as a whole, these demographics mean challenging times ahead, both short-term and long-term.

Recruiting Minority Teachers

Boosting the diversity of Virginia's teaching staff is crucial at a time when educators are worrying about eliminating achievement gaps. The gap between the diversity of students in the schools and the ethnic characteristics of the teaching force poses a key question: will teachers reflect the tremendous diversity of the students they will serve? Not without a concerted effort. In 2009-2010, 12 percent of Virginia's teachers are black, two percent are Hispanic, and one percent are Asian, compared with approximately 25, nine, and six percent of students, respectively.

Promoting Parental and Family Involvement

The family and the home are both critical education institutions where children begin learning long before they start school, and where they spend much of their time after they start school. It stands to reason that involving parents in their child's education is conducive to learning. Such involvement is critical if we are to improve the educational achievement of Virginia's students, promote safe and healthy school environments, and eliminate achievement gaps. To do this, schools need to promote and enhance cooperative partnerships in which families are allies in the efforts of teachers and schools.

New Initiatives for 2010 and Support for Virginia Department of Education Initiatives

The Board of Education is firmly committed to providing leadership to help schools and divisions meet higher standards for all students. Legislation proposed by Governor Robert F. McDonnell and approved by the 2010 General Assembly creates additional opportunities for students to learn and gives the Board of Education responsibility to implement the provisions of the new programs. The new legislation includes provisions that:

(1) Increase the level of state support and guidance in the development of charter schools in Virginia to ensure that local school boards receive quality charter school proposals;

(2) Allow any public institution of higher education in the commonwealth with an approved teacher-preparation program to establish a college partnership laboratory school; and

(3) Give additional opportunities for online learning.

As a springboard for action, the President of the Board of Education, Mrs. Eleanor B. Saslaw, established two new committees to focus attention on priorities for action: the Charter School Committee and the College Partnership Laboratory School Committee. The committees consist of members of the Board, and the chairs of the respective committees have set an agenda for action that will move the Board closer to meeting its goal of expanding learning opportunities for all students. Also, the Board has supported the work related to two new initiatives undertaken by the Virginia Department of Education that directly relate to the priorities of the Board.

- Charter School Committee:
  Charter schools provide options for parents and students while allowing communities and educators to create innovative instructional programs that can be replicated elsewhere in the public school system. All charter schools in Virginia are nonsectarian alternative public schools located within a school division and under the authority of a local school board. To carry out its responsibilities, the Board's Charter School Committee was formed and set to work immediately to develop or revise the following: procedures for receiving and reviewing charter school applications; criteria used in reviewing applications; a listing of regulations that may be waived for charter schools; and criteria for making distributions from the charter school fund. During its deliberations, the committee held informative discussions with a panel of national experts, followed by panels of leaders of statewide organizations. It is anticipated that the procedures, criteria, and regulations will be adopted by the Board at the January 2011 meeting.

- College Partnership Laboratory School Committee:
  College partnership laboratory schools are public schools established by contract between the governing board of a college or university and the Board of Education.

The 2010 legislation allows any public institution of higher education in the Commonwealth with an approved teacher-preparation program to establish a college partnership laboratory school.

The Board's College Partnership Laboratory School Committee was established and is in the process of developing the following: procedures for receiving college partnership laboratory school applications; an application and criteria used in reviewing applications; a listing of regulations that may be waived; and criteria for making distributions from the college partnership laboratory fund.

The committee began its work by convening a panel of nationally recognized experts in the college laboratory field, followed by discussions with Virginia college and university provosts, deans, and directors of teacher education programs. Final recommendations on procedures and criteria will be made by the Board at the January 2011 meeting.

- Multidivision Online Providers:
  Also new in legislation for 2010, the Superintendent of Public Instruction is required to develop, and the Board is required to approve, criteria for approving and monitoring multidivision online providers of virtual school programs. It allows local school boards to enter into contracts with approved multidivision online providers to deliver virtual programs.

  "Multidivision online provider" means (i) a private or nonprofit organization that enters into a contract with a local school board to provide online courses or programs through that school board to students who reside in Virginia both within and outside the geographical boundaries of that school division; (ii) a private or nonprofit organization that enters into contracts with multiple local school boards to provide online courses or programs to students in grades K through 12 through those school boards; or (iii) a local school board that provides online courses or programs to students who reside in Virginia but outside the geographical boundaries of that school division.

  The Superintendent must develop model policies for school divisions, and the Board must submit information about virtual school programs in its annual report to the Governor and to the General Assembly, beginning in November 2011. In October 2010, the Board approved the first set of multidivision online providers and will report on these providers and any subsequent additions in its annual report for 2011.

Board of Education Support for Virginia Department of Education Initiatives

College and Career Readiness Initiative: Being developed and implemented by the Virginia Department of Education, the Virginia College and Career Readiness Initiative (CCRI) builds on the revised Standards of Learning in mathematics and English adopted in 2009 and 2010, respectively. The revised standards reflect the substantial input and recommended changes provided by college faculty and other experts from the College Board, ACT, the American Diploma Project, and the business community. These groups support Virginia's revisions and have validated the standards as college and career ready.

The Virginia College and Career Readiness Initiative builds on the revised standards and is designed to:

(1) Ensure that college and career ready learning standards in reading, writing, and mathematics are taught in every Virginia high school classroom; and
(2) Strengthen students' preparation for college and the work force before leaving high school.

As the state moves forward to implement the revised English and mathematics Standards of Learning, VDOE, in partnership with leaders in the Virginia Community College System (VCCS) and the State Council of Higher Education for Virginia (SCHEV) are conducting a variety of activities that focus on increasing the number of high school graduates who meet or exceed college and career ready benchmarks. Leading the partnership formed to support the Virginia College and Career Readiness Initiative, VDOE is in the process of:

1) Defining college and career ready performance expectations aligned to national and international college and career ready standards;[1]
2) Developing elective "capstone courses" to support students who need additional instruction to meet college and career ready performance expectations before leaving high school;
3) Providing technical assistance and professional development to Virginia's educators to support implementation of the revised English and mathematics standards and the college and career ready performance expectations;
4) Aligning the state assessments to measure student mastery of the more rigorous mathematics and English standards adopted in 2009 and 2010. Certain high school end-of-course tests will include quantitative indicators of whether students have met or exceeded the achievement levels needed to be successful in introductory mathematics and English courses in college; and
5) Identifying accountability measures and incentives for schools to increase the percentage of students who graduate high school having demonstrated the academic and career skills needed to be successful in postsecondary education programs.

Study and Development of Model Teacher and Administrator Evaluation Systems: The Board of Education has received updates on the Virginia Department of Education's comprehensive study of teacher and administrator evaluation. This study is designed to:

(1) Provide models that may be used by school divisions to develop differentiated or performance-based compensation systems; and
(2) Provide revised guidance documents and new evaluation models for teachers that can be used in school divisions to improve student achievement by improving teacher performance, increasing teacher retention, and developing meaningful, targeted professional development.

---

[1] This work is supported by the Virginia's participation in the Southern Regional Education Board's college readiness initiative, funded by the Bill and Melinda Gates Foundation.

The study will target divisions with high-poverty schools and persistently low-performing schools as initial pilot sites for revised evaluation models. The department plans to complete the Guidance documents and evaluation models in December 2010 and present the documents to the Board of Education in January and February 2011.

The Board's Performance Measures: Addressing the Needs of Virginia's Public Schools

The Board of Education has adopted a comprehensive plan of action for the coming years. More details for the plan of action may be found in the Board of Education's *Comprehensive Plan: 2011-2016*, which may be viewed on the Board of Education's Web site at the following address:
http://www.doe.virginia.gov/VDOE/VA_Board/comprehensiveplan.pdf. It outlines seven goals (discussed in more detail below), along with strategies and activities that will provide the framework for the Board of Education's focus for the near future.
The following goals were set by the Board to address the complex challenges that impact our schools and our young people.

Objective 1: The Board of Education will continue to enhance the quality standards for all public schools in Virginia.

From 2008 to 2010, the Board adopted revised Standards of Learning (SOL) in mathematics, English, science, and history and social science. During the revisions of the mathematics and English standards in particular, there was a substantial effort made to work with outside experts to establish Standards of Learning that, if mastered, would prepare students for success in college and careers. The mathematics and English standards reflect the substantial input and recommended changes provided by college faculty and other experts from the College Board, ACT, the American Diploma Project, and the business community. These groups support Virginia's revisions and have validated the standards as college and career ready.

With the Board's adoption of these revised standards, the Virginia Department of Education (VDOE) is developing new tests that will measure students' mastery of the more rigorous content standards. The new mathematics and English assessments will be administered online, and include technology-enhanced items that require students to demonstrate content mastery in ways that were not possible with multiple-choice tests. The result of the standards revision, therefore, will be that students will have to demonstrate mastery of more rigorous content in mathematics and English in order to pass the revised SOL tests.

In addition to the standards revisions, VDOE is developing the new tests to enable the Board to establish college ready achievement levels on certain end-of-course assessments in English and mathematics. The test development process will be informed by previous research focused on the associations between student achievement measured by SOL assessments and postsecondary enrollment and persistence. Further, the results of a survey in which higher education faculty identified the SOL in mathematics and English that are essential for student success in introductory, credit-bearing English and mathematics courses

in college will be considered in the test development process. In addition to adopting minimum cut scores that demonstrate proficiency to verify course credit, the Board of Education will adopt minimum scores that represent academic preparedness for success in introductory, credit-bearing English and mathematics courses in college. The college ready achievement level will replace advanced proficiency on certain end-of-course tests.
The addition of a college ready cut score on certain end-of-course mathematics and English assessments is part of the Virginia College and Career Readiness Initiative. The initiative, which resulted from the Board's 2007 action to authorize the Department to conduct studies to determine factors contributing to success in postsecondary education, is designed to:

(1) Ensure that college and career ready learning standards in reading, writing, and mathematics are taught in every Virginia high school classroom; and
(2) Strengthen students' preparation for college and the work force before leaving high school.

The Virginia Department of Education leads the initiative in close collaboration with leaders from the Virginia Community College System and the State Council of Higher Education for Virginia.

Highlights: Actions of the Board in 2010
The Board of Education regularly reviews and revises the Standards of Quality (SOQ), Standards of Accreditation (SOA), and Standards of Learning (SOL). Throughout this process, the Board collects data and information that support its ability to thoughtfully and deliberately make revisions that are designed to enhance the quality of the standards to which Virginia's students are held.

In 2010, the Board adopted revised Standards of Learning for English and Science, along with revised curriculum frameworks for these core subjects. The Board also adopted the curriculum framework for its *Economics and Personal Finance Standards of Learning*.

In June 2010, the Board of Education reaffirmed its intention that the academic standards for Virginia's schools shall be second to none. Much has been made in media reports about the Common Core State Standards. The Board of Education is committed to the Virginia Standards of Learning program and opposed a word-for-word adoption of the newly developed Common Core State Standards as a prerequisite for participation in federal competitive grant and entitlement programs.

In September, the Board reviewed a detailed analysis of Virginia's Mathematics and English Standards of Learning compared to the Common Core State Standards for Mathematics and English. The side-by-side analysis showed that Virginia's Mathematics and English Standards of Learning have a strong alignment to the Common Core State Standards. By the time students have progressed into high school mathematics and English content through the CCSS or SOL, students have received most of the same academic content delivered through different learning progressions. In short, Standards of Learning are clear and rigorous and have won the acceptance and trust of Virginia educators.

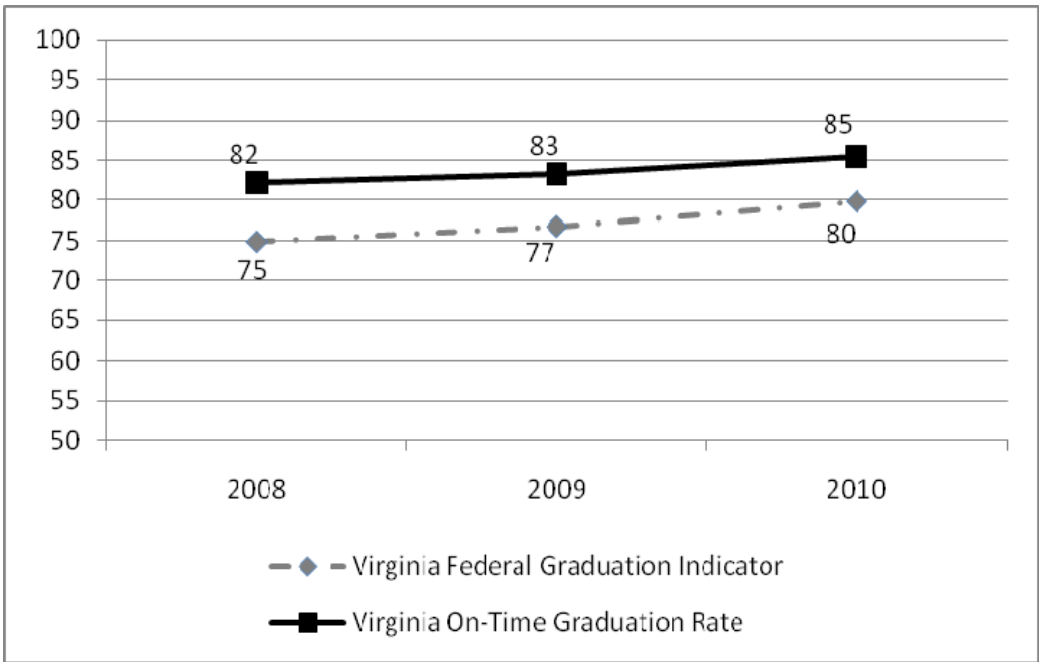
Objective 2: The Board of Education will provide leadership to help schools and school divisions eliminate the achievement gap between groups of students and increase the academic success of all students.

Objective 3: The Board of Education will support accountability for all schools, focusing on assisting chronically low-performing schools and school divisions while recognizing all schools and school divisions as they move towards excellence.

Objectives 2 and 3 address the critical need for sound accountability programs. School accountability in Virginia continues to evolve. In 2010, 1,814 schools were fully accredited, representing 98 percent of Virginia's public schools. Fifteen (15) of Virginia's schools were Accredited with Warning, and four were rated as Accreditation denied.

Other signals of positive trends in Virginia are seen in the increasing numbers of students earning high school diplomas. The figure below shows Virginia's two cohort graduation indicators—the Virginia On-Time Graduation Rate, which includes all Board of Education-approved diplomas, and the Federal Graduation Indicator, which includes only Virginia's standard and advanced studies diplomas. Both rates are increasing, which indicates that more of Virginia's high school students are meeting the rigorous requirements of the Board's diploma requirements.

Figure 1: Cohort Graduation Rates in Virginia



Virginia's research has identified several indicators that are associated with a high probability of enrolling in four-year postsecondary institutions of higher education, and persisting into the second year. The indicators are as follows:

- Earning an advanced studies diploma;
- Participating in Algebra II;
- Earning advanced proficient scores on the reading and writing mathematics assessments.

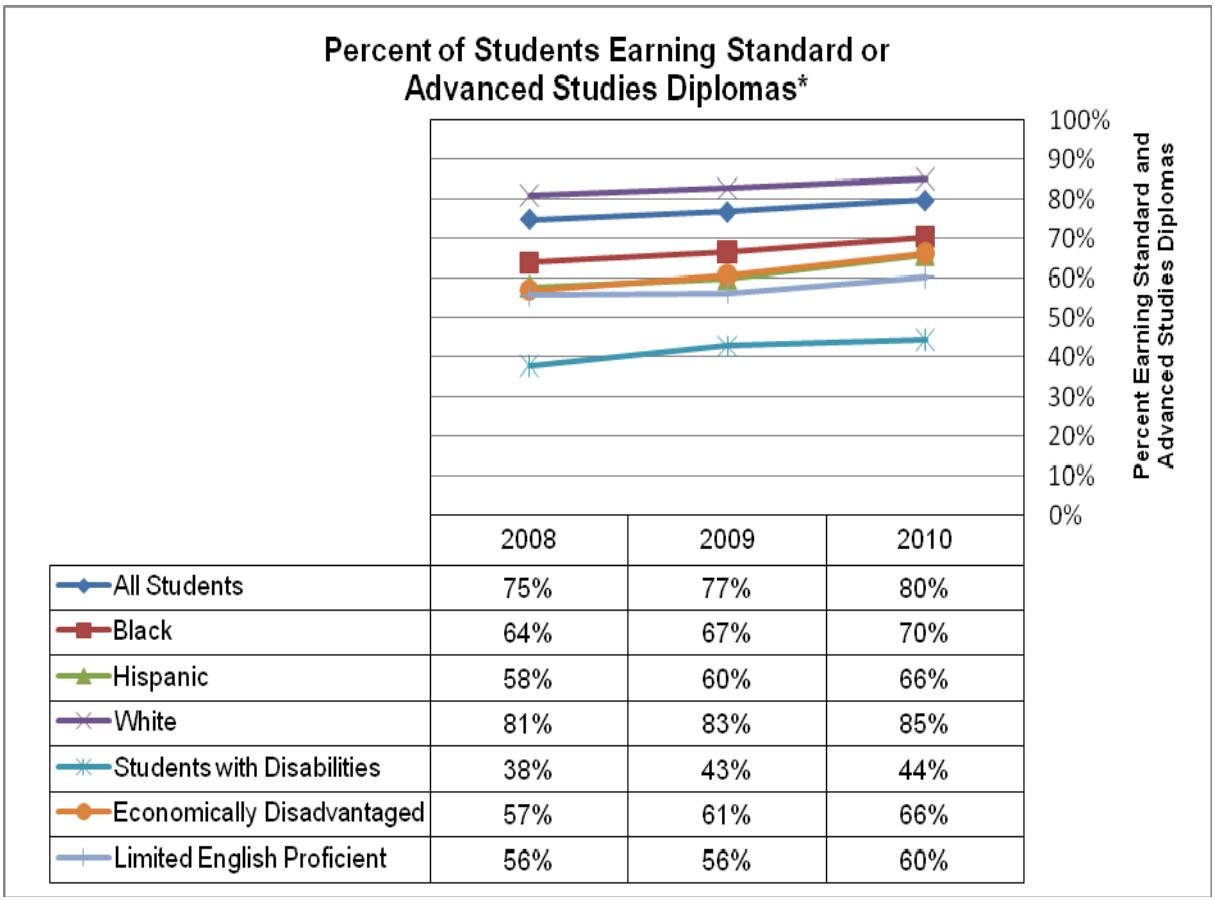
These indicators are predictive of postsecondary enrollment independently. The following provides information on the percent of students who graduated from high school meeting one or more college and career ready indicators of future success.

Independent Indicators of College Readiness in Virginia

Graduation Year	Advanced Studies Diploma	Participation in Algebra II	Advanced Proficient on reading, writing, and Algebra II
2007-2008	52%	60%	51%
2008-2009	53%	69%	52%
2009-2010	54%	70%	52%

Virginia is a national leader in career readiness. The percent of students who complete a defined career and technical education (CTE) sequence of courses has increased from 40 percent in 2007 to 47 percent in 2010. Completing these course sequences provides students with a pathway for future success in the workplace. As well, Board policy encourages schools to validate students' CTE outcomes success through participation in national assessments, receipt of state licenses, and earning industry certifications. In 2010, more than 29,000 students earned such credentials, and 57 percent of students earned an advanced studies diploma or earned a CTE credential.

These positive results reflect many years of dedicated partnerships to strengthen Virginia's Standards of Learning and move more students to excel in mastering them. While celebrating these successes, Virginia must also recognize the challenges ahead. For example, results of the 2009 administration of the National Assessment of Educational Progress (NAEP) showed Virginia's fourth grade reading outcomes have been stagnant since 2002, and scores on the eighth grade reading assessment have declined significantly since 2002. As well, Virginia continues to have schools that did not meet the Board-established graduation goal of 80 percent of students earning standard and advanced studies diplomas. As is shown in the figure below, while all of Virginia's subgroups as defined for federal accountability are showing increases since 2008, all have failed to meet the goal.



	2008	2009	2010
All Students	75%	77%	80%
Black	64%	67%	70%
Hispanic	58%	60%	66%
White	81%	83%	85%
Students with Disabilities	38%	43%	44%
Economically Disadvantaged	57%	61%	66%
Limited English Proficient	56%	56%	60%

* As defined by the formula used to calculate the federal graduation rate indicator, 2010.

Virginia's state accountability system, which includes significant support from state partners, continues to show results. Under the state accountability system, any school that is accredited with warning for three consecutive years is considered chronically low-performing. In the 2010-2011 accreditation year, and based on data available from the 2009-2010 school year, Virginia had only nine (9) schools identified as chronically low-performing using the state definition. This included five schools accredited with warning for a third consecutive year and four schools denied accreditation. This is two fewer schools than last year, and is down from 58 chronically low-performing schools in the 2006-2007 school year.

Accreditation Year	Number of chronically low-performing schools
2010-2011	9
2009-2010	11
2008-2009	33
2007-2008	42
2006-2007	58

This year, the federal government established its own definition of persistently lowest-achieving schools. In accordance with federal requirements, in 2010, Virginia identified schools that are considered Virginia's persistently lowest-achieving schools under the following federal definition:

A. A Title I school in improvement, corrective action, or restructuring that is among the lowest-achieving five percent of Title I schools in improvement, corrective action, or restructuring based on the academic achievement of the "all students" group in reading/language arts and mathematics combined and the school has not reduced its failure rate in reading/language arts and/or mathematics by 10 to 15 percent each year for the past two years (Tier I); or

B. A secondary school that is eligible for, but does not receive, Title I funds that is among the lowest-achieving five percent of schools based on the academic achievement of the "all students" group in reading/language arts and mathematics combined and the school has not reduced its failure rate in reading/language arts and/or mathematics by 10 to 15 percent each year for the past two years (Tier II); or

C. A high school that has had a graduation rate as defined in 34 CFR 200.19(b) that is less than 60 percent for two years (Tier II).

As of June 2010, the following schools that are currently open met each of the above criteria:

- Persistently Lowest-Achieving Schools That Met Criterion A and are open in 2010-2011:
  Petersburg City Public Schools, Peabody Middle School
  Roanoke City Public Schools, Westside Elementary School
  Sussex County Public Schools, Ellen W. Chambliss Elementary
  Sussex County Public Schools, Sussex Central Middle School
- Persistently Lowest-Achieving Schools That Met Criterion B
  Alexandria City Public Schools, T.C. Williams High School
  Colonial Beach Public Schools, Colonial Beach High School
  Danville City Public Schools, Langston Focus High School
  King and Queen County Public Schools, Central High School
  Prince Edward County Public Schools, Prince Edward County High School
  Richmond City Public Schools, Armstrong High School

- Persistently Lowest-Achieving Schools That Met Criterion C
  Petersburg City Public Schools, Petersburg High School

<u>Highlights: Actions of the Board in 2010</u>

There is no question that aggressive interventions by the Virginia Department of Education and well-defined partnerships between the Board of Education and local school boards have produced positive results in divisions previously identified as low-performing.

The Department of Education promotes student learning and achievement by assisting schools and school divisions in the implementation of effective instructional strategies and best practices. Programs include school-level and division-level academic reviews, school improvement planning, and innovative programs such as the Partnership for Achieving Successful Schools (PASS).

As a part of this ongoing effort, the Board continued to review and receive periodic reports from the Petersburg City Public Schools and the Sussex County Public Schools. Both divisions have signed a Memorandum of Understanding (MOU) with the Board of Education, and they continue to provide summative reports on progress made in meeting or exceeding MOU agreements and expectations.

Objective 4: The Board of Education will work cooperatively with partners to help ensure that all young children are ready to enter kindergarten with the skills they need for success.

In the 2009-2010 school year, the Virginia Preschool Initiative (VPI) served 15,921children. Students who participate in public preschool programs, including the VPI, continue to have fewer needs for extra support in learning how to read when they enter kindergarten compared to the entire kindergarten class.

	Percent requiring extra support to stay on track to learn to read				
Student Group	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009
Attended any type of public preschool the year before kindergarten	13%	13%	11%	12%	12%
Attended VPI programs the year before kindergarten	13%	11%	10%	9%	9%
All kindergarten students participating in pre-literacy screening in kindergarten	18%	17%	17%	14%	14%

Highlights: Actions of the Board in 2010

Board member Rob Krupicka serves on the Virginia Early Childhood Advisory Council (ECAC). The ECAC has the support of Governor McDonnell and is designed to provide increased collaboration and efficiency among state agencies, communities, and private sector organizations that focus on the multiple facets of early childhood health, education and development; the training of early childhood professionals; and issues related to long-term work force development.

Objective 5: The Board of Education will establish policies that support the attainment of literacy skills of all students, kindergarten through grade 12.

Statewide, and in aggregate across grade levels, tested students passed 88 and 89 percent of mathematics assessments in 2009-2010, which is an increase in mathematics compared to the previous year. Grade by grade, however, the data tell a more nuanced story. The percent of students passing the grade three reading test dropped by three percentage points compared to last year. As well, grades 4 and 5 and end-of-course assessments saw lower pass rates this year compared to last.

Pass Rates on Statewide Reading Assessments

Assessment Level	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	One Year Change
Grade 3	84	80	84	86	83	-3
Grade 4	86	87	88	89	88	-1
Grade 5	87	87	89	92	90	-2
Grade 6	83	84	85	86	88	+2
Grade 7	81	82	86	88	89	+1
Grade 8	78	80	83	87	90	+3
EOC Reading	90	94	94	95	94	-1

In conjunction with stagnant scores on grade 4 NAEP and lower scores on grade 8 NAEP in 2009 compared with 2002, these results suggest that the state has significant work to do to sustain its high levels of reading achievement, particularly in light of the new and more rigorous English standards that will be assessed beginning in the 2013 school year.

In mathematics, achievement continues to increase for all assessment levels except Algebra II, which saw a five-point decrease in pass rates compared to last year. The Department is monitoring this drop, particularly in light of the increased participation in this course.

Pass Rates on Statewide Mathematics Assessments

Assessment Level	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	One-Year Change
Grade 3	90	89	89	89	92	+3
Grade 4	77	81	84	86	88	+2
Grade 5	83	87	88	90	90	0
Grade 6	51	60	68	73	77	+4
Grade 7	44	56	65	71	75	+4
Grade 8	76	77	83	85	87	+2
Algebra I	88	92	93	94	94	0
Geometry	85	88	90	91	91	0
Algebra II	86	87	87	88	83	-5

The Governor and General Assembly have supported the Board's effort to increase literacy skills for all students with a variety of programs that support students who may struggle in school because:

- They have not had opportunities comparable to those of other students;
- They have a history of poor performance in certain content areas that warrants intervention to prevent further decline;
- They have struggled unsuccessfully to meet higher graduation requirements;
- They come from non-English speaking homes; or
- Their life circumstances make it difficult to succeed.

In the next few years, as the economy continues to struggle, continued emphasis on programs for at risk students will be even more critical for Virginia's students, as the more rigorous standards are put in place and tested. Current programs that support students, and have helped students meet and exceed existing standards include the Virginia Preschool Initiative; K-3 Class Size Reduction; At-Risk Add-on; SOQ English as a Second Language programs; Early Intervention Reading Initiative; the Algebra Readiness Initiative; Project Graduation; Remedial Summer School; SOQ Prevention, Intervention, and Remediation; and the Regional Alternative Education Programs.

Highlights: Actions of the Board in 2010:
As noted above, the Board adopted revised English and Science Standards of Learning, as well as revised curriculum frameworks for English, Science, and Economics and Personal Finance. The Board received extensive analysis of the comparison of Virginia's Mathematics and English SOL with the Common Core State Standards for Mathematics and English. Also, the Board actively supports the Virginia College and Career Readiness Initiative (CCRI), which is an initiative of the Virginia Department of Education designed to: 1) Ensure that college and career ready learning standards in reading, writing, and mathematics are taught in every Virginia high school classroom; and 2) Strengthen students' preparation for college and the work force before leaving high school.

Objective 6: The Board of Education will establish policies and standards that enhance the preparation, recruitment, and retention of educational personnel, including their meaningful, ongoing professional development.

Highly qualified teachers and educational personnel are essential. In 2009-2010, 99 percent of teachers in core academic classes were considered highly qualified. However, these teachers are not distributed evenly, as 2 percent of classes in high-poverty schools are taught by teachers who are not highly qualified, compared to only 1 percent in low-poverty schools. This is an improvement from 2006-2007, when 5 percent of core academic classes in high-poverty schools were taught by teachers who were not highly qualified, compared to 2 percent of core classes in low-poverty schools.

While Virginia has made great strides towards distributing highly qualified teachers evenly across high- and low-poverty schools, less is known about the effectiveness of such educators. In 2010, the Virginia Department of Education (VDOE) established a workgroup to build models for performance evaluation that, when used appropriately, will allow school divisions to identify more and less effective educators, and provide all teachers with professional development opportunities that focus on their needs, as identified through evaluation. Part of the workgroup's charge is to update the Board of Education's guidance document on teacher performance standards and evaluation criteria. Completing this work will position Virginia to remain competitive in bringing federal funds for teachers to Virginia's schools.

VDOE is also working to provide mathematics and English teachers in tested grades with information about the growth of their students based on SOL test scores. Virginia's growth measure, which will be available in 2011, will provide teachers with information about the progress of their students, relative to other students with similar achievement the previous year. This information will help teachers and administrators understand how much progress their students make each year. When used appropriately as one component of comprehensive performance evaluation, the growth measure can provide information about the contribution of teacher activities to student progress.

Highlights: Actions of the Board in 2010:
The Board of Education adopted a number of new or revised provisions regarding teacher training and licensure requirements, including:

(1) Revising the passing score for the *School Leaders Licensure Assessment (SLLA)*;
(2) Approving several college and university new endorsement areas and professional education programs;
(3) Revising and updating several requirements related to teacher pre-service assessments (Praxis I and Praxis II);
(4) Adopting test options for native speakers or for teacher candidates who have learned a foreign language without formal academic credit to meet the endorsement requirements in these languages; and
(5) Adopting an assessment for those seeking an initial Virginia license with the endorsement in Special Education-Visual Impairments

Objective 7: The Board of Education will provide leadership in implementing the provisions of state and federal laws and regulations.

Highlights: Actions of the Board in 2010:
The Board of Education is revising and updating a number of its current regulations, to include:

(1) Promulgating new regulations entitled *Regulations Governing Local School Boards and School Divisions*. This regulatory action will repeal or consolidate 13 of the Board's current regulations into one comprehensive regulation, thus eliminating outdated provisions and streamlining requirements to a considerable degree; and

(2) Initiating a review of regulations in the areas of career and technical education, education of the gifted, state-funded remedial programs, unexcused absences and truancy, operation of private day schools for students with disabilities, competitive foods sold in schools, and pupil transportation.

The Board also continued its ongoing review of the Elementary and Secondary Education Act (formerly called *No Child Left Behind Act of 2001*) and submitted revisions to Virginia's Consolidated State Application Accountability Plan to the U.S. Department of Education for approval.

Status of Virginia's Public Charter Schools in 2009-2010

In addition to the work of the new Charter School Committee and College Partnership Laboratory School committee, the Board of Education received information on the number of public charter school applications approved and denied by local school boards during 2009-2010 through Superintendent's Memorandum, Number 155-10, *Charter School Report for 2009-2010*, dated July 9, 2010.

- All school divisions reported;
- No new charter school applications were approved;
- No charter school applications were denied;
- One charter school application was submitted to the Richmond City School Board and is presently going through the school system's internal review process;
- Three charter schools operated for students in 2009-2010;
- A fourth charter school was in its planning year in 2009-2010 and opened for students in grades K-5 in August 2010.

Virginia Public Charter Schools in Operation: 2009-2010

Division	School	Year Opened	Grades Served	Enrollment [1]
Albemarle County	Murray High School	2001	9-12	110
York County	York River Academy	2002	9-12	54
Albemarle County	The Albemarle Community Public Charter School	2008	6-7	26
Richmond City	Patrick Henry School of Science and Arts (opened August 2010)	2009 planning year	NA: in 2009-2010	NA: in 2009-2010

Note [1]: Enrollment numbers are based on charter school self-reported data in 2009-2010.

Accreditation and Adequate Yearly Progress (AYP) Status: 2009-2010

Academic Status	Murray High School	York River Academy	The Albemarle Community Public Charter School	Patrick Henry School of Science and Arts
State Accreditation	Fully Accredited	Fully Accredited	Accredited with Warning	Not Applicable
Adequate Yearly Progress (AYP)	Made AYP	Made AYP	Did Not Make AYP	Not Applicable

Objective 8: The Board of Education will provide leadership to help schools and school divisions ensure a safe and secure environment conducive to facilitating the teaching and learning process.

Highlights of Action in 2010:
As more and more research in Internet safety shows, it is clear that cyberbullying is one of the most pressing issues involved in keeping public schools and the children in them safe. The Board of Education has supported the Virginia Department of Education's efforts to address this issue with the *Guidelines and Resources for Internet Safety in Schools* published in 2006. The resources for schools to use when updating their own policies and procedures are regularly updated with the most current research, recommendations, and helpful resource sites. There are several excellent sites for students that address the issue in a powerful way, including *Let's Face It Together* (http://old.digizen.org/cyberbullying/film.aspx). Other sites focus on teen dating abuse, such as *That's Not Cool* (http://www.thatsnotcool.com/).

The Virginia Department of Education has provided its own research and resources by developing a study focusing on the use of online, interactive, story-based lessons on various Internet safety issues, including cyberbullying. *Internet Safety and You*, a Web site developed in conjunction with a private company (Pokémon USA) and the Virginia Department of Education, has since been made available to all students. The resulting research, presented at annual meeting of the American Educational Research Association, demonstrated that these lessons had a positive impact on the behavior of fourth grade students. Subsequently, this project has been continued using Garfield characters and created in cooperation with the Professor Garfield Foundation, a nonprofit organization founded by Jim Davis. Currently additional lessons focusing on character education are being developed. Several of these cover issues that support anti-bullying messages for students, such as encouraging diversity, resisting peer pressure, and learning self control.

The department has also researched and published two information briefs to inform schools about the latest research. The briefs help divisions update their own policies and procedures relating to current issues. *Cyberbullying and School Policy* was published in August 2008 and *Sexting: Implications for Schools* was published in October 2009. Both were developed in conjunction with the Office of the Attorney General of Virginia.

Recent research suggests that cyberbullying is a part of the much broader issue of "digital citizenship." The concept of digital citizenship includes ethical behavior on the Internet as well as with other technologies to which students have common access. In early 2010, the department developed the guidelines *Essential Elements of ICT (Information and Communications Technology) Literacy* for schools to use when addressing what students need to know. Behavioral and attitudinal elements that support anti-bullying initiatives in schools are included in these guidelines.

These efforts may be paying off. According to the data, the number of bullying incidents had been relatively stable from 2006-2007 through 2008-2009. In the 2009-2010 school year, which is the most recent data available, there were 1191 fewer incidents, or a reduction of 18 percent, of bullying offenses reported to VDOE from the school divisions. This also reflected 16 percent fewer individual student offenders being involved in reported bullying offenses. The department is working closely with school divisions on this issue and looks forward to seeing if this is an ongoing trend.

Compliance with the Requirements of the Standards of Quality

Section 22.1-18 of the *Code of Virginia* requires the Board of Education to "identify any school divisions and the specific schools therein which have failed to establish and maintain schools meeting the existing prescribed standards of quality."

Ninety-four divisions reported full compliance with the provisions of the Standards of Quality (SOQ) in the 2009-2010 school year. Appendix B contains a list of school divisions that have reported non-compliance with any of the provisions of the SOQ. The appendix also provides additional information on the status of compliance over the last three years for these divisions. Students in 1,814 of the commonwealth's 1,850 schools met or exceeded state achievement objectives on Standards of Learning (SOL) tests and other statewide assessments in the four core academic areas last year.

Each year, the Department of Education collects self-assessment data from school divisions on their compliance with the provisions of § 22.1-253.13:1 through 22.1-253.13:8 of the *Code of Virginia* (Standards of Quality). The chairman of the school board and division superintendent certify the level of compliance with the standards and the individual indicators within each standard to the Department of Education via an electronic data collection system.

Where divisions indicate less than full compliance with the standards, corrective action plans for the noncompliance items are required. See Appendix _ for a listing of the information and data used by the Department of Education staff to monitor and verify compliance. Of the divisions that were not in full compliance, all have filed a corrective action plan. The data are for the 2009-2010 school year and for the Standards of Quality that were in effect as of July 1, 2009.

Compliance with the Requirements of the Standards of Accreditation

Ninety-eight percent of Virginia's public schools are fully accredited and meeting current state standards for achievement in English, mathematics, history and science based on 2009-2010 assessment results. Another one percent received conditionally accredited ratings because they are new schools.

The 2010-2011 ratings represent the second consecutive year in which all but two percent of Virginia's public schools are fully accredited. Students in 98 percent of Virginia's 1,850 schools met or exceeded state objectives on SOL tests and other statewide assessments in the four core academic areas. Ninety-eight percent of Virginia's elementary and middle schools and 99 percent of the high schools are now fully accredited.

One school – Vernon Johns Junior High in Petersburg – earned full accreditation after being denied accreditation for three consecutive years.

Three schools earned full accreditation after undergoing reconstitution and being conditionally accredited for one or more years. These schools are: Lake Taylor Middle and Northside Middle in Norfolk and Thomas C. Boushall Middle in Richmond.

Under Virginia's accountability program, a school that has been on academic warning for three consecutive years and fails to meet state standards for a fourth consecutive year can apply to the Board of Education for conditional accreditation – if the local school board agrees to reconstitute the school's leadership, staff, governance or student population. A reconstituted school can retain conditional accreditation for up to three years if it is making acceptable progress toward meeting state standards.

In 119 of Virginia's132 school divisions, all schools are fully accredited, compared with 117 last year. For a full listing, see Appendix C.

Requirements Will Become More Rigorous

Beginning with accreditation ratings to be announced in September 2011, high schools will have to meet an annual objective for raising graduation rates to earn full accreditation. In September 2012, a pass rate of at least 75 percent in English reading will be required for all grade spans, and the required pass rates for elementary schools in science and history/social science will each rise to 70 percent – the same benchmark middle schools and high schools must meet. The higher pass rates had been scheduled to take effect earlier but were delayed by the General Assembly.

In addition, students will take more rigorous SOL mathematics tests beginning in 2011-2012 and more rigorous tests in English reading the following year.

Taken together, these steps will represent a substantial increase in the rigor of Virginia's accountability program. The accreditation ratings we will announce a year from now will mark a new beginning as schools advance toward goals aligned with the latest national expectations for college and career readiness.

Accreditation ratings may reflect adjustments made for schools that successfully remediate students who failed reading or mathematics tests during the previous year. Adjustments also may be made for students with limited-English proficiency and for students who have recently transferred into a Virginia public school.

Closing Statement by the Virginia Board of Education

The Board of Education's priorities for action may be summed up as this: Priorities are based upon a sincere expectation that every child will learn academic content at a high and challenging level, that any traditional excuses for failure will be swept off the table, and that assessments will be used to guide the next lesson as well as evaluate the previous one.

In uncovering key components of successfully run schools, research points to strong instructional leadership, a clear focus on academics, regular measures of academic progress, high-quality teaching, and good community and parent relations. The Board's priorities for action clearly address each of these factors.

The world in which we live —and certainly the one in which our children will live and work in the future —is constantly changing, constantly shifting. New technologies, higher level skills, and new ways of working emerge every day, and our schools must provide an education that promotes excellent opportunities for all children to learn.

Keeping our system of public schools on a steady course and continuing to deliver solid results despite huge challenges call for a keen sense of what is required to ensure opportunities for all children to learn. It requires a steady focus on the Board of Education's vision, mission, and goals.

Education is the foundation for everything else we do, from economic development to health care. We are facing some difficult challenges today, but the key solution to these challenges remains the same: Be measured by rigorous standards, reach rigorous standards, and exceed rigorous standards. By doing so, young Virginians will surely lead the nation in educational progress.

Appendices

Appendix A: List of School Divisions Reporting Full Compliance with the SOQ: 2009-2010

Appendix B. List of School Divisions Reporting Noncompliance with any Provision of the SOQ: 2009-2010

Appendix C: Divisions with All Schools Fully Accredited, Schools Granted Conditional Accreditation, Schools Rated Accredited with Warning, Schools Rated Accreditation Denied: 2010- 2011

Appendix D: Standards of Quality, Effective July 1, 2009

APPENDIX A:
Compliance with the Standards of Quality: 2009-2010:

94 Divisions Reporting Fully Compliant with All Provisions of the Standards of Quality for 2009-2010

Accomack County
Alleghany County
Amelia County
Appomattox County
Arlington County
Augusta County
Bath County
Bedford City/Bedford County
Bland County
Botetourt County
Bristol City
Buchanan County
Buckingham County
Buena Vista City
Campbell County
Caroline County
Charles City County
Charlotte County
Charlottesville City
Chesapeake City
Chesterfield County
Colonial Beach
Colonial Heights City
Covington City
Craig County
Culpeper County
Cumberland County
Dinwiddie County
Essex County
Fairfax County
Fauquier County
Floyd County
Fluvanna County
Franklin City
Franklin County
Frederick County
Fredericksburg City
Galax City
Giles County
Gloucester County
Goochland County
Greene County
Halifax County
Harrisonburg City
Henry County
Isle of Wight County
King William County
Lancaster County
Lee County
Lexington City
Loudoun County
Louisa County
Lunenburg County
Lynchburg City
Madison County
Manassas Park City
Mathews County
Middlesex County
Montgomery County
Nelson County
Nottoway County
Page County
Patrick County
Pittsylvania County
Poquoson City
Portsmouth City
Powhatan County
Prince Edward County
Prince George County
Pulaski County
Radford City
Rappahannock County
Richmond County
Rockbridge County
Rockingham County
Russell County
Salem City
Scott County
Shenandoah County
Smyth County
Southampton County
Spotsylvania County
Stafford County
Suffolk City
Surry County
Tazewell County
Virginia Beach City
Warren County
Washington County
West Point
Westmoreland County
Williamsburg-James City County
Winchester City
York County

APPENDIX B:
Divisions Reporting Noncompliance with Certain Provisions of the Standards of Quality for 2009-2010

§ 22.1-253.13:1 – Standard 1. Instructional programs supporting the Standards of Learning and other educational objectives.				
Requirement	**School Division**	**2008 - 2009 Was Division Compliant?**	**2007 - 2008 Was Division Compliant?**	**2006 - 2007 Was Division Compliant?**
The division superintendent chooses summer school remediation programs or other forms of remediation as appropriate to the academic needs of the student and does not charge tuition to students required to attend such programs.	King and Queen County	YES	YES	YES
Educational alternatives for students whose needs are not met in programs prescribed elsewhere in the standards.	Falls Church City	YES	YES	YES

§ 22.1-253.13:1 – Standard 2. Instructional, administrative, and support personnel. Please note: The data collection for compliance with the Standards of Quality takes place during the spring of each year. A number of school divisions reported being out of compliance with the standard: "The school board employs licensed instructional personnel qualified in the relevant subject areas." Given school division staffing patterns and turnover/vacancy issues, school divisions may be undertaking efforts to hire licensed instructional personnel in all areas but may not have completed all hiring processes or may be encountering difficulties with teacher shortages in certain areas.

Requirement	**School Division**	**2008 - 2009 Was Division Compliant?**	**2007 - 2008 Was Division Compliant?**	**2006 - 2007 Was Division Compliant?**
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Carroll County	YES	YES	YES
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Dickenson County	NO	NO	NO
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Greensville County/Emporia City	NO	NO	NO

Requirement	School Division	2008 - 2009 Was Division Compliant?	2007 - 2008 Was Division Compliant?	2006 - 2007 Was Division Compliant?
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Hopewell City	NO	NO	NO
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Martinsville City	NO	NO	NO
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Mecklenburg County	YES	YES	YES
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Northampton County	YES	YES	YES
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Northumberland County	YES	YES	YES
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Petersburg City	NO	NO	YES
The school board employs licensed instructional personnel qualified in the relevant subject areas.	Staunton City	YES	YES	YES
The school board employs two full-time equivalent positions per 1,000 students in grades K-12, one who provides technology support and one who serves as an instructional technology teacher.	Hanover County	NO	NO	NO
Guidance counselors in elementary schools, one hour per day per 100 students, one full-time at 500 students, one hour per day additional time per 100 students or major fraction thereof; guidance counselors in middle schools, one period per 80 students, one full-time at 400 students, one additional period per 80 students or major fraction thereof; guidance counselors in high schools, one period per 70 students, one full-time at 350 students, one additional period per 70 students or major fraction thereof.	New Kent County	YES	YES	YES

Requirement	School Division	2008 - 2009 Was Division Compliant?	2007 - 2008 Was Division Compliant?	2006 - 2007 Was Division Compliant?
Clerical personnel in elementary schools, part-time to 299 students, one full-time at 300 students; clerical personnel in middle schools, one full-time and one additional full-time for each 600 students beyond 200 students and one full-time for the library at 750 students; clerical personnel in high schools, one full-time and one additional full-time for each 600 students beyond 200 students and one full-time at 750 students.	New Kent County	YES	YES	YES
The school board employs two full-time equivalent positions per 1,000 students in grades K-12, one who provides technology support and one who serves as an instructional technology teacher.	Orange County	YES	YES	YES
Local school boards may employ additional positions that exceed these minimal staffing requirements. These additional positions may include, but are not limited to, those funded through the state's incentive and categorical programs as set forth in the appropriation act. The requirement for guidance counselors meets the requirements based on enrollment at the various school organization levels.	Norton City	YES	YES	YES
The school board, annually, on or before January 1 reports to the public the actual pupil teacher ratios (excluding resource personnel) in elementary school classrooms by school for the current year. The board also reports the pupil/teacher ratio including resource teachers in the same report. The report includes identification of the schools but ensures confidentiality of all teacher and pupil identities.	Highland County	NO	YES	YES

Requirement	School Division	2008 - 2009 Was Division Compliant?	2007 - 2008 Was Division Compliant?	2006 - 2007 Was Division Compliant?
The school board, annually, on or before January 1 reports to the public the actual pupil teacher ratios (excluding resource personnel) in elementary school classrooms by school for the current year. The board also reports the pupil/teacher ratio including resource teachers in the same report. The report includes identification of the schools but ensures confidentiality of all teacher and pupil identities.	Newport News City	YES	YES	YES
The school board, annually, on or before January 1, reports to the public the actual pupil teacher ratios (excluding resource personnel) in elementary school classrooms by school for the current year. The board also reports the pupil/teacher ratio including resource teachers in the same report. The report includes identification of the schools but ensures confidentiality of all teacher and pupil identities.	Waynesboro City	YES	YES	YES

§ 22.1-253.13:3 – Standard 3. Accreditation, other standards and evaluation.				
Requirement	**School Division**	**2008 - 2009 Was Division Compliant?**	**2007 - 2008 Was Division Compliant?**	**2006 - 2007 Was Division Compliant?**
All schools are fully accredited by the Board of Education.	Albemarle County	YES	YES	YES
All schools are fully accredited by the Board of Education.	Alexandria City	NO	NO	NO
All schools are fully accredited by the Board of Education.	Brunswick County	NO	NO	NO
All schools are fully accredited by the Board of Education.	Danville City	NO	NO	NO
All schools are fully accredited by the Board of Education.	Grayson County	NO	NO	NO
All schools are fully accredited by the Board of Education.	Hampton City	NO	NO	NO
All schools are fully accredited by the Board of Education.	Henrico County	NO	NO	NO

§ 22.1-253.13:3 – Standard 3. Accreditation, other standards and evaluation.				
All schools are fully accredited by the Board of Education.	Norfolk City	NO	NO	NO
All schools are fully accredited by the Board of Education.	Northampton County	NO	NO	NO
All schools are fully accredited by the Board of Education.	Petersburg City	NO	NO	NO
All schools are fully accredited by the Board of Education.	Prince William County	NO	NO	NO
All schools are fully accredited by the Board of Education.	Richmond City	NO	NO	NO
All schools are fully accredited by the Board of Education.	Roanoke City	NO	NO	NO
All schools are fully accredited by the Board of Education.	Sussex County	NO	NO	NO
All schools are fully accredited by the Board of Education.	Wythe County	NO	NO	NO

§ 22.1-253.13:4 – Standard 4.A.4. Student achievement and graduation requirements.				
Requirement	**School Division**	**2008 - 2009 Was Division Compliant?**	**2007 - 2008 Was Division Compliant?**	**2006 - 2007 Was Division Compliant?**
The school board notifies the parents of rising eleventh and twelfth grade students of (i) the number of standard and verified units of credit required for graduation pursuant to the standards of accreditation and (ii) the remaining number of such units of credit the individual student requires for graduation.	Prince William County	YES	YES	YES
The school board notifies the parents of students with disabilities who have an individualized education program and who fail to meet the requirements for a standard or advanced studies diploma of the student's right to a free and appropriate education to age 21, inclusive.	Prince William County	YES	YES	YES

§ 22.1-253.13:4 – Standard 4.A.4. Student achievement and graduation requirements.				
The school board awards certificates of program completion to students who complete a prescribed course of study as defined by the school board when they do not meet the requirements for a standard, advanced studies, modified standard, or general achievement diploma.	Prince William County	NO	NO	YES
The school board provides notification of the right to a free public education for students who have not reached 20 years of age on or before August 1 of the school year to the parent of students who fail to graduate or who have failed to achieve the number of verified units of credit required for graduation as provided in the standards of accreditation. If such student who does not graduate or achieve such verified units of credit is a student for whom English is a second language, the school board notifies the parent of the student's opportunity for a free public education to age 22.	Prince William County	YES	YES	YES

§ 22.1-253.13:6 – Standard 6. Planning and Public Involvement.				
Requirement	**School Division**	**2008 - 2009 Was Division Compliant?**	**2007 - 2008 Was Division Compliant?**	**2006 - 2007 Was Division Compliant?**
The school board revises, extends, and adopts a division-wide comprehensive, unified, long-range plan based on data collection, an analysis of the data, and how the data will be utilized to improve classroom instruction and student achievement. The plan is developed with staff and community involvement and includes, or is consistent with, all other division-wide plans required by state and federal laws and regulations. The plan is reviewed biennially and revised as necessary.	Amherst County	YES	YES	YES

§ 22.1-253.13:6 – Standard 6. Planning and Public Involvement.				
The school board revises, extends, and adopts a division-wide comprehensive, unified, long-range plan based on data collection, an analysis of the data, and how the data will be utilized to improve classroom instruction and student achievement. The plan is developed with staff and community involvement and includes, or is consistent with, all other division-wide plans required by state and federal laws and regulations. The plan is reviewed biennially and revised as necessary.	Clarke County	YES	YES	YES
The school division's comprehensive plan is developed with staff and community involvement.	Clarke County	YES	YES	YES
The school board posts such plan or revisions on the division's Internet website if practicable, and in any case, makes a hard copy of the plan or revisions available for public inspection and copying, and conducts at least one public hearing to solicit public comment on the division wide plan or revisions.	Clarke County	YES	YES	YES
The school board reports to the public by November 1 of each odd-numbered year the extent to which the objectives of the division-wide comprehensive plan have been met during the previous two school years.	Clarke County	YES	YES	YES
The school board revises, extends, and adopts a division-wide comprehensive, unified, long-range plan based on data collection, an analysis of the data, and how the data will be utilized to improve classroom instruction and student achievement. The plan is developed with staff and community involvement and includes, or is consistent with, all other division-wide plans required by state and federal laws and regulations. The plan is reviewed biennially and revised as necessary.	Highland County	YES	YES	YES

§ 22.1-253.13:6 – Standard 6. Planning and Public Involvement.				
The school board reports to the public by November 1 of each odd-numbered year the extent to which the objectives of the division-wide comprehensive plan have been met during the previous two school years.	Highland County	YES	YES	YES
The school board reports to the public by November 1 of each odd-numbered year the extent to which the objectives of the division-wide comprehensive plan have been met during the previous two school years.	Highland County	YES	YES	YES
Each school in the division prepares a comprehensive, unified, long-range plan that was considered by the board in developing the division-wide comprehensive plan.	Highland County	YES	YES	YES
The school board reports to the public by November 1 of each odd-numbered year the extent to which the objectives of the division-wide comprehensive plan have been met during the previous two school years.	Wise County	YES	YES	YES

§ 22.1-253.13:7 – Standard 7. School board policies.				
Requirement	**School Division**	**2008 - 2009 Was Division Compliant?**	**2007 - 2008 Was Division Compliant?**	**2006 - 2007 Was Division Compliant?**
The school board maintains and follows up-to-date policies that have been reviewed at least every five years and revised as necessary.	Mecklenburg County	YES	YES	YES

Appendix C:

Divisions with All Schools Fully Accredited, Schools Granted Conditional Accreditation, Schools Rated Accredited with Warning, Schools Rated Accreditation Denied 2010- 2011

In 119 of the commonwealth's 132 school divisions, all schools are fully accredited, compared with 117 last year. Divisions with all schools fully accredited (other than new schools that automatically receive conditional accreditation) are:

Accomack County	Frederick County	Orange County
Alleghany County	Fredericksburg	Patrick County
Amelia County	Galax	Pittsylvania County
Amherst County	Giles County	Poquoson
Appomattox County	Gloucester County	Powhatan County
Arlington County	Goochland County	Prince Edward County
Augusta County	Grayson County	Prince George County
Bath County	Greene County	Prince William County
Bedford County	Greensville County	Pulaski County
Bland County	Halifax County	Radford
Botetourt County	Hanover County	Rappahannock County
Bristol	Harrisonburg	Richmond
Brunswick County	Henry County	Richmond County
Buchanan County	Highland County	Roanoke County
Buckingham County	Hopewell	Rockbridge County
Buena Vista	Isle of Wight County	Rockingham County
Campbell County	King George County	Russell County
Caroline County	King William County	Salem
Carroll County	King and Queen County	Scott County
Charles City County	Lancaster County	Shenandoah County
Charlotte County	Lee County	Smyth County
Charlottesville	Lexington	Southampton County
Chesapeake	Loudoun County	Spotsylvania County
Chesterfield County	Louisa County	Stafford County
Clarke County	Lunenburg County	Staunton

Colonial Beach
Colonial Heights
Covington
Craig County
Culpeper County
Cumberland County
Dickenson County
Dinwiddie County
Essex County
Falls Church
Fauquier County
Floyd County
Fluvanna County
Franklin
Franklin County
Lynchburg
Madison County
Manassas
Manassas Park
Martinsville
Mathews County
Mecklenburg County
Middlesex County
Montgomery County
Nelson County
New Kent County
Newport News
Northumberland County
Norton
Nottoway County
Suffolk
Surry County
Tazewell County
Virginia Beach
Warren County
Washington County
Waynesboro
West Point
Westmoreland County
Williamsburg-James City County
Winchester
Wise County
Wythe County
York County

Schools Accredited with Warning

Nineteen schools failed to earn full accreditation compared with 25 last year. The number of schools accredited with warning fell to 15, compared with 17 last year and 54 two years ago.

Albemarle County Community Public Charter School in Albemarle County

Jefferson-Houston Elementary in Alexandria

JM Langston Focus School in Danville

Hybla Valley Elementary in Fairfax County

John B. Cary Elementary in Hampton

Highland Springs Elementary in Henrico County

Lindenwood Elementary in Norfolk

William H. Ruffner Middle in Norfolk

Kiptopeke Elementary in Northampton County

Page County Middle in Page County

A.P. Hill Elementary in Petersburg

Brighton Elementary in Portsmouth

Lincoln Terrace Elementary in Roanoke City

Westside Elementary in Roanoke City

William Fleming High in Roanoke City

Schools Denied Accreditation

Four schools were denied accreditation this year:

J.E.B. Stuart Elementary and Peabody Middle in Petersburg were denied accreditation for a fifth consecutive year.

Ellen W. Chambliss Elementary in Sussex County was denied accreditation for a second consecutive year.

Lafayette-Winona Middle in Norfolk was denied accreditation after not meeting state standards after one year of conditional accreditation.

Schools Conditionally Accredited

"Conditional Accreditation" is the accreditation rating given to a new school for one year in order to allow for tests to be given. This rating may also be given to a school that is being reconstituted.

Seventeen newly opened schools are automatically rated as conditionally accredited for 2010-2011.

Brookneal Elementary in Campbell County

Grayson Highlands School in Grayson County

George P. Phenix Elementary in Hampton

Hunter B. Andrews Elementary in Hampton

Glen Allen High in Henrico County

Holman Middle in Henrico County

Axton Elementary in Henry County

Buffalo Trail Elementary in Loudoun County

Harmony Middle in Loudoun County

Tuscarora High in Loudoun County

Woodgrove High in Loudoun County

Moss-Nuckols Elementary in Louisa County

Eastern Montgomery Elementary in Montgomery County

Patrick Henry School of Science and Arts in Richmond City

East Rockingham High in Rockingham County

East Rockingham High in Williamsburg-James City County

Lois Hornsby Middle in Williamsburg-James City County

Appendix D:
STANDARDS OF QUALITY: EFFECTIVE JULY 1, 2010

Code of Virginia

§ 22.1-253.13:1. Standard 1. Instructional programs supporting the Standards of Learning and other educational objectives.

A. The General Assembly and the Board of Education believe that the fundamental goal of the public schools of this Commonwealth must be to enable each student to develop the skills that are necessary for success in school, preparation for life, and reaching their full potential. The General Assembly and the Board of Education find that the quality of education is dependent upon the provision of (i) the appropriate working environment, benefits, and salaries necessary to ensure the availability of high-quality instructional personnel; (ii) the appropriate learning environment designed to promote student achievement; (iii) quality instruction that enables each student to become a productive and educated citizen of Virginia and the United States of America; and (iv) the adequate commitment of other resources. In keeping with this goal, the General Assembly shall provide for the support of public education as set forth in Article VIII, Section 1 of the Constitution of Virginia.

B. The Board of Education shall establish educational objectives known as the Standards of Learning, which shall form the core of Virginia's educational program, and other educational objectives, which together are designed to ensure the development of the skills that are necessary for success in school and for preparation for life in the years beyond. At a minimum, the Board shall establish Standards of Learning for English, mathematics, science, and history and social science. The Standards of Learning shall not be construed to be regulations as defined in § 2.2-4001.

The Board shall seek to ensure that the Standards of Learning are consistent with a high-quality foundation educational program. The Standards of Learning shall include, but not be limited to, the basic skills of communication (listening, speaking, reading, and writing); computation and critical reasoning including problem solving and decision making; proficiency in the use of computers and related technology; and the skills to manage personal finances and to make sound financial decisions.

The English Standards of Learning for reading in kindergarten through grade three shall be based on components of effective reading instruction, to include, at a minimum, phonemic awareness, phonics, fluency, vocabulary development, and text comprehension.

The Standards of Learning in all subject areas shall be subject to regular review and revision to maintain rigor and to reflect a balance between content knowledge and the application of knowledge in preparation for eventual employment and lifelong learning. The Board of Education shall establish a regular schedule, in a manner it deems appropriate, for the review, and revision as may be necessary, of the Standards of Learning in all subject areas. Such review of each subject area shall occur at least once every seven years. Nothing in this section shall be construed to prohibit the Board from conducting such review and revision on a more frequent basis.

To provide appropriate opportunity for input from the general public, teachers, and local school boards, the Board of Education shall conduct public hearings prior to establishing revised Standards of Learning. Thirty days prior to conducting such hearings, the Board shall give notice of the date, time, and place of the hearings to all local school boards and any other persons requesting to be notified of the hearings and publish notice of its intention to revise the Standards of Learning in the Virginia Register of Regulations. Interested parties shall be given reasonable opportunity to be heard and present information prior to final adoption of any revisions of the Standards of Learning.

In addition, the Department of Education shall make available and maintain a website, either separately or through an existing website utilized by the Department of Education, enabling public elementary, middle, and high school educators to submit recommendations for improvements relating to the Standards of Learning, when under review by the Board according to its established schedule, and related assessments required by the Standards of Quality pursuant to this chapter. Such website shall facilitate the submission of recommendations by educators.

School boards shall implement the Standards of Learning or objectives specifically designed for their school divisions that are equivalent to or exceed the Board's requirements. Students shall be expected to achieve the educational objectives established by the school division at appropriate age or grade levels. The curriculum adopted by the local school division shall be aligned to the Standards of Learning.

The Board of Education shall include in the Standards of Learning for history and social science the study of contributions to society of diverse people. For the purposes of this subsection, "diverse" shall include consideration of disability, ethnicity, race, and gender.

With such funds as are made available for this purpose, the Board shall regularly review and revise the competencies for career and technical education programs to require the full integration of English, mathematics, science, and history and social science Standards of Learning. Career and technical education programs shall be aligned with industry and professional standard certifications, where they exist.

C. Local school boards shall develop and implement a program of instruction for grades K through 12 that is aligned to the Standards of Learning and meets or exceeds the requirements of the Board of Education. The program of instruction shall emphasize reading, writing, speaking, mathematical concepts and computations, proficiency in the use of computers and related technology, and scientific concepts and processes; essential skills and concepts of citizenship, including knowledge of Virginia history and world and United States history, economics, government, foreign languages, international cultures, health and physical education, environmental issues and geography necessary for responsible participation in American society and in the international community; fine arts, which may include, but need not be limited to, music and art, and practical arts; knowledge and skills needed to qualify for further education, gainful employment, or training in a career or technical field; and development of the ability to apply such skills and knowledge in preparation for eventual employment and lifelong learning and to achieve economic self-sufficiency.

Local school boards shall also develop and implement programs of prevention, intervention, or remediation for students who are educationally at risk including, but not limited to, those who fail to achieve a passing score on any Standards of Learning assessment in grades three through eight or who fail an end-of-course test required for the award of a verified unit of credit. Such programs shall include components that are research-based.

Any student who achieves a passing score on one or more, but not all, of the Standards of Learning assessments for the relevant grade level in grades three through eight may be required to attend a remediation program.

Any student who fails to achieve a passing score on all of the Standards of Learning assessments for the relevant grade level in grades three through eight or who fails an end-of-course test required for the award of a verified unit of credit shall be required to attend a remediation program or to participate in another form of remediation. Division superintendents shall require such students to take special programs of prevention, intervention, or remediation, which may include attendance in public summer school programs, in accordance with clause (ii) of subsection A of § 22.1-254 and § 22.1-254.01.

Remediation programs shall include, when applicable, a procedure for early identification of students who are at risk of failing the Standards of Learning assessments in grades three through eight or who fail an end-of-course test required for the award of a verified unit of credit. Such programs may also include summer school for all elementary and middle school grades and for all high school academic courses, as defined by regulations promulgated by the Board of Education, or other forms of remediation. Summer school remediation programs or other forms of remediation shall be chosen by the division superintendent to be appropriate to the academic needs of the student. Students who are required to attend such summer school programs or to participate in another form of remediation shall not be charged tuition by the school division.

The requirement for remediation may, however, be satisfied by the student's attendance in a program of prevention, intervention or remediation that has been selected by his parent, in consultation with the division superintendent or his designee, and is either (i) conducted by an accredited private school or (ii) a special program that has been determined to be comparable to the required public school remediation program by the division superintendent. The costs of such private school remediation program or other special remediation program shall be borne by the student's parent.

The Board of Education shall establish standards for full funding of summer remedial programs that shall include, but not be limited to, the minimum number of instructional hours or the equivalent thereof required for full funding and an assessment system designed to evaluate program effectiveness. Based on the number of students attending and the Commonwealth's share of the per pupil instructional costs, state funds shall be provided for the full cost of summer and other remediation

programs as set forth in the appropriation act, provided such programs comply with such standards as shall be established by the Board, pursuant to § 22.1-199.2.

D. Local school boards shall also implement the following:

1. Programs in grades K through three that emphasize developmentally appropriate learning to enhance success.

2. Programs based on prevention, intervention, or remediation designed to increase the number of students who earn a high school diploma and to prevent students from dropping out of school. Such programs shall include components that are research-based.

3. Career and technical education programs incorporated into the K through 12 curricula that include:

a. Knowledge of careers and all types of employment opportunities including, but not limited to, apprenticeships, entrepreneurship and small business ownership, the military, and the teaching profession, and emphasize the advantages of completing school with marketable skills;

b. Career exploration opportunities in the middle school grades; and

c. Competency-based career and technical education programs that integrate academic outcomes, career guidance and job-seeking skills for all secondary students. Programs must be based upon labor market needs and student interest. Career guidance shall include counseling about available employment opportunities and placement services for students exiting school. Each school board shall develop and implement a plan to ensure compliance with the provisions of this subdivision. Such plan shall be developed with the input of area business and industry representatives and local community colleges and shall be submitted to the Superintendent of Public Instruction in accordance with the timelines established by federal law.

4. Educational objectives in middle and high school that emphasize economic education and financial literacy pursuant to § 22.1-200.03.

5. Early identification of students with disabilities and enrollment of such students in appropriate instructional programs consistent with state and federal law.

6. Early identification of gifted students and enrollment of such students in appropriately differentiated instructional programs.

7. Educational alternatives for students whose needs are not met in programs prescribed elsewhere in these standards. Such students shall be counted in average daily membership (ADM) in accordance with the regulations of the Board of Education.

8. Adult education programs for individuals functioning below the high school completion level. Such programs may be conducted by the school board as the primary agency or through a collaborative arrangement between the school board and other agencies.

9. A plan to make achievements for students who are educationally at risk a divisionwide priority that shall include procedures for measuring the progress of such students.

10. A plan to notify students and their parents of the availability of dual enrollment and advanced placement classes, the International Baccalaureate Program, and Academic Year Governor's School Programs, the qualifications for enrolling in such classes and programs, and the availability of financial assistance to low-income and needy students to take the advanced placement and International Baccalaureate examinations.

11. Identification of students with limited English proficiency and enrollment of such students in appropriate instructional programs.

12. Early identification, diagnosis, and assistance for students with reading and mathematics problems and provision of instructional strategies and reading and mathematics practices that benefit the development of reading and mathematics skills for all students.

13. Incorporation of art, music, and physical education as a part of the instructional program at the elementary school level.

14. A program of physical fitness available to all students with a goal of at least 150 minutes per week on average during the regular school year. Such program may include any combination of (i) physical education classes, (ii) extracurricular athletics, or (iii) other programs and physical activities deemed appropriate by the local school board. Each local school board shall incorporate into its local wellness policy a goal for the implementation of such program during the regular school year.

15. A program of student services for grades kindergarten through 12 that shall be designed to aid students in their educational, social, and career development.

16. The collection and analysis of data and the use of the results to evaluate and make decisions about the instructional program.

E. From such funds as may be appropriated or otherwise received for such purpose, there shall be established within the Department of Education a unit to (i) conduct evaluative studies; (ii) provide the resources and technical assistance to increase the capacity for school divisions to deliver quality instruction; and (iii) assist school divisions in implementing those programs and practices that will enhance pupil academic performance and improve family and community involvement in the public schools. Such unit shall identify and analyze effective instructional programs and practices and professional development initiatives; evaluate the success of programs encouraging parental and family involvement; assess changes in student outcomes prompted by family involvement; and collect and disseminate among school divisions information regarding effective instructional programs and practices, initiatives promoting family and community involvement, and potential funding and support sources. Such unit may also provide resources supporting professional development for administrators and teachers. In providing such information, resources, and other services to school divisions, the unit shall give priority to those divisions demonstrating a less than 70 percent passing rate on the Standards of Learning assessments.

§ 22.1-253.13:2. Standard 2. Instructional, administrative, and support personnel.

A. The Board shall establish requirements for the licensing of teachers, principals, superintendents, and other professional personnel.

B. School boards shall employ licensed instructional personnel qualified in the relevant subject areas.

C. Each school board shall assign licensed instructional personnel in a manner that produces divisionwide ratios of students in average daily membership to full-time equivalent teaching positions, excluding special education teachers, principals, assistant principals, counselors, and librarians, that are not greater than the following ratios: (i) 24 to one in kindergarten with no class being larger than 29 students; if the average daily membership in any kindergarten class exceeds 24 pupils, a full-time teacher's aide shall be assigned to the class; (ii) 24 to one in grades one, two, and three with no class being larger than 30 students; (iii) 25 to one in grades four through six with no class being larger than 35 students; and (iv) 24 to one in English classes in grades six through 12.

Within its regulations governing special education programs, the Board shall seek to set pupil/teacher ratios for pupils with mental retardation that do not exceed the pupil/teacher ratios for self-contained classes for pupils with specific learning disabilities.

Further, school boards shall assign instructional personnel in a manner that produces schoolwide ratios of students in average daily memberships to full-time equivalent teaching positions of 21 to one in middle schools and high schools. School divisions shall provide all middle and high school teachers with one planning period per day or the equivalent, unencumbered of any teaching or supervisory duties.

D. Each local school board shall employ with state and local basic, special education, gifted, and career and technical education funds a minimum number of licensed, full-time equivalent instructional personnel for each 1,000 students in average daily membership (ADM) as set forth in the appropriation act. Calculations of kindergarten positions shall be based on full-day kindergarten programs. Beginning with the March 31 report of average daily membership, those school divisions offering half-day kindergarten with pupil/teacher ratios that exceed 30 to one shall adjust their average daily membership for kindergarten to reflect 85 percent of the total kindergarten average daily memberships, as provided in the appropriation act.

E. In addition to the positions supported by basic aid and in support of regular school year programs of prevention, intervention, and remediation, state funding, pursuant to the appropriation act, shall be provided to fund certain full-time equivalent instructional positions for each 1,000 students in grades K through 12 who are identified as needing prevention, intervention, and remediation services. State funding for prevention, intervention, and remediation programs provided pursuant to this subsection and the appropriation act may be used to support programs for educationally at-risk students as identified by the local school boards.

F. In addition to the positions supported by basic aid and those in support of regular school year programs of prevention, intervention, and remediation, state funding, pursuant to the appropriation act, shall be provided to support 17 full-time equivalent instructional positions for each 1,000 students identified as having limited English proficiency.

G. In addition to the full-time equivalent positions required elsewhere in this section, each local school board shall employ the following reading specialists in elementary schools, one full-time in each elementary school at the discretion of the local school board.

H. Each local school board shall employ, at a minimum, the following full-time equivalent positions for any school that reports fall membership, according to the type of school and student enrollment:

1. Principals in elementary schools, one half-time to 299 students, one full-time at 300 students; principals in middle schools, one full-time, to be employed on a 12-month basis; principals in high schools, one full-time, to be employed on a 12-month basis;

2. Assistant principals in elementary schools, one half-time at 600 students, one full-time at 900 students; assistant principals in middle schools, one full-time for each 600 students; assistant principals in high schools, one full-time for each 600 students;

3. Librarians in elementary schools, one part-time to 299 students, one full-time at 300 students; librarians in middle schools, one-half time to 299 students, one full-time at 300 students, two full-time at 1,000 students; librarians in high schools, one half-time to 299 students, one full-time at 300 students, two full-time at 1,000 students;

4. Guidance counselors in elementary schools, one hour per day per 100 students, one full-time at 500 students, one hour per day additional time per 100 students or major fraction thereof; guidance counselors in middle schools, one period per 80 students, one full-time at 400 students, one additional period per 80 students or major fraction thereof; guidance counselors in high schools, one period per 70 students, one full-time at 350 students, one additional period per 70 students or major fraction thereof; and

5. Clerical personnel in elementary schools, part-time to 299 students, one full-time at 300 students; clerical personnel in middle schools, one full-time and one additional full-time for each 600 students beyond 200 students and one full-time for the library at 750 students; clerical personnel in high schools, one full-time and one additional full-time for each 600 students beyond 200 students and one full-time for the library at 750 students.

I. Local school boards shall employ five full-time equivalent positions per 1,000 students in grades kindergarten through five to serve as elementary resource teachers in art, music, and physical education.

J. Local school boards shall employ two full-time equivalent positions per 1,000 students in grades kindergarten through 12, one to provide technology support and one to serve as an instructional technology resource teacher.

K. Local school boards may employ additional positions that exceed these minimal staffing requirements. These additional positions may include, but are not limited to, those funded through the state's incentive and categorical programs as set forth in the appropriation act.

L. A combined school, such as kindergarten through 12, shall meet at all grade levels the staffing requirements for the highest grade level in that school; this requirement shall apply to all staff, except for guidance counselors, and shall be based on the school's total enrollment; guidance counselor staff requirements shall, however, be based on the enrollment at the various school organization levels, i.e., elementary, middle, or high school. The Board of Education may grant waivers from these staffing levels upon request from local school boards seeking to implement experimental or innovative programs that are not consistent with these staffing levels.

M. School boards shall, however, annually, on or before January 1, report to the public the actual pupil/teacher ratios in elementary school classrooms by school for the current school year. Such actual ratios shall include only the teachers who teach the grade and class on a full-time basis and shall exclude resource personnel. School boards shall report pupil/teacher ratios that include resource teachers in the same annual report. Any classes funded through the voluntary kindergarten through third grade class size reduction program shall be identified as such classes. Any classes having waivers to exceed the requirements of this subsection shall also be identified. Schools shall be identified; however, the data shall be compiled in a manner to ensure the confidentiality of all teacher and pupil identities.

N. Students enrolled in a public school on a less than full-time basis shall be counted in ADM in the relevant school division. Students who are either (i) enrolled in a nonpublic school or (ii) receiving home instruction pursuant to § 22.1-254.1, and who are enrolled in public school on a less than full-time basis in any mathematics, science, English, history, social science, career and technical education, fine arts, foreign language, or health education or physical education course shall be counted in the ADM in the relevant school division on a pro rata basis as provided in the appropriation act. Each such course enrollment by such students shall be counted as 0.25 in the ADM; however, no such nonpublic or home school student shall be counted as more than one-half a student for purposes of such pro rata calculation. Such calculation shall not include enrollments of such students in any other public school courses.

O. Each local school board shall provide those support services that are necessary for the efficient and cost-effective operation and maintenance of its public schools.

For the purposes of this title, unless the context otherwise requires, "support services" shall include services provided by the school board members; the superintendent; assistant superintendents; student services (including guidance counselors, social workers, and homebound, improvement, principal's office, and library-media positions); attendance and health positions; administrative, technical, and clerical positions; operation and maintenance positions; educational technology positions; school nurses; and pupil transportation positions.

Pursuant to the appropriation act, support services shall be funded from basic school aid on the basis of prevailing statewide costs.

P. Notwithstanding the provisions of this section, when determining the assignment of instructional and other licensed personnel in subsections C through J, a local school board shall not be required to include full-time students of approved virtual school programs.

§ 22.1-253.13:3. Standard 3. Accreditation, other standards and evaluation.

A. The Board of Education shall promulgate regulations establishing standards for accreditation pursuant to the Administrative Process Act (§ 2.2-4000 et seq.), which shall include, but not be limited to, student outcome measures, requirements and guidelines for instructional programs and for the integration of educational technology into such instructional programs, administrative and instructional staffing levels and positions, including staff positions for supporting educational technology, student services, auxiliary education programs such as library and media services, course and credit requirements for graduation from high school, community relations, and the philosophy, goals, and objectives of public education in Virginia.

The Board shall review annually the accreditation status of all schools in the Commonwealth.

Each local school board shall maintain schools that are fully accredited pursuant to the standards for accreditation as prescribed by the Board of Education. Each local school board shall review the accreditation status of all schools in the local school division annually in public session. Within the time specified by the Board of Education, each school board shall submit corrective action plans for any schools within its school division that have been designated as not meeting the standards as approved by the Board.

When the Board of Education has obtained evidence through the school academic review process that the failure of schools within a division to achieve full accreditation status is related to division level failure to implement the Standards of Quality, the Board may require a division level academic review. After the conduct of such review and within the time specified by the Board of Education, each school board shall submit for approval by the Board a corrective action plan, consistent with criteria established by the Board and setting forth specific actions and a schedule designed to ensure that schools within its school division achieve full accreditation status. Such corrective action plans shall be part of the relevant school division's comprehensive plan pursuant to § 22.1-253.13:6.

With such funds as are appropriated or otherwise received for this purpose, the Board shall adopt and implement an academic review process, to be conducted by the Department of Education, to assist schools that are accredited with warning. The Department shall forward a report of each academic review to the relevant local school board, and such school board shall report the results of such academic review and the required annual progress reports in public session. The local school board shall implement any actions identified through the academic review and utilize them for improvement planning.

B. The Superintendent of Public Instruction shall develop and the Board of Education shall approve criteria for determining and recognizing educational performance in the Commonwealth's public school divisions and schools. Such criteria, when approved, shall become an integral part of the accreditation process and shall include student outcome measurements. The Superintendent of Public Instruction shall annually identify to the Board those school divisions and schools that exceed or do not meet the approved criteria. Such identification shall include an analysis of the strengths and weaknesses of public education programs in the various school divisions in Virginia and recommendations to the General Assembly for further enhancing student learning uniformly across the Commonwealth. In recognizing educational performance in the school divisions, the Board shall include consideration of special school division accomplishments, such as numbers of dual enrollments and students in Advanced Placement and International Baccalaureate courses, and participation in academic year Governor's Schools.

The Superintendent of Public Instruction shall assist local school boards in the implementation of action plans for increasing educational performance in those school divisions and schools that are identified as not meeting the approved criteria. The Superintendent of Public Instruction shall monitor the implementation of and report to the Board of Education on the effectiveness of the corrective actions taken to improve the educational performance in such school divisions and schools.

C. With such funds as are available for this purpose, the Board of Education shall prescribe assessment methods to determine the level of achievement of the Standards of Learning objectives by all students. Such assessments shall evaluate knowledge, application of knowledge, critical thinking, and skills related to the Standards of Learning being assessed. The Board shall (i) in consultation with the chairpersons of the eight regional superintendents' study groups, establish a timetable for administering the Standards of Learning assessments to ensure genuine end-of-course and end-of-grade testing and (ii) with the assistance of independent testing experts, conduct a regular analysis and validation process for these assessments.

In prescribing such Standards of Learning assessments, the Board shall provide local school boards the option of administering tests for United States History to 1877, United States History: 1877 to the Present, and Civics and Economics. The last administration of the cumulative grade eight history test will be during the 2007-2008 academic school year. Beginning with the 2008-2009 academic year, all school divisions shall administer the United States History to 1877, United States History: 1877 to the Present, and Civics and Economics tests. The Board shall also provide the option of industry certification and state licensure examinations as a student-selected verified credit.

The Board of Education shall make publicly available such assessments in a timely manner and as soon as practicable following the administration of such tests, so long as the release of such assessments does not compromise test security or

deplete the bank of assessment questions necessary to construct subsequent tests, or limit the ability to test students on demand and provide immediate results in the web-based assessment system.

The Board shall include in the student outcome measures that are required by the Standards for Accreditation end-of-course or end-of-grade tests for various grade levels and classes, as determined by the Board, in accordance with the Standards of Learning. These Standards of Learning assessments shall include, but need not be limited to, end-of-course or end-of-grade tests for English, mathematics, science, and history and social science.

In addition, to assess the educational progress of students, the Board of Education shall (i) develop appropriate assessments, which may include criterion-referenced tests and alternative assessment instruments that may be used by classroom teachers; (ii) select appropriate industry certification and state licensure examinations and (iii) prescribe and provide measures, which may include nationally normed tests to be used to identify students who score in the bottom quartile at selected grade levels. An annual justification that includes evidence that the student meets the participation criteria defined by the Virginia Department of Education shall be provided for each student considered for the Virginia Grade Level Alternative. Each Individual Education Program team shall review such justification and make the final determination as to whether or not the Virginia Grade Level Alternative is appropriate for the student. The superintendent and the school board chairman shall certify to the Board of Education, as a part of certifying compliance with the Standards of Quality, that there is a justification in the Individual Education Program for every student who takes the Virginia Grade Level Alternative. Compliance with this requirement shall be monitored as a part of the special education monitoring process conducted by the Department of Education. The Board shall report to the Governor and General Assembly in its annual reports pursuant to § 22.1-18 any school division that is not in compliance with this requirement.

The Standard of Learning requirements, including all related assessments, shall be waived for any student awarded a scholarship under the Brown v. Board of Education Scholarship Program, pursuant to § 30-231.2, who is enrolled in a preparation program for the General Education Development (GED) certificate or in an adult basic education program to obtain the high school diploma.

The Board of Education may adopt special provisions related to the administration and use of any SOL test or tests in a content area as applied to accreditation ratings for any period during which the SOL content or assessments in that area are being revised and phased in. Prior to statewide administration of such tests, the Board of Education shall provide notice to local school boards regarding such special provisions.

D. The Board of Education may pursue all available civil remedies pursuant to § 22.1-19.1 or administrative action pursuant to § 22.1-292.1 for breaches in test security and unauthorized alteration of test materials or test results.

The Board may initiate or cause to be initiated a review or investigation of any alleged breach in security, unauthorized alteration, or improper administration of tests by local school board employees responsible for the distribution or administration of the tests.

Records and other information furnished to or prepared by the Board during the conduct of a review or investigation may be withheld pursuant to subdivision 12 of § 2.2-3705.3. However, this section shall not prohibit the disclosure of records to (i) a local school board or division superintendent for the purpose of permitting such board or superintendent to consider or to take personnel action with regard to an employee or (ii) any requester, after the conclusion of a review or investigation, in a form that (a) does not reveal the identity of any person making a complaint or supplying information to the Board on a confidential basis and (b) does not compromise the security of any test mandated by the Board. Any local school board or division superintendent receiving such records or other information shall, upon taking personnel action against a relevant employee, place copies of such records or information relating to the specific employee in such person's personnel file.

Notwithstanding any other provision of state law, no test or examination authorized by this section, including the Standards of Learning assessments, shall be released or required to be released as minimum competency tests, if, in the judgment of the Board, such release would breach the security of such test or examination or deplete the bank of questions necessary to construct future secure tests.

E. With such funds as may be appropriated, the Board of Education may provide, through an agreement with vendors having the technical capacity and expertise to provide computerized tests and assessments, and test construction, analysis, and security, for (i) web-based computerized tests and assessments for the evaluation of student progress during and after remediation and (ii) the development of a remediation item bank directly related to the Standards of Learning.

F. To assess the educational progress of students as individuals and as groups, each local school board shall require the use of Standards of Learning assessments and other relevant data, such as industry certification and state licensure examinations, to evaluate student progress and to determine educational performance. Each local school shall require the administration of appropriate assessments to all students for grade levels and courses identified by the Board of Education, which may include criterion-referenced tests, teacher-made tests and alternative assessment instruments and shall include the Standards of Learning Assessments and the National Assessment of Educational Progress state-by-state assessment. Each school board shall analyze and report annually, in compliance with any criteria that may be established by the Board of Education, the results from the Stanford Achievement Test Series, Ninth Edition (Stanford Nine) assessment, if administered, industry certification examinations, and the Standards of Learning Assessments to the public.

The Board of Education shall not require administration of the Stanford Achievement Test Series, Ninth Edition (Stanford Nine) assessment, except as may be selected to facilitate compliance with the requirements for home instruction pursuant to § 22.1-254.1.

The Board shall include requirements for the reporting of the Standards of Learning assessment scores and averages for each year as part of the Board's requirements relating to the School Performance Report Card. Such scores shall be disaggregated for each school by student subgroups on the Virginia assessment program as appropriate and shall be reported to the public within three months of their receipt. These reports (i) shall be posted on the portion of the Department of Education's website relating to the School Performance Report Card, in a format and in a manner that allows year-to-year comparisons, and (ii) may include the National Assessment of Educational Progress state-by-state assessment.

G. Each local school division superintendent shall regularly review the division's submission of data and reports required by state and federal law and regulations to ensure that all information is accurate and submitted in a timely fashion. The Superintendent of Public Instruction shall provide a list of the required reports and data to division superintendents annually. The status of compliance with this requirement shall be included in the Board of Education's annual report to the Governor and the General Assembly as required by § 22.1-18.

§ 22.1-253.13:4. Standard 4. Student achievement and graduation requirements.

A. Each local school board shall award diplomas to all secondary school students, including students who transfer from nonpublic schools or from home instruction, who earn the units of credit prescribed by the Board of Education, pass the prescribed tests, and meet such other requirements as may be prescribed by the local school board and approved by the Board of Education. Provisions shall be made to facilitate the transfer and appropriate grade placement of students from other public secondary schools, from nonpublic schools, or from home instruction as outlined in the standards for accreditation. Course credits earned for online courses taken in the Department of Education's Virtual Virginia program shall transfer to Virginia public schools in accordance with provisions of the standards for accreditation. Further, reasonable accommodation to meet the requirements for diplomas shall be provided for otherwise qualified students with disabilities as needed.

In addition, each local school board may devise, vis-a-vis the award of diplomas to secondary school students, a mechanism for calculating class rankings that takes into consideration whether the student has taken a required class more than one time and has had any prior earned grade for such required class expunged.

Each local school board shall notify the parents of rising eleventh and twelfth grade students of (i) the number and subject area requirements of standard and verified units of credit required for graduation pursuant to the standards for accreditation and (ii) the remaining number and subject area requirements of such units of credit the individual student requires for graduation.

B. Students identified as disabled who complete the requirements of their individualized education programs shall be awarded special diplomas by local school boards.

Each local school board shall notify the parent of such students with disabilities who have an individualized education program and who fail to meet the requirements for a standard or advanced studies diploma of the student's right to a free and appropriate education to age 21, inclusive, pursuant to Article 2 (§ 22.1-213 et seq.) of Chapter 13 of this title.

C. Students who have completed a prescribed course of study as defined by the local school board shall be awarded certificates of program completion by local school boards if they are not eligible to receive a standard, advanced studies, modified standard, special, or general achievement diploma.

Each local school board shall provide notification of the right to a free public education for students who have not reached 20 years of age on or before August 1 of the school year, pursuant to Chapter 1 (§ 22.1-1 et seq.) of this title, to the parent of students who fail to graduate or who have failed to achieve the number of verified units of credit required for graduation as provided in the standards for accreditation. If such student who does not graduate or achieve such verified units of credit is a student for whom English is a second language, the local school board shall notify the parent of the student's opportunity for a free public education in accordance with § 22.1-5.

D. In establishing course and credit requirements for a high school diploma, the Board shall:

1. Provide for the selection of integrated learning courses meeting the Standards of Learning and approved by the Board to satisfy graduation credit requirements, which shall include Standards of Learning testing, as necessary.

2. Establish the requirements for a standard, modified standard, or advanced studies high school diploma, which shall include one credit in fine or performing arts or career and technical education and one credit in United States and Virginia history. The requirements for a standard high school diploma shall, however, include at least two sequential electives chosen from a concentration of courses selected from a variety of options that may be planned to ensure the completion of a focused sequence of elective courses. Students may take such focused sequence of elective courses in consecutive years or any two years of high school. Such focused sequence of elective courses shall provide a foundation for further education or training or preparation for employment, shall be identified in the Academic and Career Plan as described in Board of Education regulations, and shall be developed by the school division, consistent with Board of Education guidelines and as approved by the local school board.

3. Establish the requirements for a technical diploma. This diploma shall meet or exceed the requirements of a standard diploma and will include a concentration in career and technical education, as established in Board regulations. A student who meets the requirement for the advanced studies diploma who also fulfills a concentration in career and technical education shall receive an advanced technical diploma, or if he chooses, he shall receive an advanced studies diploma. The Board may develop or designate assessments in career and technical education for the purposes of awarding verified credit pursuant to subdivision 6.

4. Provide, in the requirements for the verified units of credit stipulated for obtaining the standard or advanced studies diploma, that students completing elective classes into which the Standards of Learning for any required course have been integrated may take the relevant Standards of Learning test for the relevant required course and receive, upon achieving a satisfactory score on the specific Standards of Learning assessment, a verified unit of credit for such elective class that shall be deemed to satisfy the Board's requirement for verified credit for the required course.

5. Establish a procedure to facilitate the acceleration of students that allows qualified students, with the recommendation of the division superintendent, without completing the 140-hour class, to obtain credit for such class upon demonstration of mastery of the course content and objectives. Having received credit for the course, the student shall be permitted to sit for the relevant Standards of Learning assessment and, upon receiving a passing score, shall earn a verified credit. Nothing in this section shall preclude relevant school division personnel from enforcing compulsory attendance in public schools.

6. Provide for the award of verified units of credit for passing scores on industry certifications, state licensure examinations, and national occupational competency assessments approved by the Board of Education.

School boards shall report annually to the Board of Education the number of Board-approved industry certifications obtained, state licensure examinations passed, national occupational competency assessments passed, Virginia workplace readiness skills assessments passed, and the number of career and technical education completers who graduated. These numbers shall be reported as separate categories on the School Performance Report Card.

For the purposes of this subdivision, a "career and technical education completer" is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program.

In addition, the Board may:

a. For the purpose of awarding verified units of credit, approve the use of additional or substitute tests for the correlated Standards of Learning assessment, such as academic achievement tests, industry certifications or state licensure examinations; and

b. Permit students completing career and technical education programs designed to enable such students to pass such industry certification examinations or state licensure examinations to be awarded, upon obtaining satisfactory scores on such industry certification or licensure examinations, the appropriate verified units of credit for one or more career and technical education classes into which relevant Standards of Learning for various classes taught at the same level have been integrated. Such industry certification and state licensure examinations may cover relevant Standards of Learning for various required classes and may, at the discretion of the Board, address some Standards of Learning for several required classes.

7. Provide for the waiver of certain graduation requirements (i) upon the Board's initiative or (ii) at the request of a local school board. Such waivers shall be granted only for good cause and shall be considered on a case-by-case basis.

E. In the exercise of its authority to recognize exemplary academic performance by providing for diploma seals, the Board of Education shall develop criteria for recognizing exemplary performance in career and technical education programs by students who have completed the requirements for a standard or advanced studies diploma and shall award seals on the diplomas of students meeting such criteria.

In addition, the Board shall establish criteria for awarding a diploma seal for advanced mathematics and technology for the standard and advanced studies diplomas. The Board shall consider including criteria for (i) technology courses; (ii) technical writing, reading, and oral communication skills; (iii) technology-related training; and (iv) industry, professional, and trade association national certifications.

The Board shall also establish criteria for awarding a diploma seal for excellence in civics education and understanding of our state and federal constitutions and the democratic model of government for the standard and advanced studies diplomas. The Board shall consider including criteria for (i) successful completion of history, government, and civics courses, including courses that incorporate character education; (ii) voluntary participation in community service or extracurricular activities that includes the types of activities that shall qualify as community service and the number of hours required; and (iii) related requirements as it deems appropriate.

F. The Board shall establish, by regulation, requirements for the award of a general achievement diploma for those persons who have (i) achieved a passing score on the GED examination; (ii) successfully completed an education and training program designated by the Board of Education; and (iii) satisfied other requirements as may be established by the Board for the award of such diploma.

G. To ensure the uniform assessment of high school graduation rates, the Board shall collect, analyze, and report high school graduation and dropout data using a formula prescribed by the Board.

The Board may promulgate such regulations as may be necessary and appropriate for the collection, analysis, and reporting of such data.

§ 22.1-253.13:5. Standard 5. Quality of classroom instruction and educational leadership.

A. Each member of the Board of Education shall participate in high-quality professional development programs on personnel, curriculum and current issues in education as part of his service on the Board.

B. Consistent with the finding that leadership is essential for the advancement of public education in the Commonwealth, teacher, administrator, and superintendent evaluations shall be consistent with the performance objectives included in the Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers, Administrators, and Superintendents. Teacher evaluations shall include regular observation and evidence that instruction is aligned with the school's curriculum. Evaluations shall include identification of areas of individual strengths and weaknesses and recommendations for appropriate professional activities.

C. The Board of Education shall provide guidance on high-quality professional development for (i) teachers, principals, supervisors, division superintendents and other school staff; (ii) administrative and supervisory personnel in the evaluation and documentation of teacher and administrator performance based on student academic progress and the skills and knowledge of such instructional or administrative personnel; (iii) school board members on personnel, curriculum and current issues in education; and (iv) programs in Braille for teachers of the blind and visually impaired, in cooperation with the Virginia Department for the Blind and Vision Impaired.

The Board shall also provide technical assistance on high-quality professional development to local school boards designed to ensure that all instructional personnel are proficient in the use of educational technology consistent with its comprehensive plan for educational technology.

D. Each local school board shall require (i) its members to participate annually in high-quality professional development activities at the state, local, or national levels on governance, including, but not limited to, personnel policies and practices; curriculum and instruction; use of data in planning and decision making; and current issues in education as part of their service on the local board and (ii) the division superintendent to participate annually in high-quality professional development activities at the local, state or national levels.

E. Each local school board shall provide a program of high-quality professional development (i) in the use and documentation of performance standards and evaluation criteria based on student academic progress and skills for teachers and administrators to clarify roles and performance expectations and to facilitate the successful implementation of instructional programs that promote student achievement at the school and classroom levels; (ii) as part of the license renewal process, to assist teachers and principals in acquiring the skills needed to work with gifted students, students with disabilities, and students who have been identified as having limited English proficiency and to increase student achievement and expand the knowledge and skills students require to meet the standards for academic performance set by the Board of Education; (iii) in educational technology for all instructional personnel which is designed to facilitate integration of computer skills and related technology into the curricula, and (iv) for administrative personnel designed to increase proficiency in instructional leadership and management, including training in the evaluation and documentation of teacher and administrator performance based on student academic progress and the skills and knowledge of such instructional or administrative personnel.

In addition, each local school board shall also provide teachers and principals with high-quality professional development programs each year in (i) instructional content; (ii) the preparation of tests and other assessment measures; (iii) methods for assessing the progress of individual students, including Standards of Learning assessment materials or other criterion-referenced tests that match locally developed objectives; (iv) instruction and remediation techniques in English, mathematics, science, and history and social science; (v) interpreting test data for instructional purposes; (vi) technology applications to implement the Standards of Learning; and (vii) effective classroom management.

F. Schools and school divisions shall include as an integral component of their comprehensive plans required by § 22.1-253.13:6, high-quality professional development programs that support the recruitment, employment, and retention of qualified teachers and principals. Each school board shall require all instructional personnel to participate each year in these professional development programs.

G. Each local school board shall annually review its professional development program for quality, effectiveness, participation by instructional personnel, and relevancy to the instructional needs of teachers and the academic achievement needs of the students in the school division.

§ 22.1-253.13:6. Standard 6. Planning and public involvement.

A. The Board of Education shall adopt a statewide comprehensive, unified, long-range plan based on data collection, analysis, and evaluation. Such plan shall be developed with statewide participation. The Board shall review the plan biennially and adopt any necessary revisions. The Board shall post the plan on the Department of Education's website if practicable, and, in any case, shall make a hard copy of such plan available for public inspection and copying.

This plan shall include the objectives of public education in Virginia, including strategies for first improving student achievement, particularly the achievement of educationally at-risk students, then maintaining high levels of student achievement; an assessment of the extent to which these objectives are being achieved; a forecast of enrollment changes; and an assessment of the needs of public education in the Commonwealth. In the annual report required by § 22.1-18, the Board shall include an analysis of the extent to which these Standards of Quality have been achieved and the objectives of the statewide comprehensive plan have been met. The Board shall also develop, consistent with, or as a part of, its comprehensive plan, a detailed comprehensive, long-range plan to integrate educational technology into the Standards of Learning and the curricula of the public schools in Virginia, including career and technical education programs. The Board shall review and approve the comprehensive plan for educational technology and may require the revision of such plan as it deems necessary.

B. Each local school board shall adopt a divisionwide comprehensive, unified, long-range plan based on data collection, an analysis of the data, and how the data will be utilized to improve classroom instruction and student achievement. The plan shall be developed with staff and community involvement and shall include, or be consistent with, all other divisionwide plans required by state and federal laws and regulations. Each local school board shall review the plan biennially and adopt any necessary revisions. Prior to the adoption of any divisionwide comprehensive plan or revisions thereto, each local school board shall post such plan or revisions on the division's Internet website if practicable, and, in any case, shall make a hard copy of the plan or revisions available for public inspection and copying and shall conduct at least one public hearing to solicit public comment on the divisionwide plan or revisions.

The divisionwide comprehensive plan shall include, but shall not be limited to, (i) the objectives of the school division, including strategies for first improving student achievement, particularly the achievement of educationally at-risk students, then maintaining high levels of student achievement; (ii) an assessment of the extent to which these objectives are being achieved; (iii) a forecast of enrollment changes; (iv) a plan for projecting and managing enrollment changes including consideration of the consolidation of schools to provide for a more comprehensive and effective delivery of instructional services to students and economies in school operations; (v) an evaluation of the appropriateness of establishing regional programs and services in cooperation with neighboring school divisions; (vi) a plan for implementing such regional programs and services when appropriate; (vii) a technology plan designed to integrate educational technology into the instructional programs of the school division, including the school division's career and technical education programs, consistent with, or as a part of, the comprehensive technology plan for Virginia adopted by the Board of Education; (viii) an assessment of the needs of the school division and evidence of community participation, including parental participation, in the development of the plan; (ix) any corrective action plan required pursuant to § 22.1-253.13:3; and (x) a plan for parent and family involvement to include building successful school and parent partnerships that shall be developed with staff and community involvement, including participation by parents.

A report shall be presented by each school board to the public by November 1 of each odd-numbered year on the extent to which the objectives of the divisionwide comprehensive plan have been met during the previous two school years.

C. Each public school shall also prepare a comprehensive, unified, long-range plan, which the relevant school board shall consider in the development of its divisionwide comprehensive plan.

D. The Board of Education shall, in a timely manner, make available to local school boards information about where current Virginia school laws, Board regulations and revisions, and copies of relevant Opinions of the Attorney General of Virginia may be located online.

§ 22.1-253.13:7. Standard 7. School board policies.

A. Each local school board shall develop policies and procedures to address complaints of sexual abuse of a student by a teacher or other school board employee.

B. Each local school board shall maintain and follow up-to-date policies. All school board policies shall be reviewed at least every five years and revised as needed.

C. Each local school board shall ensure that policies are developed giving consideration to the views of teachers, parents, and other concerned citizens and addressing the following:

1. A system of two-way communication between employees and the local school board and its administrative staff whereby matters of concern can be discussed in an orderly and constructive manner;

2. The selection and evaluation of all instructional materials purchased by the school division, with clear procedures for handling challenged controversial materials;

3. The standards of student conduct and attendance and enforcement procedures designed to provide that public education be conducted in an atmosphere free of disruption and threat to persons or property and supportive of individual rights;

4. School-community communications and community involvement;

5. Guidelines to encourage parents to provide instructional assistance to their children in the home, which may include voluntary training for the parents of children in grades K through three;

6. Information about procedures for addressing concerns with the school division and recourse available to parents pursuant to § 22.1-87;

7. A cooperatively developed procedure for personnel evaluation appropriate to tasks performed by those being evaluated; and

8. Grievances, dismissals, etc., of teachers, and the implementation procedure prescribed by the General Assembly and the Board of Education, as provided in Article 3 (§ 22.1-306 et seq.) of Chapter 15 of this title, and the maintenance of copies of such procedures.

D. A current copy of the school division policies, required by this section, including the Student Conduct Policy, shall be posted on the division's website and shall be available to employees and to the public. School boards shall ensure that printed copies of such policies are available as needed to citizens who do not have online access.

E. An annual announcement shall be made in each division at the beginning of the school year and, for parents of students enrolling later in the academic year, at the time of enrollment, advising the public that the policies are available in such places.

§ 22.1-253.13:8. Compliance.

The Standards of Quality prescribed in this chapter shall be the only standards of quality required by Article VIII, Section 2 of the Constitution of Virginia.

Each local school board shall provide, as a minimum, the programs and services, as provided in the Standards of Quality prescribed above, with state and local funds as apportioned by the General Assembly in the appropriation act and to the extent funding is provided by the General Assembly.

Each local school board shall report its compliance with the Standards of Quality to the Board of Education annually. The report of compliance shall be submitted to the Board of Education by the chairman of the local school board and the division superintendent.

Noncompliance with the Standards of Quality shall be included in the Board of Education's annual report to the Governor and the General Assembly as required by § 22.1-18.

As required by § 22.1-18, the Board of Education shall submit to the Governor and the General Assembly a report on the condition and needs of public education in the Commonwealth and shall identify any school divisions and the specific schools therein that have failed to establish and maintain schools meeting the existing prescribed Standards of Quality.

The Board of Education shall have authority to seek school division compliance with the foregoing Standards of Quality. When the Board of Education determines that a school division has failed or refused, and continues to fail or refuse, to comply with any such Standard, the Board may petition the circuit court having jurisdiction in the school division to mandate or otherwise enforce compliance with such standard, including the development or implementation of any required corrective action plan that a local school board has failed or refused to develop or implement in a timely manner.

§ 22.1-253.13:9. Virginia Index of Performance incentive program.

A. Schools and local school divisions shall be recognized by the Board of Education in accordance with guidelines it shall establish for the Virginia Index of Performance (VIP) incentive program. The VIP incentive program shall be designed to recognize and reward fully accredited schools and school divisions that make significant progress toward achieving advanced proficiency levels in reading, mathematics, science, and history and social science, and on other indicators of school and student performance that are aligned with the Commonwealth's goals for public education. Such recognition may include:

1. Public announcements recognizing individual schools and divisions;

2. Tangible rewards;

3. Waivers of certain board regulations;

4. Exemptions from certain reporting requirements; or

5. Other commendations deemed appropriate to recognize high achievement.

In addition to Board recognition, local school boards shall adopt policies to recognize individual schools through public announcements or media releases as well as other appropriate recognition.

B. A school that maintains a passing rate on Virginia assessment program tests or additional tests approved by the Board of 95 percent or above in each of the four core academic areas for two consecutive years may, upon application to the Department of Education, receive a waiver from annual accreditation. A school receiving such a waiver shall be fully accredited for a three-year period. However, such school shall continue to annually submit documentation in compliance with the pre-accreditation eligibility requirements.

C. Schools may be eligible to receive the Governor's Award for Outstanding Achievement. This award will be given to schools rated fully accredited that significantly increase the achievement of students within student subgroups in accordance with guidelines prescribed by the Board of Education.

Board of Education Agenda Item

Item: N. **Date:** November 18, 2010

Topic: Final Review of a Recommendation of the Advisory Board on Teacher Education and Licensure (ABTEL) to Grant the Professional Education Program at Christopher Newport University Accreditation by the Board of Education Approved Process

Presenter: Mrs. Patty S. Pitts, Assistant Superintendent, Division of Teacher Education and Licensure

Telephone Number: (804) 371-2522 **E-Mail Address:** Patty.Pitts@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- ____ State or federal law or regulation
- _X_ Board of Education regulation
- ____ Other: _____

_X_ Action requested at this meeting ___ Action requested at future meeting: _____

Previous Review/Action:

_____ No previous board review/action

_X_ Previous review/action
date: October 28, 2010
action: The Board of Education accepted this item for first review.

Background Information:

Regulations Governing the Review and Approval of Education Programs in Virginia

The *Regulations Governing the Review and Approval of Education Programs in Virginia* (8VAC20-542-10 et seq.), effective September 21, 2007, set forth the options for the accreditation of "professional education programs" at Virginia institutions of higher education. The regulations define the "professional education program" as the Virginia institution, college, school, department, or other administrative body within a Virginia institution of higher education, or another Virginia entity for a defined educator preparation program that is primarily responsible for the preparation of teachers and other professional school personnel. The regulations, in part, stipulate the following:

8VAC20-542-30. Options for accreditation or a process approved by the Board of Education.

A. Each professional education program in Virginia shall obtain and maintain national accreditation from the National Council for the Accreditation of Teacher Education (NCATE), the Teacher Education Accreditation Council (TEAC), or a process approved by the Board of Education.

B. Each Virginia professional education program seeking accreditation through a process approved by the Board of Education shall be reviewed. A report of the review shall be submitted to the Board of Education in accordance with established timelines and procedures and shall include one of the following recommendations:

1. Accredited. The professional education program meets standards outlined in 8VAC20-542-60.

2. Accredited with stipulations. The professional education program has met the standards minimally, but significant weaknesses have been identified. Within a two-year period, the professional education program shall fully meet standards as set forth in 8VAC20-542-60.

3. Accreditation denied. The professional education program has not met standards as set forth in 8VAC20-542-60. The State Council of Higher Education for Virginia (SCHEV) shall be notified of this action by the Department of Education.

C. Professional education program accreditation that has been denied may be considered by the Board of Education after two years if a written request for review is submitted to the Department of Education.

D. Professional education programs in Virginia seeking accreditation through NCATE, TEAC, or an accreditation process approved by the Board of Education shall adhere to the following requirements:

1. Accredited professional education programs shall be aligned with standards in 8VAC20-542-60; and

2. Accredited professional education programs shall be aligned with competencies in 8VAC20-542-70 through 8VAC20-542-600.

E. Professional education programs in Virginia seeking accreditation through a process approved by the Board of Education shall follow procedures and timelines as prescribed by the Department of Education....

Section 20-542-60 of the *Regulations Governing Review and Approval of Education Programs in Virginia* provides the standards and indicators for the Board of Education approved accreditation process. The four standards are as follows:

<u>Standard 1: Program Design</u>. The professional education program shall develop and maintain high quality programs that are collaboratively designed and based on identified needs of the preK-12 community.

<u>Standard 2: Candidate Performance on Competencies for Endorsement Areas</u>. Candidates in education programs shall demonstrate the knowledge, skills, and dispositions to meet professional, state, and institutional standards to ensure student success.

Standard 3: Faculty in Professional Education Programs. Faculty in the professional education program represent well-qualified education scholars who are actively engaged in teaching and learning.

Standard 4: Governance and Capacity. The professional education program demonstrates the governance and capacity to prepare candidates to meet professional, state, and institutional standards.

Board of Education Definitions for At-Risk of Becoming Low-Performing and Low-Performing Institutions of Higher Education

In October 1998, the U.S. Congress enacted Title II provisions to the Higher Education Act (HEA) authorizing federal grant programs to improve the recruitment, retention, preparation, and support of new teachers. Title II also included accountability measures in the form of reporting requirements for institutions and states on teacher preparation and licensing. Section 207 of Title II reporting requirements mandates that the U.S. Secretary of Education collect data on standards for teacher certification and licensure, as well as data on the performance of teacher preparation programs. The law requires the Secretary to use these data in submitting its annual report on the quality of teacher preparation to Congress. In addition, states were required to develop criteria, procedures, and processes from which institutions at-risk of becoming low-performing and low-performing institutions could be identified.

On November 20, 2008, the Board of Education approved revisions to the definitions for at-risk of becoming low-performing and low-performing institutions of higher education to reflect the designations used by each of the accrediting bodies.

At-Risk of Becoming a Low-Performing Institution of Higher Education: At-risk of becoming a low-performing institution of higher education means an institution with teacher preparation programs that receives one of the following designations from the accreditation review:

NCATE:	*Accreditation After First Visit*: Provisional Accreditation
	Continuing Accreditation: Accreditation with Probation
TEAC:	Provisional Accreditation
BOE:	Accredited with Stipulations

Low-Performing Institution of Higher Education: Low-performing institution of higher education means an institution with teacher preparation programs that has not made improvements by the end of the period designated by the accreditation body or not later than two years after receiving the designation of at-risk of becoming a low-performing institution of higher education.

When an institution receives one of the following designations, the low-performing designation will be removed:

NCATE:	Accreditation, Continuing Accreditation, or Accredited with Conditions
TEAC:	Accreditation
BOE:	Accredited

Federal reporting is required by states in October of each year. Institutions meeting these definitions at the end of the reporting year will be designated at-risk of becoming low-performing institutions and low-performing institutions of higher education.

Summary of Major Elements:

Christopher Newport University (CNU) requested accreditation through the Board of Education approved process. The following education programs offered at CNU have been approved by the Board:

- Computer Science (Graduate)
- Elementary Education PreK-6 (Graduate)
- English (Graduate)
- Foreign Language PreK-12 – French (Graduate)
- Foreign Language PreK-12 – Spanish (Graduate)
- History and Social Sciences (Graduate)
- Mathematics (Graduate)
- Music Education – Instrumental PreK-12 (Graduate)
- Music Education – Vocal/Choral PreK-12 (Graduate)
- Science – Biology (Graduate)
- Science – Physics (Graduate)
- Theatre Arts PreK-12 (Graduate)
- Visual Arts PreK-12 (Graduate)

An on-site visit to review the professional education program at CNU was conducted on March 28-31, 2010. Attached are the *Professional Education Program Review Team Report of Findings* and Christopher Newport University's *Institutional Response to the Professional Education Program Review Team Report of Findings***.**

The overall recommendation of the on-site review team was that the professional education program be "accredited." The team made this recommendation based on the information available in the 2009 *Institutional Report*, and the evidence available during the March 28-31, 2010, site visit.

Below are the recommendations for each of the four standards:

STANDARD	**TEAM'S RECOMMENDATIONS**
Standard 1: Program Design	Met
Standard 2: Candidate Performance on Competencies for Endorsement Areas	Met
Standard 3: Faculty in Professional Education Programs	Met
Standard 4: Governance and Capacity	Met

The following weaknesses were noted in Standards 1, 3, and 4. Specific issues for each standard are identified in the *Report of Findings* (see Appendices) and must be addressed by the next accreditation review date.

…II. Findings for Each Standard

A. Standard 1: Program Design. *The professional education program shall develop and maintain high quality programs that are collaboratively designed and based on identified needs of the preK-12 community….*

…Weaknesses:

1. *There is a need to re-examine the field experience observation hours and connect these experiences more explicitly to all applicable coursework. While the field experiences and expectations are clearly delineated in some courses (SOC 314L and PSYC 521), the department should strive for the same consistency in all linked courses and in the required volunteer field experience requirement.*

2. *Assessment and evaluation of teaching competencies of the candidates enrolled in the multiple field experiences, including practica, should be clearly documented and tracked. For example, there is a field experience log that requires candidates to record hours. This component could be used to track experiences across grade levels.*

3. *Candidates and cooperating teachers expressed the need for expanding the variety of experiences that candidates have during field experiences both for the elementary, middle, and high school candidates.*

4. *Candidates enrolled in the student teaching experience expressed that it would be helpful to have more lead time to prepare for the intern placement. They suggested that the handbook be provided prior to the winter break to provide a longer period of time for candidates to review the material. Furthermore, candidates expressed that they would benefit from additional time with the cooperating teachers prior to the placement to review the policies and procedures outlined in the Student Teaching Handbook.*

5. *The CNU Teacher Preparation Council should review the practice of candidates taking additional courses during the student teaching experience....*

…C. Standard 3: Faculty in Professional Education Programs. *Faculty in the professional education program represent well-qualified education scholars who are actively engaged in teaching and learning….*

Weakness:

Insufficient evidence was provided for the faculty demonstrating understanding of cultural differences and exceptionalities and their instructional implications. The Teacher Preparation Program (TPP) should ensure that the requirement for addressing multicultural experiences and students with exceptionalities be thoroughly addressed in course syllabi.

*…**D. Standard 4: Governance and Capacity.** The professional education program demonstrates the governance and capacity to prepare candidates to meet professional, state, and institutional standards….*

Weaknesses:

1. *The Steering Committee of the Teacher Preparation Council should review the policy of denying Virginia Board of Education-approved substitute SAT or ACT scores for Praxis I assessment scores for graduates from other institutions applying to the MAT program.*

2. *Consideration should be given to allocating resources to hire additional personnel for the purpose of supporting the field experiences for TPP candidates….*

On October 4, 2010, the Advisory Board on Teacher Education and Licensure voted to recommend that the Board of Education accept the recommendation of the on-site accreditation review team that the professional education program at Christopher Newport University be "accredited," indicating that the program has met the standards as set forth in 8VAC-20-542-60 of the *Regulations Governing the Review and Approval of Education Programs in Virginia*.

Superintendent's Recommendation:

The Superintendent of Public Instruction recommends that the Board of Education approve the Advisory Board on Teacher Education and Licensure's recommendation to accept the recommendation of the on-site accreditation review team that the professional education program at Christopher Newport University be "accredited," indicating that the program has met the standards as set forth in 8VAC-20-542-60 of the *Regulations Governing the Review and Approval of Education Programs in Virginia*.

Impact on Resources:

Expenses, with the exception of those for the state representative, incurred during on-site review of teacher education programs are funded by the host institution.

Timetable for Further Review/Action:

An on-site review of professional education programs will be conducted on a seven-year cycle. Specific weaknesses for each standard must be addressed by the next accreditation review date.

Appendices

- **Letter from President Paul S. Trible, Jr., Christopher Newport University, in response to the Professional Education Program Review Team Report of Findings**
- **Professional Education Program Review Team Report of Findings**

CHRISTOPHER NEWPORT
UNIVERSITY

RECEIVED
JUL 16 2010

June 16, 2010

Dr. JoAnne Y. Carver
Virginia Department of Education
Division of Teacher Education
P.O. Box 2120
Richmond, VA 23218-2120

Dear Dr. Carver:

We have received the *Professional Education Program Review Team Report of Findings* from the on-site accreditation review of Christopher Newport University's Teacher Preparation Program conducted on March 28-31.

We concur with the findings of the report and are pleased by the fact that we have met all four program standards. Please rest assured that we will address each of the eight weaknesses that were identified.

We would like to extend our appreciation for the professionalism and courtesy exhibited by each of the visiting team members. They were extremely diligent and helpful in their thoughtful review of the program. Also, we would like to thank you for your ongoing support of our efforts in making this an excellent teacher preparation program.

Sincerely,

Paul Trible

Paul Trible

Office of the President
1 University Place Newport News, Virginia 23606-2998
Voice (757) 594-7001 TDD (757) 594-7938 Fax (757) 594-7864

VIRGINIA DEPARTMENT OF EDUCATION
P. O. BOX 2120
RICHMOND, VIRGINIA 23218-2120

FORM FOR PROFESSIONAL EDUCATION PROGRAM REVIEW TEAM REPORT OF FINDINGS

VISIT TO:

Christopher Newport University
Newport News, Virginia
March 28-31, 2010

***Members of the Review Team*:**

Dr. H. Jurgen Combs
Dr. Jewell Askins
Dr. Glenn Koonce
Dr. Peggy Schimmoeller
Dr. Diane J. Simon

State Representative:

Dr. JoAnne Y. Carver

SUMMARY FOR PROFESSIONAL EDUCATION PROGRAM

Institution: Christopher Newport University

Standards **Overall Recommendation:** Accredited		**Team Findings**:
A. Standard 1	**Program Design.** The professional education program shall develop and maintain high quality programs that are collaboratively designed and based on identified needs of the PreK-12 community.	_X_ Met ___ Met Minimally with Significant Weaknesses ___ Not Met
B. Standard 2	**Candidate Performance on Competencies for Endorsement Areas.** Candidates in education programs shall demonstrate the knowledge, skills, and dispositions to meet professional, state, and institutional standards to ensure student success. Candidates shall demonstrate the competencies specified in 8VAC20-542-70 through 8VAC20-542-600.	_X_ Met ___ Met Minimally with Significant Weaknesses ___ Not Met
C. Standard 3	**Faculty in Professional Education Programs.** Faculty in the professional education program represent well-qualified education scholars who are actively engaged in teaching and learning.	_X_ Met ___ Met Minimally with Significant Weaknesses ___ Not Met
D. Standard 4	**Governance and Capacity.** The professional education program demonstrates the governance and capacity to prepare candidates to meet professional, state, and institutional standards.	_X_ Met ___ Met Minimally with Significant Weaknesses ___ Not Met

I. Introduction

Description of the Institution

Christopher Newport University (CNU), located in Newport News, Virginia, was established by the Virginia General Assembly in 1960 as a two-year branch of The College of William and Mary. CNU became a four-year institution in 1971 and in 1977 became independent of The College of William and Mary. CNU has a 236 person faculty in the College of Arts and Humanities, the College of Natural and Behavioral Sciences, and the College of Social Sciences. Both graduate and undergraduate programs are offered.

During the 2009-2010 academic year, CNU had an enrollment of approximately 4,800 students. Minority enrollment averaged between 11 percent and 17 percent according to self-reporting information. The total minority enrollment in the Master of Arts in Teaching (MAT)/Teacher Preparation Program (TPP) averaged between 5.8 percent in the 2009 cohort and 10.8 percent in the 2010 cohort.

The mission of Christopher Newport University is "to provide educational and cultural opportunities that benefit CNU students, the residents of the Commonwealth of Virginia and the nation." "The mission of the CNU MAT [Master of Arts in Teaching] Teacher Preparation Program (TPP) is to prepare highly qualified teachers who are licensed to teach in the Commonwealth of Virginia and in reciprocal states throughout the United States."

For several years, CNU served largely a nontraditional, part-time, and commuting student body. By the mid 1980s, the population of nontraditional students began to decline. Since there was an almost 30 percent decline in the number of commuting students attending CNU, the acceptance rate rose dramatically. In 1996, CNU was transformed into a university of choice, offering the "small college experience" to Virginia students. Scholastic Aptitude Test (SAT) scores of incoming freshmen rose dramatically and CNU undertook an ambitious building program.

In 2002, the existing education program was terminated to help address financial difficulties created by severe budget cuts. The Newport News Public Schools (NNPS) "… passed a resolution requesting that CNU continue offering teacher licensure programs to serve a high local need for teachers." A CNU faculty committee and Newport News school officials created a plan for a licensure program to be implemented at the graduate level. The proposed program would allow candidates to complete the teacher licensure requirements in a five-year program, concluding with licensure and a master's degree.

The Virginia Department of Education (VDOE) approved the program as a two-year pilot on August 6, 2003. This pilot program was reviewed by a team from the VDOE in the spring 2005, and the program was fully approved. The partnership between CNU and Newport News Public Schools makes the program unique in the Commonwealth.

The program is administered through a Teacher Preparation Council (TPC) composed of 12 faculty members teaching in 11 departments, two representatives from the Newport News Public School division, three representatives of CNU student education organizations, and an administrative

professional who oversees the field experiences. A Steering Committee from the TPC meets monthly. A member of the English Department serves as the program director.
CNU offers a five-year bachelor's to master's degree program for candidates seeking teacher licensure. Candidates interested in education can earn a master's degree in one of the graduate disciplines by completing one additional year of study beyond the traditional four years of the undergraduate program. All education programs are offered on the main campus in Newport News; select laboratory courses are offered on various NNPS campuses. Currently, no courses are offered via distance education.

The education program at CNU is an interdisciplinary model in which the courses are taught in the various academic departments. Several faculty members in these departments have teaching credentials and experience in schools. Public school personnel teach several courses.

The five-year programs consist of 120 credit hours taken at the undergraduate level which includes a major in a liberal arts or science program. Thirty-six graduate hours are required; six of these hours may be taken during the senior year as part of the 120 hours of the undergraduate degree. The graduate degree is a Master of Arts in Teaching. The various tracks lead to eligibility for licensure in the following teaching endorsement areas:

- Computer Science
- Elementary Education PreK-6
- English
- Foreign Languages PreK-12: French and Spanish
- History and Social Sciences
- Mathematics
- Music Education: Instrumental PreK-12 and Vocal/Choral PreK-12
- Science: Biology and Physics
- Theater Arts PreK-12 (to be discontinued in 2014)
- Visual Arts PreK-12

Note: At the time of the on-site visit, English as a Second Language PreK-12 and Science-Chemistry had been recommended for approval to the Virginia Board of Education by the Advisory Board on Teacher Education and Licensure. The Board approved both endorsement areas on April 22, 2010.

The number of candidates enrolled in the MAT program has increased from 19 in 2005 to 91 in 2010. The quality of the candidates in the education program has improved based on test scores and assessments from cooperating teachers. In 2008 the average Virginia Communication and Literacy Assessment (VCLA) score was 69.6 points above the state average while by 2010 the average score was 85.1 points above the state average. The average entry level Grade Point Average (GPA) has risen to between 3.2 and 3.4. The average Praxis I assessment score has increased from 540 in 2006 to 543 in 2010. The average Virginia Reading Assessment (VRA) score has increased from 262 in academic year 2006 to 271 in academic year 2010, well above the state passing score. During the past three years, the average VCLA score has increased from 539 to 555, again well above the state passing score.

The following revisions have been made in the Teacher Preparation Program since its inception.

- Reviews of course evaluations and cooperating teacher assessments indicated that the technology course was not meeting the needs of the candidates. Beginning in 2009, the course was revised. Preliminary indications are that candidates now are more adept at using technology.

- An assessment of the student teaching experience suggested a change in the start date of the experience would be beneficial. Candidates begin their experience in early September and spend four to five days with the cooperating teacher. This time is spent preparing for the school year and working with the K-12 students for four to five days. The candidates return to their CNU classes, engage in fall practica related to coursework, complete their 120 credit-hour requirement, and begin their student teaching experience during the following January term.

- Effective in 2010, NNPS will pay the University supervisor of student teachers a stipend to mentor their former student teachers who have been hired by NNPS.

- Praxis II passing scores are required before entering student teaching.

In January 2010, the Education Program at CNU moved into the new McMurran Hall. This move further reinforced the interdisciplinary nature of the TPP and provided the needed space to the department. Offices for adjunct faculty are readily available in the new building.

II. Findings for Each Standard

8VAC20-542-60. Standards for Board of Education approved accreditation process.

A. Standard 1: Program Design. The professional education program shall develop and maintain high quality programs that are collaboratively designed and based on identified needs of the preK-12 community.

The *2009-2010 Policy Manual for the Teacher Preparation Program* includes a mission statement, conceptual framework and goals. The document is based on scientifically-based research including Darling-Hammond (1998), Shulman (1987), and the *Education Commission of the State on Teacher Preparation: What Does the Research Say* (2003). The Teacher Preparation Program mission may be accessed online under the "Teacher" link listed under academic majors. The Teacher Preparation Program mission, "*the development of new, liberally educated teachers who are well prepared to teach in both content and pedagogy*" is aligned with the University's mission, "*committed to providing a liberal arts education that stimulates intellectual inquiry*." The mission statement also is included in the 2009-2010 *Graduate Catalog* under Master of Arts in Teaching (page 41). The conceptual framework centers on the concept of "Theory into Effective Practice." Evidence of this framework was found in the *Policy Manual* for the TPP, and in the MAT *Student Handbook: a Guidebook to Becoming a Teacher through the Teacher Preparation Program at Christopher Newport University*.

The conceptual framework incorporates the program philosophy, purposes, and goals. During a student poster presentation held prior to the on-site review team dinner, Sunday, March 28, 2010,

nine MAT candidates presented work samples to members of the team that demonstrated how the conceptual framework is integrated into the student teaching experience. Candidates shared how they incorporated a variety of instructional models during their teaching (i.e., interactive notebooks, use of mathematics models, project-based learning, integration of writing and reading in content areas, etc.). Candidates were able to explain the pedagogy supporting the project as well as demonstrate knowledge of the content they were teaching. The poster session allowed candidates to demonstrate that they are able to analyze and evaluate student learning. In addition, best teaching practices were evident in the student work samples presented. Candidates were able to discuss their projects and reflect on the teaching, learning, and assessment process.

Specific knowledge and skills that are necessary for competence at the entry level for beginning teachers are incorporated throughout the CNU program design. The following knowledge and skills are listed in the *Teacher Preparation Policy Manual*:

- Theoretical Grounding
- Variety of Instructional Strategies
- Teaching Reading and Writing
- Educational Technology
- Classroom Management
- Evaluation of Learning
- Content Knowledge
- Planning and Preparation of Instruction
- Ability to Create a Nurturing Environment
- Delivery and Assessment of Instruction
- Professional Behaviors

The CNU program emphasis on *theory-demonstration-practice-feedback* is based on these acquisition principles (i.e., presentation of theory, demonstration of the new strategy, initial practices in a non-classroom setting, and prompt feedback about effort). The Elementary Education PreK-6 course plan includes the reading course: PSYC 521: Reading Acquisition and Development. In addition to this course, ENGL 521: Teaching Composition and ENGL 532: Language Varieties in American Schools, listed in the Virginia Department of Education 2007 Program Status Matrix for Elementary Education PreK-6, address reading and language acquisition competencies.

The CNU Teacher Preparation Program design reflects current research, best educational practice and the *Virginia Standards of Learning (SOL)*. This design also was reflected in the *Teacher Preparation Policy Manual* provided by CNU.

The Teacher Preparation Council ensures that relevant courses are aligned with the *Virginia Standards of Learning*. The following are the goals of the Teacher Preparation Program:

1. Planning and preparing for instruction based on knowledge of content, resources and students;
2. Creating a safe, orderly and nurturing environment that creates high expectations for all while recognizing and respecting diversity;
3. Delivering and assessing instruction to meet state-mandated and district objectives, adjusting methods as needed to engage and teach every child; and

4. Demonstrating professional responsibilities of dress, collegial behaviors, engagement with families, administrative duties, and self-directed growth.

An overview of course requirements was provided to the on-site review team through a PowerPoint presentation as well as in the *Graduate Handbook*. A summary of courses was provided and is outlined in the following chart:

Program Design

PREREQUISITE COURSEWORK: Sociology 314: *Education, Culture, and Society* Psychology 307: *Human Growth and Behavior* Psychology 312: *Educational Psychology*	
CONTENT-AREA COURSEWORK:	**PEDAGOGICAL COURSEWORK:**
▪12 hours of graduate coursework in content area (varies by discipline) ▪Undergraduate licensure courses	▪Teaching 516: *Curriculum and Instruction* ▪Teaching 543: *Classroom Management* ▪Psychology 535: *The Exceptional Learner* ▪Psychology 521*:* *Reading Acquisition* ▪English 521*:* *Teaching Composition* ▪English 522*:* *Reading and Writing in the Content Areas* ▪Comp. Sci. 580: *Technology for Teachers* ▪Sociology 501: *Multiculturalism, Diversity, and Education* ▪Teaching 510: *Internship*

The goals of the Teacher Preparation Program have been clearly articulated in the *Teacher Preparation Handbook*, the *Student Teaching Handbook*, and in the *Graduate Catalog*.

The CNU faculty members integrate best practice research and literature as a basis for program design and as resources for use in courses. For example, Marzano's *Classroom Instruction that Works* and Bartell's *Action Research: Cases of Effective Teaching* are referenced in the *Policy Manual* as supporting literature. Furthermore, a variety of research-based texts are used in the MAT courses including the following samples:

- *Making the Journey: Being and Becoming a Teacher of English Language Arts* (Christenbury)
- *Reading, Writing, and Learning in ESL: A Resource Book for K-12 Teachers* (Peregoy)
- *The Pleasure of Children's Literature* (Perry)
- *Teaching Writing in Middle and Secondary Schools: Theory, Research, and Practice (*Soven)
- *Teaching Geography* (Gersmehl)
- *Psychology Applied to Teaching* (Snowman)

Additional evidence of the infusion of the *SOL* into the MAT curriculum was demonstrated during a class visit to Lauren Fowler's Choral Literature course (MUSC 520). Dr. Fowler asked candidates to identify which *SOL* would apply to the contemporary choral trends presentation they were discussing

as a class. In addition, she prompted the candidates to think of applicable objectives and activities they might incorporate into a middle school or high school chorus lesson plan.

Program descriptions were found in the *2009-2010 Graduate Catalog*. Course plans for Biology, Computer Science, Elementary, English, Foreign Language: French, Foreign Language: Spanish, History and Social Sciences, Mathematics, Music-Vocal/Choral, Music-Instrumental, Physics, Theater Arts, and Visual Arts are included in the catalog. The course catalog outlines a 36 credit-hour graduate program that incorporates, content, pedagogy, and field-based experience in surrounding public schools. The majority of the field experiences are facilitated with the Newport News Public Schools.

Knowledge-based

The CNU Teacher Preparation Program's framework in licensure categories is knowledge-based as evidenced by the content area requirements for each teaching endorsement area as well as the theoretical base that is infused into many of the courses. Course plans are provided for each of the endorsement areas, and the education (endorsement programs) have been approved by the Virginia Board of Education.

Evidenced-based

The CNU Teacher Preparation Program framework was adopted through the Teacher Preparation Council, the Teacher Preparation Program, and through administrators from Newport News Public Schools. Council members include 18 voting members and three ex officio members. There are representatives from Arts and Sciences in each area that applies to the Teacher Preparation Program (i.e., biology, history and social sciences, music), school principals, CNU student representatives from each of the on-campus pre-professional groups (Student Virginia Education Association [SVEA], Student Virginia Association of Teachers of English [SVATE], and MENC: The National Association for Music Education) as well as ex officio representatives from the CNU administration. Minutes of the 2005 through 2010 TPC were made available to the on-site review team and included discussions and decisions made by council members regarding the program framework. In addition to the council meeting minutes, the Teacher Preparation Program Plan for growth and the MAT program goals were included in the notebook. Goals included annual ongoing goals, specific goals and long-term goals through 2010. Documented evidences detailed the process used by the TPC to review program goals. Moreover, supporting evidence outlined how evaluation results were used by the council members as they reviewed and recommended programmatic changes. For example, based on PRAXIS II assessment results, new MAT courses for social studies teachers were developed (i.e., GEOG 570: World Geography for Teachers, GOVT 570: Teaching and Learning Social Studies, and ECON 595: Economics for Teachers).

The CNU teacher preparation framework has been collaboratively developed with various stakeholders as evidenced by the recorded minutes from the TPC meeting. The minutes reflect active and consistent participation by council members. Over the past three years an average of 14 out of 18 Teacher Preparation Council members regularly attended meetings. The TPC Steering Committee is a subcommittee of the Teacher Preparation Council. This subcommittee meets more frequently, approximately monthly, with an average six of the seven Steering Committee members present at each meeting. The Steering Committee is charged with recommending changes for consideration and

approval by the full TPC. In addition, the Steering Committee reviews all program application files and is responsible for making recommendations on students who are offered acceptance into the MAT program.

The TPC, the voting body, is charged with the creation and maintenance of all programs within the Teacher Preparation Program and meets regularly to review and discuss program issues. The professional education program has developed an integrated five-year, leading to licensure program, leading to the MAT. Transfer students who satisfy CNU program entry requirements may enroll in a one-year MAT program.

Further evidence for this area is found in the CNU *Approved Program Notebook* and in the *Teacher Preparation Council Minutes Notebook*. As evidenced in the *Approved Program Notebook* all education (endorsement) programs offered have been approved by the Virginia Board of Education.

The Teacher Preparation Program faculty members evaluate the program, the courses, and the field activities required of teacher candidates. Field experience end-of-course evaluations are given for all field placements. Summary data of these evaluations are provided in the 2005-2009 *Field Experience Evaluation Notebook*. Descriptive data (percentages for each scale) as well as qualitative data in the form of student responses to open-ended questions are provided for all lab courses. A five point Likert scale is used on the course evaluations. Ten statements are provided and candidates are asked to rate their response on each question: 1-strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5-strongly agree. On the 2009 survey, a majority of the candidates enrolled in the pre-graduate studies professional course strongly agreed or agreed with each of the nine statements on the evaluation form (i.e., the purpose and focus of the field experience were clearly understood by me). However, more candidates reported that they did not agree that they were able to participate in tutoring or assisting in the way that they had expected (50 percent reported this below the "strongly agree" response option). Several candidates did report that during the SOC 314 course they experienced some difficulty in being assigned to classes to complete their field experience. This was the case with the PSYC 312 field placement course as well.

The 2009 student teacher cohort reported overall satisfaction with the fall field placement process; however, they did express the need for more advance notice regarding their tutoring assignments. The 2010 student teacher cohort reported during a focus group session at the high school that they would have benefited from more time to prepare for the intern teaching requirements; however, candidates in the elementary cohort did not express any concern with the process. Both groups reported that the number of clock hours, especially the 120 clock hours required, were not as beneficial as they had expected. The candidates indicated they were given a lot of "busy work" to complete during the early practicum experiences. The elementary candidates did feel that this experience was closer to the role expected of a parent volunteer rather than an experience that allowed them to become acquainted with the roles and responsibilities of a classroom teacher.

Evidence for this area was found in the *MAT Evaluation Notebook* and in the *Teacher Preparation Annual Reports*. Candidates are assessed in all courses.

The following list of knowledge, skills, and dispositions matches the competency with the method of assessment used to verify candidates' attainment in these areas:

- Theoretical Grounding: Virginia Reading Assessment,
- Variety of Instructional Strategies: Student Teaching Midterm and Final Evaluations,
- Teaching Reading and Writing: Virginia Reading Assessment,
- Educational Technology: Grade in Technology Capstone Course,
- Classroom Management: Student Teaching Midterm and Final Evaluations,
- Evaluation of Learning: Student Teaching Midterm and Final Evaluations,
- Content Knowledge: Virginia Communication and Literacy Assessment, Praxis I and II, Course Grades,
- Planning and Preparation of Instruction: Student Teaching Midterm and Final Evaluations,
- Ability to Create a Nurturing Environment: Student Teaching Midterm and Final Evaluations,
- Delivery and Assessment of Instruction: Student Teaching Midterm and Final Evaluations, and
- Professional Behaviors: Student Teaching Midterm and Final Evaluations.

These areas were gleaned from the program framework as noted above and are evaluated using various methods including standardized testing, course grades, observational records and field experience rating scales.

During the student teaching semester classroom teachers, university supervisors, and school administrators provide ratings of candidate effectiveness in knowledge, skills, and dispositions. These ratings are summarized in a report prepared by the Director of Field Experiences and are reviewed by the Teacher Preparation Council at its May or August meeting each year to determine any areas of weakness that may need to be addressed. CNU teacher candidates are expected to have a strong background in the major as indicated by the 3.0 GPA required for content area courses.

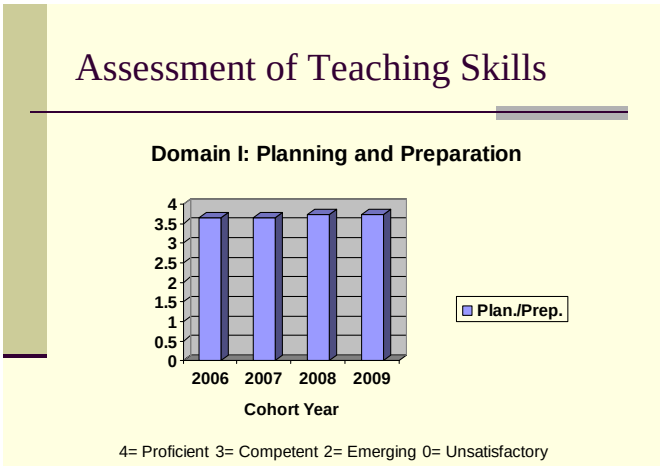
Interviews were conducted at local elementary, middle, and secondary level schools in which the CNU candidates were placed for student teaching. Student teachers and their cooperating teachers at the secondary level commented that the classroom management strategies taught during the coursework was heavily geared toward the elementary level student. They expressed the need to include different strategies that are appropriate for the differing developmental levels of the candidates. Furthermore, six cooperating teachers stated that the student teachers would sometimes need to miss events or meetings at school because they needed to return to campus for class. This was perceived as interfering with the learning process during field experience work.

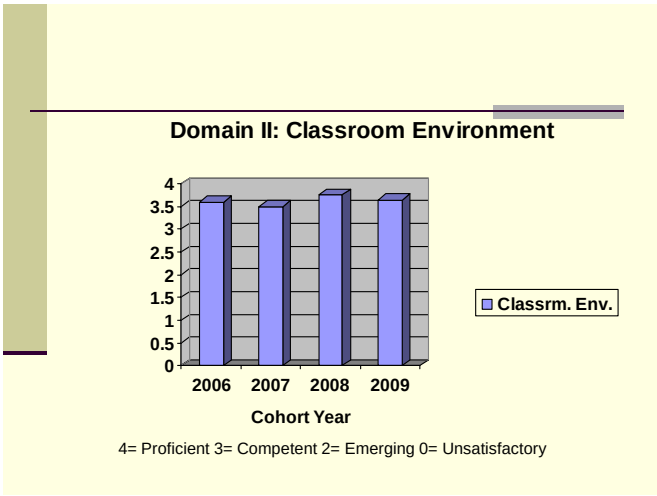
Evidence for this competency was found in the *Annual Reports*, the *Teacher Preparation Council Notebook*, and the *MAT Evaluation Notebook*. Additional evidence that CNU candidates have achieved the knowledge, skills, and dispositions identified in the program design framework was provided in the analysis of the *Employer Surveys of First-Year Teachers* (found in the *Program Evaluation/Annual Report Notebook*). The employer survey for the 2008 cohort asked employers how well they thought the CNU Teacher Preparation Program prepared their newly hired CNU trained teachers for their first year of teaching. Thirty-nine responses to this question were received with 82.1 percent responding "very much" and 17. 9 percent responding "somewhat." Each employer was asked to rate the CNU first-year teachers on 13 competency areas ranging from knowledge of subject

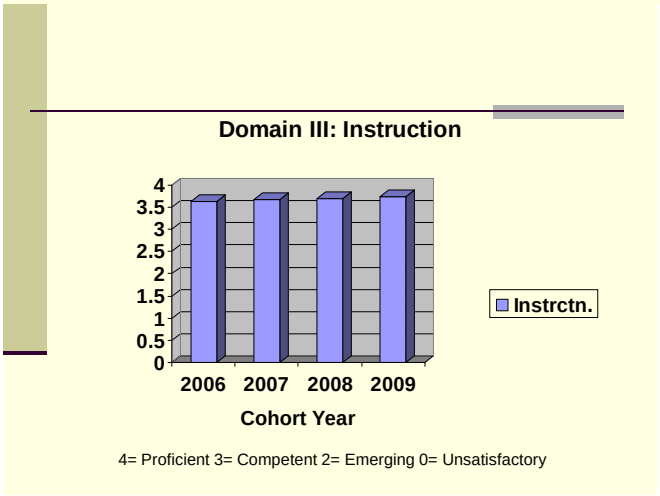
matter to professional dress and behaviors. In all 13 areas employers rated the first-year teachers as excellent or good more than 80 percent of the time. On a 4 point scale no area received a rating below an average rating of 3.23. The following areas were rated "fair" 15 percent (or higher, never exceeding 20.5 percent) of the time:

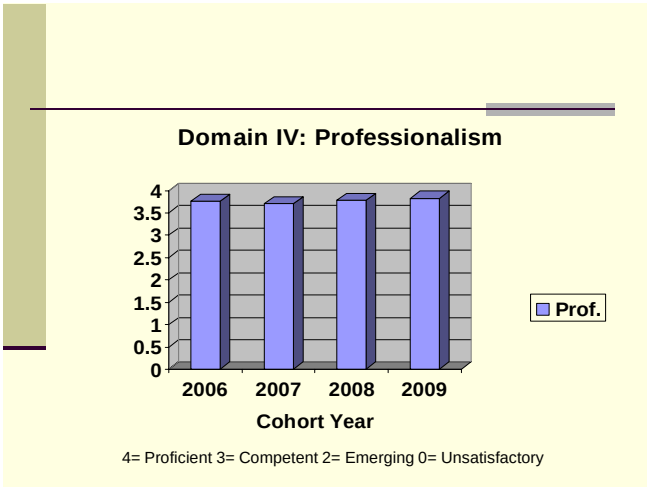
- Knowledge of subject area,
- Ability to effectively teach students who perform at different levels,
- Ability to effectively teach students with exceptionalities and disabilities, and
- Ability to deal with discipline problems.

Teaching skills are assessed during the teaching internship by cooperating teachers and university supervisors. The four areas of program skill assessment include Planning and Preparation, Classroom Environment, Instruction and Assessment, and Professionalism. The program expectation is that candidates will perform competently in each area by the end of the student teaching experience. Assessment of Teaching Skills: Planning and Preparation and Classroom Environment was summarized in the PowerPoint presentation and indicated that candidates demonstrated proficiency in this domain. In both domains candidates demonstrated at or above competent level over four years.









Professionalism reflected the strongest area for the reported cohorts followed by Instruction, Planning and Classroom Environment respectively. During the 2009 academic session a comparison between the evaluation of student teachers by supervisors and by cooperating teachers was conducted (found in Program Evaluation under Quick Summary Evaluation tab). The average for each of the domains was above 3.5 and the cooperating teachers and the college supervisors scored the candidates in a similar manner. The 2009 cohort included 69 candidates.

In addition to the data provided during the PowerPoint presentation, a five-year summary report on the Teacher Preparation Program was provided in the *Program Evaluation and Annual Reports* notebook. Five cohorts were examined, and it was reported that from 2006 through 2010 the entering GPA average was above 3.0. Detailed evidence that addresses the Praxis I, Praxis II, Virginia Communication and Literacy Assessment and the Virginia Reading Assessment scores was provided; this evidence verifies that candidates meet and often exceed the Virginia required passing scores.

The 2009-2010 *Field Experience Handbook* provides evidence that the professional education program has multiple well-planned, sequenced, and integrated field experiences that include observations, practica, student teaching, internships, and other opportunities to interact with students and the school environment.

The CNU program has designed a three-tiered field experience format. The work that the CNU candidates complete in school classrooms prior to student teaching is referred to pre-teaching field experiences and includes the first two tiers of the design. Tier I includes entry level observation and skills practice. Tier II includes independent work in Newport News Public Schools as well as the opportunity for candidates to log up to 70 clock hours in schools outside of the partnership schools. On page one of the *Field Experience Handbook*, it is reported that candidates will log over 200 clock hours of observation, assisting, and teaching time prior to student teaching and more than 625 to 647 total clock hours once candidates have successfully completed the student teaching experience.

According to a PowerPoint presentation and detailed in the *Graduate Handbook* and online at the CNU Web site, the following experiences are expected when students work in schools:

1. Entry level observation and tutorial activities, tied to prerequisite classes,
2. Skills practice, tied to program courses,
3. Paid or volunteer work in partner schools, and
4. Internship (student teaching) at the conclusion of the program.

Three field experiences are built into the program prior to the professional year in the MAT program. Candidates begin field work on Tier I with a required 30 clock hours of classroom observation to include a follow-up reflection. Other field experiences are linked to program classes, involving observation, tutoring, and assistance. Tier II requires 120 clock hours, at least 50 of which must be completed with Newport News Public Schools. The final field experience at Tier III is the student teaching internship and requires 13 weeks/455+ hours of full-time student teaching (2009 *Field Experience Handbook*).

Interviews with the associate director for field experiences, the college supervisors, and the supervisors of the undergraduate field placements revealed that the design of the field experiences is based on best teaching practices and on K-12 student needs. A description of field experiences was

found in the *Field Experience Handbook* and on the Teacher Preparation Program Web site, (http://teacherprep.cnu.edu/fieldexp.html).

As discussed with many current student teachers, the phasing in of the student teaching experience was not as smooth as the candidates would have desired. Candidates interviewed stated that they felt rushed regarding thoroughly understanding all of the roles and responsibilities that they would experience during the student teaching experience.

Faculty assigned to the CNU Teacher Preparation Program reported that the field experiences required of candidates have a developmental progression and are tied directly to the skills that candidates are expected to acquire. The first field experience in the program is offered through SOC 314L: Education, Culture, and Society. Three faculty members who teach this laboratory session met with on-site review team members to share course goals and to discuss the benefits of this experience for CNU teacher candidates. The laboratory class meets weekly and is a co-requisite to SOC 314 and is a laboratory experience that invites candidates to examine the politics, structure, and culture of education. Candidates learn about varying aspects of education, including the interplay between education and micro-level interactions of peer groups, teachers, family, and community. The course also allows candidates to examine the influence that macro-level structures have on education, such as the role government, social policy, and inequality plays on school systems. The faculty who teach this course reported that the candidates demonstrate growth in understanding the roles and responsibilities of today's teachers in diverse classrooms. This initial field experience exposes candidates to a variety of individuals who work in schools including principals, guidance counselors, custodians, food service staff, teachers, and coaches at different levels.

The CNU teacher candidates have field experiences including a 13-week student teaching experience that provide hours beyond the required 300 clock hours. The student teaching placement includes at least 150 clock hours of directed teaching activities at the appropriate level of endorsement. Evidence of this competency is detailed in the 2009-2010 *Student Teaching Handbook* and outlines the student teaching internship requirements and expectations. "In order to satisfy Virginia approved program requirements candidates must complete an appropriate student teaching program for a total of 15 weeks (13 involving direct instruction). Candidates seeking an elementary education endorsement (PreK6) will engage in 13 weeks of full-time student teaching in one grade level. Candidates seeking a middle/secondary endorsement (grades 6-12) will complete 13 weeks of full-time student teaching in one endorsement area, which may include several different courses within that area. Candidates seeking PreK-12 endorsements (art, music, theater, foreign language) will engage in six weeks of full-time instruction at either the elementary or middle/secondary level, as well as seven weeks at whichever level was not previously done or will engage in different grade levels in a proportional amount or time as determined by the Director of Student Teaching."

Field experiences and student teaching are designed to allow candidates to develop and apply knowledge and skill gained in the content and pedagogy courses. Evidence for this competency is located in the *Field Experience Handbook* revised September 2009.

Supervisors of the Tier I field experience that is linked to the SOC 314 course were interviewed. They shared that this first experience in schools allowed candidates who were considering a career in education exposure to a variety of roles and responsibilities as a member of an educational team including, but not limited to, teachers, principals, counselors, parents, resource officers, therapists,

and school board members. This laboratory course allows candidates to observe teachers and students at various grade levels.

When candidates move to Tier II of the field experiences, they begin to develop and to apply the new knowledge and skills gained in their campus courses. ENGL 511 facilitates the skills and techniques used by Teachers of English for Speakers of Other Languages (TESOL); ENGL 522: Reading and Writing in Content Areas requires a 12-hour field experience that is focused on the skills and strategies for teaching reading and writing through the content areas, with emphasis on reading comprehension, vocabulary development, study skills and expository writing. MATH 570 includes a 12-hour practicum that focuses on the methodology necessary for teaching school mathematics. Candidates are exposed to creative instructional approaches that are meaningful and mathematically correct and which instill enthusiasm and satisfaction in learning and using mathematics. This course has separate sections for elementary and middle and secondary levels. PSYC 521 requires an 18-hour field experience in which candidates apply current reading research to instructional practice. TCHG 516 requires 12 hours of field experience where special attention is paid to effective instructional planning as well as microteaching simulations. TCHG 510 is the full-time 13-week clinical teaching experience in the public schools.

Evaluation of candidate performance in field experiences is documented using multiple assessments. Teacher candidates are evaluated in all practicum placements as part of the reflective process. During the student teaching placement, cooperating teachers complete the *Student Teacher Administrative Evaluation* that asks for feedback on the following: evidence of planning and preparation, observations regarding the classroom environment, evidence of instructional effectiveness, and management of professional responsibilities. In addition to this form the *Student Teacher Observation Form* (adapted from the New Teacher Center at the University of California, Santa Cruz, and the University of Virginia Curry School of Education) is used more frequently as a formative assessment. Summative evaluations of student teachers include the *Student Teacher Midterm Evaluation* and the *Student Teacher Final Evaluation*. When a student is meeting with challenges in the classroom a *Plan of Action for Improvement* form is used to design a plan of action "to assist the student teacher in achieving a satisfactory assessment and to improve his/her potential to be a successful classroom teacher."

Other forms of assessment include the *Student Teaching Reflection Journals*, the self-evaluation which includes a videotape analysis and the teacher work sample. The teacher work sample is a newer addition to the CNU Teacher Preparation Program which requires candidates to develop an instructional strategy, implement and assess the effectiveness of the strategy, and report the findings to peers and faculty.

The integrated approach established by CNU in its teacher education program establishes a basis of collaboration, and there are indications from interviews and materials reviewed that instructors in a variety of courses observe candidates in their field placements. The partnership … "will benefit both … by promoting fulfillment of their missions and will both promote the public good and enhance opportunities for individuals seeking teaching careers by establishing a program to promote excellence in teaching and to ensure professional competence while maximizing the utilization of community resources."

University faculty and cooperating teachers jointly assess the progress of student teachers at the mid-point and end of the internship. University supervisors visit student teaching interns an average of once a week. Cooperating teachers report that their input is valued and that the clinical faculty work closely with student teaching interns to provide the guidance needed. In some cases, classes are taught on public school sites.

The nature of CNU's education program makes the partnership with the Newport News Public Schools a crucial component. The agreement, originally signed on May 21, 2003, provides the rationale for the cooperative agreement for laboratory and/or field research and student teaching placements between CNU and NNPS. The agreement outlines the responsibilities of each party in terms of placement, eligibility for placement, evaluation of candidates, and insurance liability, among other items. NNPS agreed to provide one or two school employees to serve on the Teacher Preparation Council, which is responsible for the overall direction of the program, including evaluation of courses. The agreement specifically states that "The School Division shall participate with personnel designated by the University to establish the design, content and evaluation criteria for field experiences."

Review of Team Findings Based on Evidence Presented:

Recommendation for Standard 1: (Met/Met Minimally with Significant Weaknesses/Not Met)

MET

Weaknesses:

1. There is a need to re-examine the field experience observation hours and connect these experiences more explicitly to all applicable coursework. While the field experiences and expectations are clearly delineated in some courses (SOC 314L and PSYC 521), the department should strive for the same consistency in all linked courses and in the required volunteer field experience requirement.

2. Assessment and evaluation of teaching competencies of the candidates enrolled in the multiple field experiences, including practica, should be clearly documented and tracked. For example, there is a field experience log that requires candidates to record hours. This component could be used to track experiences across grade levels.

3. Candidates and cooperating teachers expressed the need for expanding the variety of experiences that candidates have during field experiences both for the elementary, middle, and high school candidates.

4. Candidates enrolled in the student teaching experience expressed that it would be helpful to have more lead time to prepare for the intern placement. They suggested that the handbook be provided prior to the winter break to provide a longer period of time for candidates to review the material. Furthermore, candidates expressed that they would benefit from additional time with the cooperating teachers prior to the placement to review the policies and procedures outlined in the *Student Teaching Handbook*.

5. The CNU Teacher Preparation Council should review the practice of candidates taking additional courses during the student teaching experience.

B. Standard 2: Candidate Performance on Competencies for Endorsement Areas. Candidates in education programs shall demonstrate the knowledge, skills, and dispositions to meet professional, state, and institutional standards to ensure student success. Candidates shall demonstrate the competencies specified in 8VAC 20-542-70 through 8VAC 20-542-600.

General Education Courses, Experiences and Competencies

The CNU professional education program ensures that candidates have completed general education courses and experiences in the liberal arts and sciences and demonstrate the broad theoretical and practical knowledge necessary for teaching and preK-12 student achievement. All candidates in the Teacher Preparation Program must complete an academic degree in the arts and sciences, or an equivalent. CNU candidates in the Elementary Education PreK-6 program choose from appropriate liberal arts or science disciplines; secondary and PreK-12 candidates major in the content they wish to

teach. A transcript review to confirm completion of a bachelor's degree or the equivalent is required of candidates who transfer to CNU from other universities.

CNU candidates enrolled in the five-year program and candidates entering the program after completion of their degree, complete general education requirements through the University's Liberal Learning Core requirements. CNU seeks to build candidates into well-informed, productive members of society through a comprehensive liberal arts education. The vision of CNU espouses the principles of liberal learning and dedication to the ideals of scholarship, leadership, and service (http://vision2010.cnu.edu).

In 2006, CNU revised its general education core which currently requires the following for completion of the Liberal Learning Core: a first year seminar; two courses in communication literacy; one course demonstrating second language literacy; two courses in mathematics literacy; one course in western traditions; one course in global and multicultural perspectives; two courses (plus a lab) in investigating the natural world; one course in identity, institutions, and society; one course in creative expressions; and one course in informal and formal reasoning. The Liberal Learning Core is supplemented by a required Liberal Learning Emphasis, six additional hours in one of the core areas. It is clear that there is a focus on liberal learning in the general education core at CNU.

The University's Office of Assessment supports annual assessment of the Liberal Learning Core by reviewing department goals and related measures and outcome data by department and programs across the University. Documentation of the general education requirements and course descriptions are found in the *Undergraduate Catalog.* The general education curriculum is described in detail in *The Liberal Learning Cores: A Proposal of the Task Force on Curriculum and Academic Life* located in the *MAT Documents Notebook*.

In addition to the general education core, all Teacher Preparation Program candidates must hold a degree in the liberal arts and sciences (or the equivalent) as evidenced by advising sheets.
A transcript audit is completed for candidates who hold degrees from other universities. The admissions committee ensures that candidates have the requisite general education background and a major course of studies to ground them in the content knowledge they plan to teach. Candidates are advised of course deficiencies as outlined on curriculum sheets and are expected to fulfill these deficiencies to advance in the program. Advising sheets are available in the *Teacher Preparation Program Policy Manual* and on the University Web site (http://teacher prep.cnu.edu).

Candidates demonstrate that they have a full command of the English language, use Standard English grammar, have rich speaking and writing vocabularies, are knowledgeable of exemplary authors and literary works, and communicate effectively in educational, occupational, and personal areas. Candidates must successfully complete English 123: Written Communication Literacy and ULLC 223: Written Communication Literacy as part of their Liberal Learning Core requirement. Both courses require extensive reading and writing. Candidates also must complete Communications 201: Public Speaking or Theater 230: Practical Acting as prerequisites for admission to the five-year Teacher Preparation Program. These courses include instruction in basic grammar and vocabulary and introduce candidates to exemplary authors. These courses also provide the knowledge and skills to prepare candidates to meet required scores on Praxis I reading and writing assessments as part of their qualification for admission to the Teacher Preparation Program.

All elementary candidates take a linguistics course (ENGL 310 or ENGL 430) as part of their preparation program which informs them of the structure of the language. Candidates also take a teaching composition course (ENGL 521) which examines ways to teach composition and reviews basic concepts of writing. All candidates seeking a license with a PreK-12 endorsement area or a secondary teaching endorsement area take a course in reading and writing across the content areas (ENGL 522) which examines vocabulary and writing processes.

Candidates transferring to CNU from other universities also must have at least two courses in written communication literacy and demonstrate competency in reading and writing by passing the Praxis I assessment before admission to the program. CNU candidates may present requisite SAT or ACT scores for admission to the program. A writing component, included on the MAT application, is assessed by a committee of three members of the Teacher Preparation Council. Graduate program candidates are required to produce research papers, lesson units and plans, reflective journals, informative presentations, and critical analysis. Résumés are created as part of the student teaching seminar. A lengthy work sample is assigned as a culminating document incorporating academic and professional communication. Stellar examples of work samples and rubric scoring were available for review in the Exhibit Room and students demonstrated their knowledge of work samples in a presentation to the on-site review team on the first day of the visit—Sunday, March 28.

Candidates demonstrate that they can solve mathematical problems, communicate and reason mathematically, and make mathematical connections. All CNU candidates are required to take six semester hours of mathematics literacy above the level of college algebra as part of the Liberal Learning Core. Candidates in the Teacher Preparation Program are required to take statistics as one of those two courses as it requires that candidates solve problems, reason, and make connections to fields outside mathematics. The program posits that a basic understanding of statistics can inform candidates' understanding of educational research, which informs research-based practice. Elementary Education candidates are required to take nine hours of college mathematics in order to pursue licensure at the PreK-6 teaching level and take an additional three-credit graduate course in teaching elementary mathematics. These courses focus on mathematical problem solving, communication, and reasoning. Candidates coming to CNU from other universities must demonstrate mathematics competencies through submission of passing scores on the Praxis I mathematics assessment, as well as a transcript analysis showing six hours of appropriate mathematics courses.

The mathematics foundation Liberal Learning Core requirements and mathematics course descriptions are listed in the *Undergraduate Catalog*. Advising sheets for all programs are appended to the *Teacher Preparation Program Policy Manual* and are available on the Web site (http://teacherprep.cnu.edu).

Candidates demonstrate that they develop and use experimental design in scientific inquiry, use the language of science to communicate understanding of the discipline, investigate phenomena using technology, understand the history of scientific discovery, and make informed decisions regarding contemporary issues in science, including science-related careers. CNU undergraduate candidates must complete a minimum of seven semester hours of a laboratory science as part of the Liberal Learning Core. This includes two semesters of natural or physical science lecture courses and one laboratory experience. All elementary candidates in the Teacher Preparation Program are required to take courses in life sciences and/or physical sciences, and four additional credits in natural science study (NSCI 310). These courses and the laboratory focus on the scientific method, including

experimental design, using the language of mathematics, understanding scientific discoveries, and contemporary issues in science. Candidates transferring to CNU from other universities undergo a transcript review and must present the equivalent of seven semester hours of science. The science requirements are documented in the Liberal Learning Core and science course descriptions are available in the *Undergraduate Catalog* under the departments of Biology, Chemistry, and Physics. Advising sheets for all programs are appended to the *Teacher Preparation Program Policy Manual* and are located on the CNU Web site (http://teacherprep.cnu.edu).

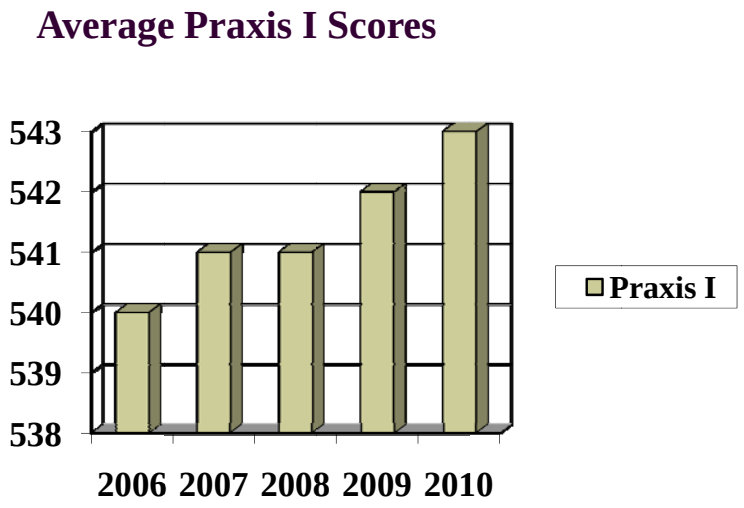
Candidates demonstrate that they know and understand our national heritage and have knowledge and skills in American and world history, geography, government/political science, and economics that create informed and responsible citizens who can understand, discuss, and participate in democratic processes. As part of the Liberal Learning Core requirements, all CNU candidates are required to take a course in the area of "Western Tradition," "Global and Multicultural Perspectives," and "Identities, Institutions and Societies." Elementary candidates must complete specific courses in United States and world history (HIST 121, HIST 111), geography (GEOG 201), and government (GOVT 101). Candidates transferring to CNU from other universities undergo a transcript review to determine whether or not they have had the requisite coursework in history and the social sciences. Liberal Learning Core requirements are available in the *Undergraduate Catalog*. Advising sheets for all programs are appended to the *Teacher Preparation Program Policy Manual* and are available on the Web site (http://teacher prep.cnu.edu).

Candidates demonstrate that they have knowledge in fine arts, communications, literature, foreign language, health, psychology, philosophy and/or other disciplines that contribute to a broad-based liberal education. As a part of the Liberal Learning Core, all CNU undergraduate candidates must complete three credit hours of coursework in the area of "Creative Expression" which may include courses in art, music, theater and literature. Candidates also must take two psychology courses (developmental psychology and educational psychology, PSYC 207 or 208 and PSYC 312), one course at the 200-level in a foreign language, and a course in speech or theatrical communication arts (COMM 201 or THEA 230). Candidates transferring to CNU from other universities undergo a transcript review to assess their knowledge of other courses in order to provide a broad-based liberal education. Documentation of the Liberal Learning Core and course descriptions are available in the *Undergraduate Catalog*.

Candidates take basic skills competency assessments prescribed by the Virginia Board of Education for admission into the program. Praxis I is required for admission to the MAT program. Candidates must present a composite score of 532 or higher as prescribed by the Board. CNU undergraduates who are applying for admission to the five-year program may submit SAT or ACT score equivalents in lieu of Praxis I. Candidates transferring from other universities must take and pass the Praxis I assessment to qualify for admission to the graduate program.

Praxis requirements as well as requirements for entry to all programs are listed in the *Graduate Catalog* and the *MAT Student Handbook*. Since 2006, average Praxis I scores for CNU candidates have improved steadily from an average of 538 in 2006 to an average of 543 in 2010. (See Table 1.)

Table 1



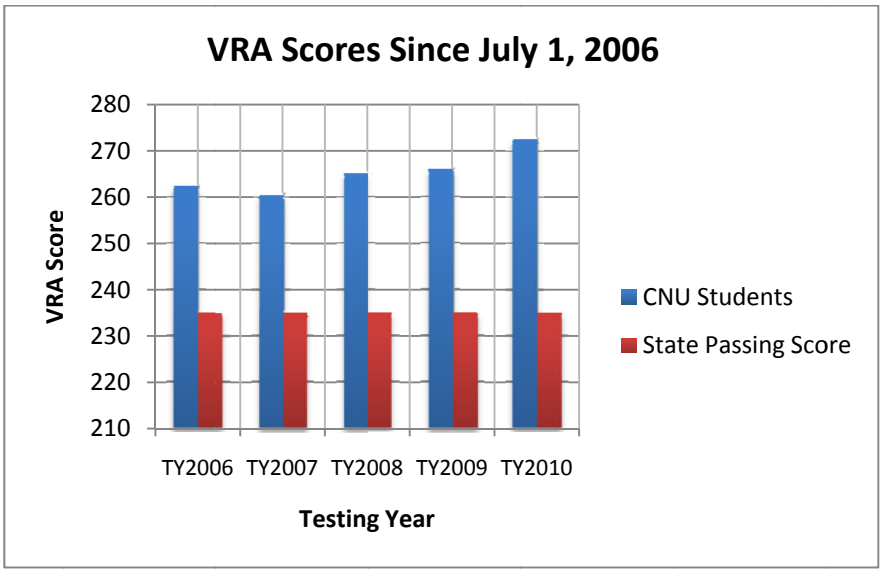
Candidates must achieve passing scores on professional content assessments for licensure prescribed by the Board of Education prior to completing their programs. Recently, the Teacher Preparation Council decided to require that the Praxis II assessment must be passed prior to student teaching. Candidates take the examination in summer or fall prior to spring student teaching. Documentation was provided to confirm that if a student fails the assessment on the first attempt, the student must meet with the Associate Director of Teacher Preparation and prepare an action plan. The one exception is in Theater Arts PreK-12, where there is no Praxis II assessment. Theater Arts majors at CNU must pass a department-created exit examination. Prior to the new requirement to pass the test prior to student teaching, all candidates in the Teacher Preparation Program were required to pass the Praxis II assessment prior to completion of the program.

CNU candidates have been highly successful in their performance on Praxis II assessments in each of the past five years as evidenced by data indicating that CNU teacher candidates have performed above the state required scores in each of the Praxis II areas assessed. Further, of the 2009 cohort, 36.2 percent (or 25 program completers) earned the Recognition of Excellence from Educational Test Service (ETS) for their achievement on the Praxis II assessments; in the 2010 cohort, 25.3 percent (or 23 program completers) earned the Recognition of Excellence designation. The professional education program consistently aggregates Praxis II, VCLA and VRA assessment data.

CNU candidates' scores on the VCLA have steadily increased over the past five years. Further, CNU candidates have consistently scored above the state average. In 2008, CNU candidates scored 69.6 points above the state average; in 2009, CNU candidates scored 78 points above the state average; and in 2010, candidates scored 85.1 points above the state averages.

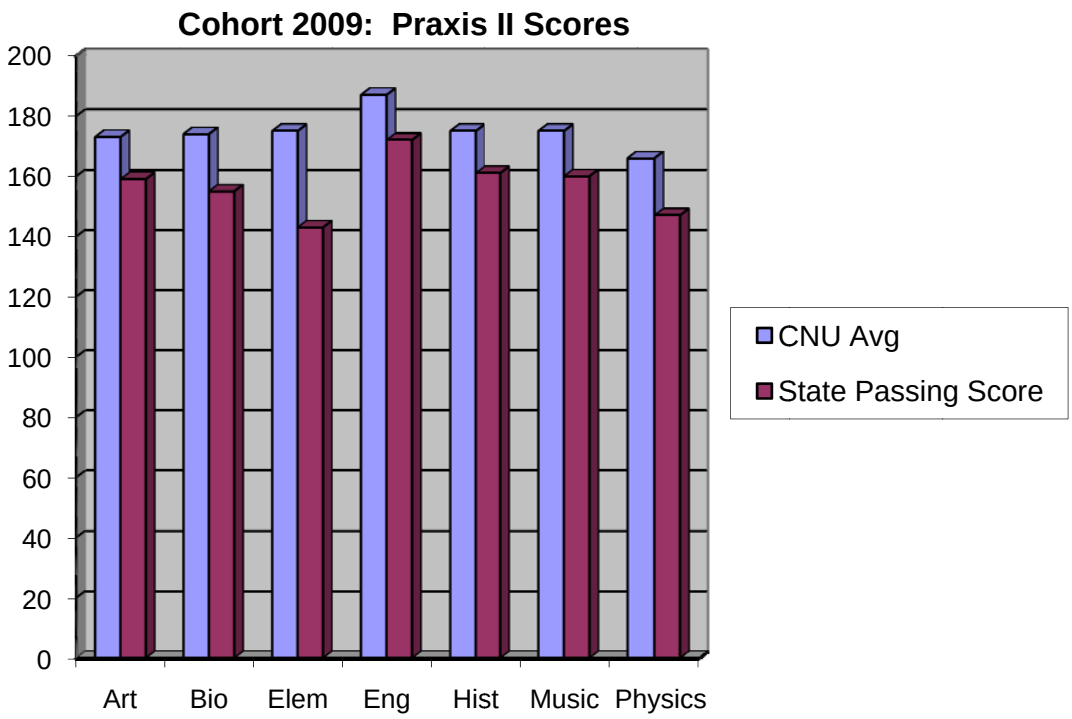
Since 2006, data on CNU student performance on the VRA indicate that candidates consistently scored above the state passing score of 235. In 2006, CNU candidates had an average score of 262 compared to an average score of 273 in 2010. (See Table 2.)

Table 2



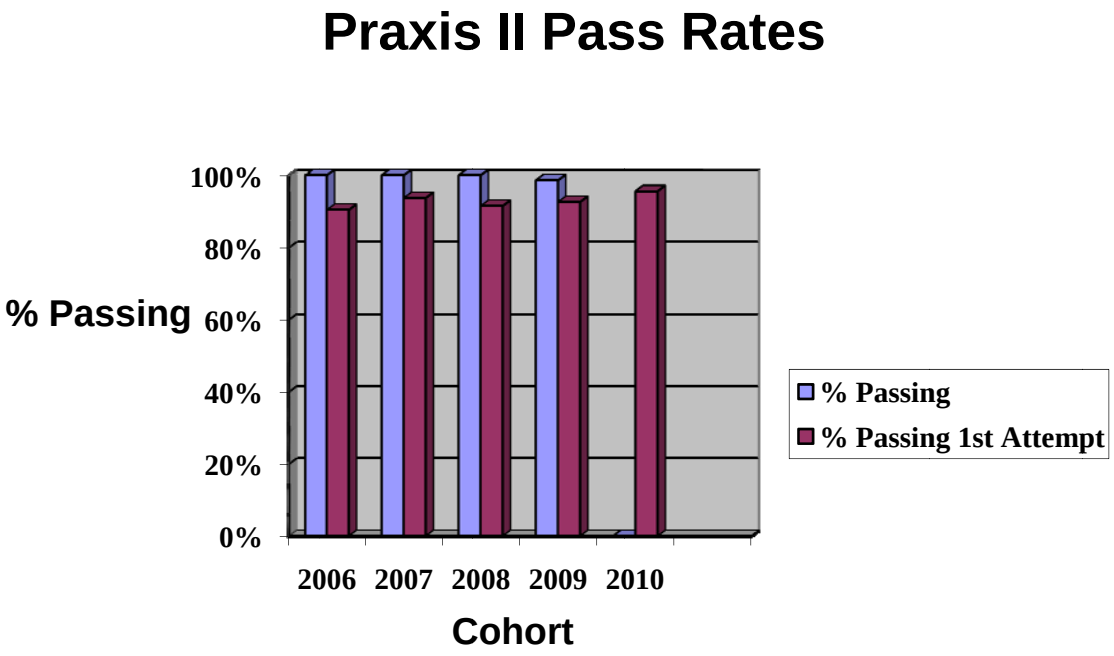
CNU candidates have consistently scored above the state passing score across all programs on the Praxis II assessments. Table 3 describes the performance of the most recent cohort.

Table 3



From 2006-2009, CNU candidate pass rates on Praxis II assessments have been consistently high at 98-100 percent. The number of candidates who pass Praxis II on the first try has continued to increase ranging from 90 percent in 2006 to 95 percent in 2010. (See Table 4.)

Table 4



Requirements for graduation for all programs and comprehensive examinations (Praxis II, VCLA, and VRA) are listed in the *Graduate Catalog* and in the *MAT Student Handbook*. Average Praxis II scores for the cohorts were provided for the on-site review team by the TPP Director and can be found in the *Annual Reports* and in the *MAT Evaluation Notebook*. A list of the names of individuals receiving the "Recognition of Excellence" designation by ETS also can be found in the *MAT Evaluation Notebook*.

Professional Knowledge, Skills, and Dispositions

Through examination of course syllabi, evidence was found to indicate that CNU candidates have opportunities to develop the knowledge, skills, and dispositions to work with a variety of students. Further, candidates are required to take a sequence of courses that provide opportunities to acquire knowledge about the physical, neurological, social, emotional, intellectual, and cognitive development of children and youth; the complex nature of language acquisition and reading; and an understanding of contemporary educational issues including the prevention of child abuse, appropriate use of technology, and diversity. Evidence is found in course program requirements and syllabi that addresses the course competencies.

CNU candidates take a sequence of courses designed to provide a firm foundation in education. PSYC 207: Life-Span Development or PSYC 208: Child Development and PSYC 312: Educational Psychology address the application of knowledge about the physical, neurological, social, emotional,

and intellectual development of children and youth. ENGL 430: The Structure of English or ENGL 310: Introduction to Linguistics, ENGL 521: Teaching Composition, ENGL 532: Language Varieties in American Schools, ENGL 314 and 514: Children's Literature and PSYC 521: Reading Acquisition and Development or ENGL 522: Reading and Writing in the Content Areas address the complex nature of language and reading. SOC 314: Education, Culture and Society and laboratory SOC 314L address the sociological foundations of public education, school culture, structure, and financing of education, school law, philosophy of education, history of education, and contemporary issues in education. PSYC 535: Exceptional Learner introduces candidates to the characteristics (e.g., neurological; developmental; physical) of exceptional learners and school-related issues such as special education laws, assessment, and technology. Diversity is addressed in this course, as well as in the graduate courses SOC 501: Education, Multiculturalism, and Diversity, TCHG 550: Teaching Across Cultures and ENGL 511: Teaching English as a Second Language. Candidates complete an online learning module of child abuse and neglect through TCHG 543: Classroom Management and Discipline. The graduate course CPSC 580: Technology for Teachers and its undergraduate prerequisite, CPSC 110: Introduction to Computing provide candidates with computer literacy. Candidates who transfer to CNU from other universities must present equivalent undergraduate courses as evaluated in the admissions review or must take the courses prior to entry.

Course descriptions are available in the undergraduate and graduate catalogs. Course syllabi were available in the *MAT Syllabi Notebook*. Advising sheets are available in the *Teacher Preparation Policy Manual* and on the CNU Web site (http://teacherprep.cnu.edu).

Alumni of the program and current candidates reported that they feel confident about their ability to work with diverse student populations indicating their experiences in Newport News Public Schools classrooms allowed rich opportunities to put theory into practice in classrooms. One student remarked that because of her diverse student teaching experience in Newport News Public Schools, she was prepared to take a position in a primarily minority setting and credits her effectiveness to her experience in NNPS.

Effective January 29, 2010, the Teacher Preparation Program adopted a procedure for assessing candidate dispositions. Candidates' dispositions will be evaluated six times including formal essay review by the Admission Committee prior to acceptance, upon admission by signing the *CNU Honor Code* and signing of the NNPS *Acceptable Use Policy* through the Office of Student Affairs, and four times during the student teaching experience which will be monitored by the University supervisor, cooperating teacher, student teacher, and director of student teaching.

The University Assessment and Evaluation Committee reviews the assessment plans for all departments at the University. Departments and programs establish goals, related assessments to measure the stated goals, and outcomes. The CNU Director of Assessment indicated that the TPP is an exemplar of this assessment process and leads the University in the implementation of this annual assessment initiative. Assessment reports, including results, were provided by the Director of Assessment.

The teacher education program utilizes data to improve programs. Based on an examination of student performance on the Praxis II assessments, two changes were made. Mathematics candidates were required to take the test early in the academic year (September) to allow time for tutoring as

needed. Also, a graduate course that reviews concepts covered on the assessment was approved and offered in the summer 2007.

Another example of the use of data to improve programs is the review of the assessment for final student teacher evaluation by the University supervisor and classroom teacher. The instrument was developed internally using the Charlotte Danielson *Framework for Teaching* rubric which also is the basis for the NNPS teacher evaluation instrument. Based on data indicating that 96.3 percent of student teachers were rated as competent or proficient in their knowledge of content by the University supervisor and the classroom teacher, no changes were made in content area preparation for any teaching endorsement area.

Another example of the use of assessment to improve programs is a change based on identified weaknesses. Course evaluations for "classroom management and discipline" were scrutinized. As a result, these evaluations were used as a part of faculty evaluations. For the following cohort, a new adjunct faculty member hired to teach the course worked closely with the TPP Director to align objectives with outcomes for the course. Also, candidates in the next cohort were allowed to begin the first portion of their student teaching in the first two weeks of the school year. In addition to written documentation on changes to improve programs as a result of assessments, the TPC corroborated these changes in an interview with the on-site review team.

Candidates demonstrate the ability to apply the principles of learning, methods for teaching the content area, classroom management, selection and use of teaching materials, and evaluation of student performance. All candidates take PSYC 312: Educational Psychology – principles of learning, PSYC 535: Exceptional Learner – differentiation of materials and assessment for special needs students, TCHG 516: Curriculum and Instruction – teaching materials and evaluation, TCHG 543: Classroom Management and Discipline, ENG 521: Teaching Composition – teaching writing, or ENGL 522: Reading and Writing in Content Areas – for teaching reading and writing skills 6-12.

Elementary candidates take PSYC 521: Reading Acquisition and Development – methods for teaching reading, MATH 570: The Study of Mathematics/elementary – methods for teaching mathematics, and NSCI 310: Exploring Science Concepts – methods for teaching science.

Middle/Secondary and PreK-12 candidates' course requirements vary based on the program as follows: Art-FNAR 534: The Theory and Practice of Art Education and FNAR 589: Teaching Crafts; Biology and Physics candidates: BIOL 538: Apprenticeship in Teaching Science; History and Social Sciences candidates: GOVT 570: Teaching and Learning Social Science; Mathematics candidates: MATH 570: The Study of Mathematics/Secondary; MATH 579: Curriculum and Instruction in Secondary Mathematics; Music candidates: MUSC 510: Measurement and Evaluation in Music, MUSC 520: Choral Literature and Conducting, MUSC 530 and 540: Wind/Orchestra Literature and Conducting, MUSC 537: Music in the Elementary School; French candidates: FREN 538: Research in Foreign Language Teaching; Spanish candidates: SPAN 338: Apprenticeship in Teaching Spanish and Theater Arts candidates: THEA 578: Teaching Apprenticeship.

Candidates are required to prepare and deliver actual or simulated lessons and lesson plans or units which allow them to practice teaching in their content area. CNU student teachers are expected to follow the CNU *Lesson Plan Format*. Student teachers are expected to make and keep a

comprehensive written plan for each lesson they instruct. All candidates complete practicum and student teaching experiences including extensive lesson planning.

Candidates have ample opportunity to become effective teachers through three tiers of field experiences:

- entry level observation and tutorial activities, tied to prerequisite classes and skills practice tied to program courses,
- independent work in partner schools, and
- internship (student teaching) as the conclusion of the program.

Candidates will have earned over 200 clock hours of observation, assisting, and teaching time prior to student teaching, and between 625 and 647 clock hours in field experiences. Elementary candidates will have earned up to 647 clock hours of clinical experiences and middle and secondary candidates will have earned up to 625 clock hours.

One of the strengths identified by the CNU alumni and beginning teachers in an interview with the on-site review team was the strong sense of their ability to plan instruction. Several graduates remarked that the lesson plan format is very helpful, and graduates confirmed that they continue to use this format to plan instruction in their classes.

Course descriptions are listed in the undergraduate and graduate catalogs. Course syllabi for each of the courses are made available in the *MAT Syllabi Notebook*. Work samples were made available in the MAT documents room. The sequencing of these courses is laid out in the advising sheets for each program, found in the appendix of the *Teacher Preparation Policy Manual* and also available on the CNU Web site (http://teacherprep.cnu.edu).

Candidates demonstrate the ability to have a positive effect on student learning through judging prior student learning; planning instruction; teaching; and assessing, analyzing, and reflecting on student performance. All TPP candidates learn the process of designing and assessing instruction in the course TCHG 516, which is reinforced in other content area methods courses described earlier in this section of the report. Candidates also have the opportunity to practice these skills in field experiences. During student teaching, all candidates are required to demonstrate their ability to assess, plan, teach, and re-assess in the form of a *Student Teacher Work Sample*. The work samples are evaluated by the CNU supervisor and reviewed by the program directors. Data are summarized for each program.

Candidates analyze and reflect on student performance through journal entries, observational feedback from cooperating teachers and university supervisors and the teacher work sample. The work sample is an assessment in which student teachers in CNU's Teacher Preparation Program provide verification that their PreK-12 students have learned specific content. The work sample provides evidence of the candidates' ability to engage in thorough and effective standards-based planning; use best practices that provide opportunities for student success; use appropriate assessment strategies to foster and document the ongoing development of their students' knowledge and skills; and analyze student assessment results, reflect on the results, and adapt instruction accordingly. During a poster session on the first day of the on-site review team visit, nine student teachers shared an overview of a lesson taught. The lessons followed the established plan of the work sample. The

candidates demonstrated an in-depth knowledge of assessment, technological literacy, and exhibited a high level of poise and professionalism as pre-service teachers. A description of the *Student Teacher Work Sample* can be found in the *Student Teacher Handbook*. Samples of *Student Teacher Work Samples* were available in the Exhibit Room.
Candidates demonstrate the ability to use educational technology to enhance student learning, including the use of computers and other technologies in instruction, assessment, and professional productivity. All teacher preparation candidates are required to complete a basic introductory course in computing. In addition, candidates must take CPSC 580: Technology for Teachers, an application course designed to meet the *Virginia Technology Standards for Teachers*, as well as a prerequisite undergraduate course, CPSC 110: Introduction to Computing. In the CPSC 580 course, candidates prepare a portfolio illustrating their technology competencies. Other professional education courses, including TCHG 516: Curriculum and Instruction, TCHG 543: Classroom Management and Discipline, and ENGL 522: Reading and Writing in the Content Area also address the understanding of and the ability to use educational technology to enhance student learning.

Course descriptions are in the *Graduate Catalog*. Course syllabi for each of the courses are available in the *MAT Syllabi Notebook*. The sequencing of these courses is outlined in the advising sheets for each program, found in the *Appendix* of the *Teacher Preparation Policy Manual* and on the CNU Web site (http://teacherprep.cnu.edu). A matrix describing the various technology tools taught in the various courses in the program appears in the *MAT Documents Notebook*.

Candidates demonstrate the ability to analyze and use various types of data to plan and assess student learning. The *Teacher Work Sample* is an example of the use of assessment data to improve programs. As of 2009, all candidates in the teaching internship (TCHG 510) are required to produce a *Teacher Work Sample*. This work sample was created by the Associate Director of Teacher Preparation in collaboration with a team of University supervisors. Candidates must assess students (pretest and posttest), implement a teaching unit based on findings on the pretest, and then measure the effects of instruction on student learning. Candidates are required to use both quantitative and qualitative assessment measures. The work sample is evaluated by the University supervisor in the TCHG 510 course. Student teachers in schools visited by on-site review team members discussed and demonstrated an understanding of how to plan instruction and assess student learning. The nine candidates who presented to the on-site review team during the poster session on Sunday, March 28, 2010, were articulate in expressing their understanding of the analysis and use of data to plan and assess student learning. The candidates shared how they incorporated instructional models in their teaching and explained subject specific pedagogy used in instruction. The activity highlighted candidates' ability to plan and assess student learning and demonstrated the use of best teaching practices.

Review of Team Findings Based on Evidence Presented:

Recommendation for Standard 2: (Met/Met Minimally with Significant Weaknesses/Not Met)

MET

Weaknesses:

None

C. Standard 3: Faculty in Professional Education Programs. Faculty in the professional education program represent well-qualified education scholars who are actively engaged in teaching and learning.

The *MAT Faculty Vitae Notebook* contained 32 full-time faculty and 26 adjunct vitae. Twenty-nine faculty have doctorate degrees, and three faculty members have master's degrees. Three MAT faculty members' vitae were randomly selected who taught ENGL 532, MUSC 520, and PSYC 521 and audited for appropriate credentials and qualifications to teach the class assigned. All three vitae met the prescribed requirements. Pages 86-129 and Section XVIII, pages 153-155 of the *Christopher Newport University Handbook* and the CNU Web site, http:///public.cnu.edu/, were reviewed to provide evidence that written procedures were in place for faculty selection and evaluation.

Evidence from class visits and discussions with faculty and candidates indicated that faculty have an understanding of current practices related to the use of computers and technology. Several members of the on-site review team observed a student using a computer-based music CD player to present a lecture/demonstration on contemporary choral trends to the class. Additionally, five syllabi were selected at random from the *MAT Syllabi Notebook* to review for evidence to support that courses integrate technology. Four syllabi had technology indicators and one did not:

- English 314W (W3): Children's Literature, Spring 2010; professor uses SCHOLAR Web site.
- Math 538: Apprenticeship in Teaching Mathematics, Spring 2010; professor makes no mention of technology in any context in the syllabus.
- SOC 314L: Education, Culture, and Society, Spring 2010; professor uses a technology specialist assignment.
- TCHG 516: Curriculum and Instruction (Elementary), Summer 2009; professor indicates technology in the syllabus on page 4 where candidates are to videotape lessons.
- SPAN 538: Apprenticeship in Teaching, Fall 2007; professor uses e-portfolio.

Candidates take a basic computer course at the beginning of the program (CPSC 110) and a capstone course (CPSC 580) near the program conclusion on integrating technology and learning in the classroom. A packet of documents from CPSC 580 were reviewed that indicate much is taught to candidates regarding technology for teachers, including:

- demonstrating having met the *Virginia Technology Standards*,
- applying TPaCK principles to classroom technology integration, and
- development of skills in various uses of hardware, software, and Web-based tools for digital literacy.

Faculty demonstrated an understanding of the *Virginia Standards of Learning* (*SOL*). Two on-site team reviewers observed the MUSC 520 class on March 29, 2010, (45 minutes), and observed a student using a computer-based music CD player to present a lecture/demonstration on contemporary choral trends to the class. The professor followed up each piece of music played by the student with instruction for the class of eight candidates, focusing on which *SOL* objectives candidates would use in their classroom that related to the presenter's pre-comments about the type of music to be played for the class.

Five syllabi were selected at random from the *MAT Syllabi Notebook* to review for evidence courses indicate teaching and use of the *SOL*. Four syllabi had indicators and one did not:

- FNAR 534: Theory and Practice of Art Education, Fall 2009; instructor confirmed *SOL* on page 2 of the syllabus.
- GEOG 595, Section 10: World Geography for Teachers, Summer 2007; professor confirmed *SOL* on page 1 of the syllabus.
- Government 570: Methods for Teaching Social Studies, Fall 2009; professor confirmed *SOL* on page 3 of the syllabus.
- MUSC 510: Measurement and Evaluation in Music Education; no semester indicated; professor confirmed *SOL* on page 1 of the syllabus.
- PSYC 535 (5766): The Exceptional Learner, Fall 2009; professor did not mention *SOL* in any context in the syllabus.

Professional education faculty members demonstrate understanding of cultural differences and exceptionalities and their instructional implications. All syllabi (six) in this section of the *MAT Syllabi Notebook* were reviewed for evidence that courses indicate an understanding of cultural differences and exceptionalities in their instructional implications. One syllabus had both indicators; one had multicultural but no indicators for exceptionalities; one had exceptionalities but no multicultural indicators; and three had neither multicultural nor exceptionalities indicators. Of the six syllabi, four made no mention of multicultural indicators while four made no mention of indicators for exceptionalities.

- TCHG 516: Curriculum and Instruction (Elementary); Summer 2009; both cultural differences and exceptionalities are confirmed, page 5.
- TCHG 516: Curriculum and Instruction, Summer 2009; no mention of cultural differences but confirmed exceptionalities, page 3.
- TCHG 516-23: Curriculum and Instruction (Elementary), Summer 2009; no mention of cultural differences or exceptionalities.
- Teaching and Learning 543: Classroom Management and Discipline, Summer 2009; no mention of cultural differences or exceptionalities.
- Teaching and Learning 543: Classroom Management and Discipline; no semester given; no mention of cultural differences or exceptionalities other than disclaimer for CNU candidates on page 3.
- Teaching 550: Teaching Across Cultures: J-Term 2009, Belize, Central America, pages 1-4 for Cultural Differences; no mention of exceptionalities.

The professional education faculty who supervise field experiences had professional teaching experiences in preK-12 school settings. Thirteen CNU student teacher supervisor vitae were reviewed from the *MAT Faculty Vitae Notebook* (page 13). All had professional teaching experiences in PreK-12 school settings.

A review of the *MAT Faculty Vitae Notebook* listed a comprehensive summary chart of faculty members, their training, and their qualifications. In the section indicating *Selected Listing of Scholarship, Leadership in Professional Associations, and Services*, all 32 full-time faculty have indicators of involvement with the professional world of practice and the design and delivery of

instructional programs in PreK-12 schools. In addition, 19 of 32 full-time faculty participate in education-related services at the local, state, national, and international levels in areas of expertise and assignment.

The professional education faculty use instructional teaching methods that reflect an understanding of different models and approaches to learning and student achievement. Faculty documents were reviewed and in all cases, the course instructor used different models and approaches to learning and student achievement as evidenced in the syllabi review.

During three different meetings with (CNU program completers', Student Virginia Education Association officers', and candidates in the program, not yet student teaching) the question was presented as to whether or not the program completers and candidates in the program had opportunities to reflect, think critically, and solve problems. All three groups responded in the affirmative. This was a particular focus in the discussion with program completers.

The syllabus for SOC 314L: Lab-Education, Culture and Society, Spring 2010, was randomly selected for additional review. The syllabus provided evidence that the concepts of reflection, thinking critically, and problem solving were taught.

The teaching of professional education faculty is continuously evaluated, and the results are used to improve teaching and learning within the program as evidenced in the Steering Committee and the TPC meeting minutes. Policies governing the teaching loads of professional education faculty, including overloads and off-site teaching, are mutually agreed upon and allow faculty to engage effectively in teaching, scholarship, and service as confirmed by two on-site reviewers in a meeting with the CNU Provost.

The diversity plan was confirmed by the TPP Director and is detailed in the *2009-2010 Faculty Handbook*. The Director indicated that this plan is reviewed annually by a committee of the faculty and administrators. No formal evaluation of the plan was found.

The diversity plan was further confirmed in a meeting with the Provost who indicated that the Office of Academic Affairs was sincerely invested in faculty retention planning. Documents were examined regarding the *University EVAL-4* program that applies to faculty reviews of the following type: probationary reappointment (second and fourth year); and tenure and promotion to associate and full professor. *Eval-4* is designed to be used in conjunction with the *Faculty Handbook* to provide guidance to faculty members regarding ways in which the University values various teaching, professional development, and service activities. In effect, "departments are not left alone" without guidance from the Office of Academic Affairs in the review of candidates being considered for reappointment.

The Director of Equal Employment Opportunity provided the following MAT faculty demographic information to the on-site team for review on March 30, 2010:

- Females - 55 percent;
- Males - 45 percent;
- White - 83.9 percent;
- Minority - 16.1 percent (Asian 3.2 percent, Black 9.7 percent, Hispanic 3.2 percent).

Faculty learning and scholarship expectations outlined in the *2009-2010 University Handbook* were reviewed. A form, *Christopher Newport University Professional Activities Report*, which assesses evaluation of professional development activities, was included in the evidence file.

During a meeting with review team members, the Provost affirmed that in these economic times there are no current finalized plans for faculty professional development, but in the past and in spirit and intent, the University administration seeks to support professional development of the faculty. The administration is aware of the continuing need for technology training for the faculty. The Provost also advised that the *University EVAL-4* program applies to faculty reviews of the following type: probationary reappointment (second and fourth year): tenure and promotion to associate and full professor.

Faculty activities in professional development are included in the *MAT Faculty Vitae Notebook* in the summary chart listing faculty members' learning and scholarship activities. This chart is very informative and shows a variety of professional/scholarly activities. There are entries for each faculty member.

Evidence was reviewed from the 2008-2009 *University Faculty Handbook* for faculty evaluation procedures. The *CNU Professional Activities Report* is found in the *MAT Documents Notebook*. Teaching, scholarship, and service are included in this evaluation document. These evaluations are initiated by the faculty in their faculty reviews. Evaluations then are reviewed by the department chairs, the deans for the various schools, and the Provost. Full-time faculty are evaluated by their department chair; the evaluation then is reviewed by the appropriate School Dean and the Provost. Adjunct faculty are evaluated by the TPP Director.

The *MAT Documents Handbook* provides copies of course evaluations completed by candidates for selected courses from 2005-2009. These were documents were reviewed and found to be an appropriate process for student evaluation of courses.

Review of Team Findings Based on Evidence Presented:

Recommendation for Standard 3: (Met/Met Minimally with Significant Weaknesses/Not Met)

MET

Weakness:

- Insufficient evidence was provided for the faculty demonstrating understanding of cultural differences and exceptionalities and their instructional implications. The TPP should ensure that the requirement for addressing multicultural experiences and students with exceptionalities be thoroughly addressed in course syllabi.

D. Standard 4: Governance and Capacity. The professional education program demonstrates the governance and capacity to prepare candidates to meet professional, state, and institutional standards.

The governance for the Teacher Preparation Program at Christopher Newport University is clearly defined with responsibilities and authority assigned to an interdisciplinary council. The *Christopher Newport University Teacher Preparation Program Policy Manual* identifies the Teacher Preparation Council—with representative membership from 12 departments, the Newport News Public Schools, and student professional organizations—as the responsible entity for administering the CNU TPP. Support and budget for the TPP is provided through the office of the Dean of the College of Liberal Arts and the Office of Graduate Studies.

The TPP Director, a faculty member in the English Department, is granted release time to serve as the licensure officer and chair of the TPC. The Director is assisted in her duties by a 12-month associate director of field experiences. The duties of the Director include assisting in the recruiting of Liberal Arts faculty with K-12 expertise and teaching experience as instructors for Teaching and Learning (T and L) courses.

The Director also has the responsibility of recruiting instructors for Teaching and Learning courses, orienting them to responsibilities, and monitoring their performance. In an interview with on-site team reviewers, the EEO Officer in charge of faculty recruitment shared faculty search advertisements documenting the specific focus on recruitment of content area researchers with expertise and experience in teaching. Also, the Provost, in an interview with on-site review team members, indicated that he consults with both the TPP Director and the Director of Graduate Programs in regard to TPP staffing needs. The Provost further clarified that evaluation of full-time faculty performance occurs as a component of annual review but that review of performance of TPP adjunct faculty occurs at the program level. The TPP Director confirmed this process, elaborating that the evaluation of job performance of adjunct instructors who teach for the program includes a review of student course and instructor evaluation forms.

In an interview with on-site review team members, the Associate Director of Graduate Admissions documented her role and the role of the TPP Director in the active recruitment of candidates and the process for admitting candidates into the MAT program. The Associate Director could not, however, elaborate on the policy of denying Virginia Board of Education-approved substitute SAT or ACT scores for Praxis I assessment scores for graduates from other institutions applying to the MAT program. The team noted that this discrepancy in the use of admission tests needs to be reviewed and corrected.

The minutes of the TPC and Steering Committee meetings for the past five years, 2005-2010, provide evidence of annual planning, including the setting of goals and the documentation of the processes and actions involved in achieving these goals. The minutes provide a detailed record of the changes to the program during this time period. Additionally, interviews with the Provost, the TPP Director, and the TPC Steering Committee indicate that there is ongoing dialogue about long-range goals in regard to program size and focus.

While the TPP has experienced tremendous growth during the past several years, from 45 program completers in 2006-2007 to a projected 91 for 2009-2010, the number of faculty and staff to support

program quality appears to have grown consistently as well. However, the increase in program size, the emphasis on the field experiences components of coursework and volunteer and/or substitute time in schools, and the need to document the range and quality of student performance in all field experiences has greatly increased the workload for the Associate Director of Field Experiences. Interviews with intern teachers confirmed the perception that while the Associate Director is doing a tremendous job, the need exists for additional help to facilitate the placement of candidates and the tracking and documentation of student performance. Such assistance is especially needed to provide adequate time for the Associate Director to respond to the intern teachers' needs when unforeseen situations arise.

The President of Christopher Newport University is to be commended for his leadership in the commitment of resources to the Teacher Preparation Program. Newly constructed, state-of-the-art facilities which house the TPP reflect a generous allocation of resources and full commitment in support of the program and its goal to train effective 21st century teachers. Interviews with the Provost, the TPP Director, and the Associate Director of Field Experiences found positive indications of the use of fiscal resources to support program quality.

The recent construction of a technology laboratory with individual laptop computers as well as other instructional tools is provides further evidence of the University's commitment to the training of teachers who are competent in the use of technology for classroom instruction. On-site team reviewers found that candidates have access to classroom tools for instruction, including Smartboards and electronic student response systems (clickers). Candidates also have access to computer facilities until midnight five nights per week and to the library until midnight every night.

The newly constructed McMurran Hall—which now houses faculty offices, including offices for adjuncts for the TPP and administrative offices for the CNU graduate programs—is evidence of generous allocation of resources to ensure program quality. In interviews with reviewers, the TPP Director and the Associate Director of Field Experiences, who teaches the technology course in the TPP curricula, corroborated the sufficiency of technological resources to meet both instructor and student needs. Evidence exists to support CNU's assertion that sufficient resources are being provided to ensure program quality.

Review of Team Findings Based on Evidence Presented:

Recommendation for Standard 4: (Met/Met Minimally with Significant Weaknesses/Not Met)

MET

Weaknesses:

1. The Steering Committee of the Teacher Preparation Council should review the policy of denying Virginia Board of Education-approved substitute SAT or ACT scores for Praxis I assessment scores for graduates from other institutions applying to the MAT program.

2. Consideration should be given to allocating resources to hire additional personnel for the purpose of supporting the field experiences for TPP candidates.

Christopher Newport University
On-Site Review Team
Schedule of Activities

March 28-31, 2010

Christopher Newport University
On-Site Review Team
Schedule of Activities

March 28-31, 2010

Date/Time/Place of Meeting	**Person/Group interviewed**	**Virginia Department of Education (VDOE) On-site Review Team Members**	**Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants**
Sunday, March 28 3:30-4:00 p.m. NMCM 114	Teacher Preparation Council (TPC)	All team members	Maggie Bowen, Art Michelle Carr, student Kelly Cartwright, Director, Graduate Studies Deborah Farina, Associate Director of Field Experiences Stavroula Gailey, Faculty Claudia Mendez, Faculty Roark Mulligan, Faculty Marsha Sprague, Director of Teacher Preparation John Tupponce, NNPS
Sunday, March 28 4:05-4:35 p.m. NMCM 114	MAT Faculty and Adjuncts	All team members	**Full-time Faculty** Kelly Cartwright, Psychology Deborah Farina, Teaching Stavroula Gailey, Mathematics Brennan Kraxberger, Govt. Claudia Mendez, Spanish Roark Mulligan, English Marsha Sprague, English Peter Snow, English/ESL Linda Waldron, Sociology Rebecca Wheeler, English **Adjunct Faculty** Maggie Bowen, Art Linda Morgan, Teaching Shirley Sypolt, NSCI Dick Weber, Sociology

Date/Time/Place of Meeting	Person/Group interviewed	Virginia Department of Education (VDOE) On-site Review Team Members	Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants
Sunday, March 28 4:40-5:10 p.m. NMCM 114	Clinical Faculty Grant Participants	Peggy Schimmoeller Jewell Askins	Robin Atlee, Grade 4 Adia Charley, Grade 3 Kay Dawson, Kindergarten Marilyn Garhart, Grade 4 Alejandro Gomez, Spanish Betty Grizzle, Grade 3 Irene Koutsogiannis, Kindergarten Mary McCoy, Grade 1 Lydia McKeithan, Social Studies Mary Merritt, Music Cathy Pape, Grade 1 Tina Turner, Grade 3
Sunday, March 28 4:40-5:10 p.m. NMCM 164	CNU Program Graduates	Diane Simon Jurgen Combs	Melissa Baird, English Anita Love Bowman, Elementary Education Beth Guthrie, Elementary Education Laura Haselton, Elementary Education Melinda Hodgkiss, Elementary Education Ashley Wilson Ide, Social Studies Justin Throupe, Geography Erin Welch, Social Studies
Sunday, March 28 4:40-5:10 p.m. NMCM Rotunda	SVEA sponsor and officers	Glenn Koonce JoAnne Carver	Gil Crippen, sponsor Michelle Carr Kenny Harkins Mary Evans Brian Bishop

Date/Time/Place of Meeting	Person/Group interviewed	Virginia Department of Education (VDOE) On-site Review Team Members	Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants
Sunday, March 28 6:00-6:30 p.m. NMCM	Poster Session: CNU student teachers	All team members	Michelle Carr Kenny Harkins Erica Oliver Tareva Coffield James Jones Jonathon Jones Erica Oliver Erin Plisco Megan Puckli Michelle Thomas Michelle Young
Sunday, March 28 6:30-8:15 p.m. NMCM Dining Room	Working Dinner	All team members	**CNU MAT Candidates** Michelle Carr Mary Evans Kenny Harkins Erica Oliver Tareva Coffield James Jones Jonathon Jones Erica Oliver Erin Plisco Michelle Thomas Michelle Young **CNU MAT Graduates** Beth Guthrie **CNU Administrators** Steven Breese, Dean Arts and Humanities Bobbye Bartels, Associate Provost Kelly Cartwright, Director of Graduate Studies Lyn Sawyer, Associate Director of Admissions

Date/Time/Place of Meeting	Person/Group interviewed	Virginia Department of Education (VDOE) On-site Review Team Members	Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants
			<u>Teacher Preparation Program Administration</u> Marsha Sprague, Director Deborah Farina, Associate Director **<u>NNPS Principals</u>** Brian Nichols John Tupponce **<u>CNU Faculty</u>** Maggie Bowen Patricia Hopkins Brian Puaca Peter Snow Lourdes Travioso-Parker Rebecca Wheeler **<u>University Supervisors</u>** Linda Morgan Judy Panatalides Bob Sulzberger **<u>Clinical Faculty</u>** Kay Dawson Marilyn Garhart Mayrene Graef Ron Graef
Monday, March 29 9-9:45 a.m. FERG 261A	Class Observation, MUSC 520	Glenn Koonce Peggy Schimmoeller	Dr. Lauren Fowler Eight Music MAT Candidates

Date/Time/Place of Meeting	Person/Group interviewed	Virginia Department of Education (VDOE) On-site Review Team Members	Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants
Monday, March 29 10-10:45 a.m. Brauer Room, Administration Bldg.	President	JoAnne Carver Jurgen Combs	President Paul Trible
Monday, March 29 10:15-10:45 a.m. Administration Bldg. 404C	Provost	Glenn Koonce Jewell Askins	Dr. Mark Padilla
Monday, March 29 11-11:30 a.m. NMCM 161A	Director of Graduate Programs	Diane Simon Peggy Schimmoeller	Dr. Kelly Cartwright
Monday, March 29 11-11:30 a.m. NMCM 159	Associate Director, Graduate Admissions	Glenn Koonce Jewell Askins	Ms. Lyn Sawyer
Monday, March 29 11:45 a.m.-12:30 p.m. NMCM 255	Associate Director for Field Experiences, Teacher Preparation Program	Peggy Schimmoeller Jewell Askins	Ms. Deborah Farina
Monday, March 29 11:45a.m. -12:15 p.m. NMCM 303C	Dean of the College of Arts and Humanities	Jurgen Combs Diane Simon	Dean Steven Breese
Monday March 29 1:45-2:20 p.m. NMCM 200B	Candidates enrolled in program, not yet student teaching	JoAnne Carver Jurgen Combs Glenn Koonce Peggy Schimmoeller	Jasmine Cordiel Shannon James Danielle Smith Allison Strickland Lauren Yoho
Monday March 29 1:45-2:15 p.m. NMCM 161B	Director of Assessment	Jewell Askins JoAnne Carver Diane Simon	Dr. Deborah Moore

Date/Time/Place of Meeting	Person/Group interviewed	Virginia Department of Education (VDOE) On-site Review Team Members	Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants
Monday March 29 2:30-3:15 p.m. NMCM	University Supervisors	JoAnne Carver Jurgen Combs Glenn Koonce Peggy Schimmoeller	Wendy Barrick Martha Bauer Cindy Connell Michelle Grau Marilee Hawkins Wanda Malette Gloria Newby Ken Noland Cecelia Owens-Graves Jean Stevens Bob Sulzberger Lois Winter
Monday March 29 2:30-3:15 p.m. TBD	EEO Officer/ Faculty Recruitment	Jewell Askins Diane Simon	Ms. Michelle Moody
Tuesday, March 30 10:15-10:45 a.m. B. C. Charles Elementary School	Cooperating Teachers B. C. Charles Elementary School	Jewell Askins	Kay Dawson Irene Koutsogiannis Adia Charley
Tuesday, March 30 10:15-10:45 a.m. Gildersleeve Middle School	Cooperating Teachers Gildersleeve Middle School	Jurgen Combs	Chris Carter Mary Parrish
Tuesday, March 30 10:15-10:45 a.m. Woodside High School	Cooperating Teachers, Woodside High School	JoAnne Carver	Melissa Baird Chris Montgomery Kate McGaw Tammy Sealy Judith Griggs
Tuesday, March 30 10:45-11:15 a.m. B. C. Charles Elementary School	Interns B. C. Charles Elementary School	Jewell Askins	Jessica Jones Melody Weaver Lindsay Kelly
Tuesday, March 30 10:45-11:15 a.m. Gildersleeve Middle School	Interns Gildersleeve Middle School	Jurgen Combs	Laura Jones Kayla Miller

Date/Time/Place of Meeting	Person/Group interviewed	Virginia Department of Education (VDOE) On-site Review Team Members	Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants
Tuesday, March 30 10:45-11:15 a.m. Woodside High School	Interns Woodside High School	JoAnne Carver	Jocelyn Carver Nathan Fesmire Katie Lantz Jessica Martin Linsey Pantele Cara Walter
Tuesday, March 30 10:15-10:45 a.m. B. C. Charles Elem	Administrator B. C. Charles	Jewell Askins	John Tupponce, Principal
Tuesday, March 30 10:15-10:45 a.m. Gildersleeve Middle School	Administrator Gildersleeve Middle School	Jurgen Combs	Aaron Smith, Assistant Principal
Tuesday, March 30 10:15-10:45 a.m. Woodside High School	Administrator Woodside High School	JoAnne Carver	Susan Tilley, Principal
Tuesday, March 30 1:15-2:00 p.m. ADMN 125	Director and Associate Director, Undergraduate Admissions	Jurgen Combs	Curtis Davidson
Tuesday, March 30 1:15-2:00 p.m. TBD	Facilitators, Early Field Experiences	Peggy Schimmoeller	Gil Crippen Deb Farina Rita Kohr Jackie Sykes
Tuesday, March 30 2:30-3:00 p.m. NMCM 161A	Open Meeting for MAT Faculty	Jewell Askins JoAnne Carver Jurgen Combs	Gayle Dow Jean Filetti Sherman Lee Pat Hopkins Kevin Shortsleeves
Tuesday, March 30 3:45-4:45 p.m. DSU, Madison Room	Steering Committee of the Teacher Preparation Council	Jewel Askins Jurgen Combs	Mary Evans, student Deborah Farina, Associate Director of Field Experiences Stavroula Gailey, Faculty Roark Mulligan, Faculty Marsha Sprague, TPP Director Linda Waldron, Faculty
Tuesday, March 30	Classroom	JoAnne Carver	Kevin Shortsleeve

Date/Time/Place of Meeting	Person/Group interviewed	Virginia Department of Education (VDOE) On-site Review Team Members	Christopher Newport University (CNU) and Newport News Public Schools (NNPS) Participants
4-4:45 p.m. NMCM 260	Observation ENGL 514		
Wednesday, March 31 11: 00-11:30 a.m. ADMN, Office of the President	Exit Interview	Jurgen Combs JoAnne Carver	President Paul Trible Marsha Sprague Kelly Cartwright

Evidence List

Evidence List

All evidence for Standards 1 through 4, including Standards boxes and document notebooks, is located on the bookshelves in the Evidence Room.

Standard 1 Evidence Box:

The box includes:

1. *Teacher Preparation Policy Manual*
2. *Student Teaching Handbook* (2009-2010)
3. *Field Experience Handbook*
4. *MAT Student Handbook*
5. *Graduate Catalog* (2009-2010)
6. *Undergraduate Catalog* (2009-2010)
7. *Field Experience Charts* (Competency 6 folder)
8. *Newport News Partnership Agreement* (Competency 6 folder)

Standard 2 Evidence Box:

The box includes:

1. *Student Teaching Handbook* (2009-2010)
2. *Graduate Catalog* (2009-2010)
3. *Undergraduate Catalog* (2009-2010)
4. *Teacher Preparation Program Policy Manual*

Standard 3 Evidence Box:

The box includes:

1. *MAT Faculty Handbook* (2009
2. *Field Experience Handbook*
3. *University Handbook* (2009-2010)

Standard 4 Evidence Box:

The box includes:

1. *Conditions for Qualifying Report*
2. *Graduate Catalog* (2009-2010)
3. *Undergraduate Catalog* (2009-2010)
4. *Teacher Preparation Program Policy Manual*
5. *MAT Student Handbook*

Documentation Found in Notebooks:

All notebooks may be found on the bookshelves in the Evidence Room.
MAT Faculty Vitae Notebook

- Full-time Faculty

  - Dr. Robert Atkinson
  - Dr. Gayle Dow
  - Dr. Kelly Cartwright
  - Dr. William Connell
  - Dr. Jean Filetti
  - Dr. Lauren Fowler-Calisto
  - Denise Gillman
  - Michelle Grau
  - Dr. Shelia Greenlee
  - Dr. George Hillow
  - Dr. Rachel Holland
  - Dr. Kara Keeling
  - Dr. Stavroula Kostaki-Gailey
  - Dr. Keith Koster
  - Dr. Sherman Lee
  - Gregg Lloyd
  - Dr. Mario Mazzarella
  - Dr. Roark Mulligan
  - Dr. Brian Puaca
  - Dr. Laura Puaca
  - Dr. Mark Reimer
  - Dr. Roberta Rosenberg
  - Dr. Anthony Santoro
  - Dr. Nigel Sellars
  - Dr. Kevin Shortsleeve
  - Dr. Peter Snow
  - Dr. Marsha Sprague
  - Dr. Danielle Velardi
  - Dr. Linda Waldron
  - Dr. Lisa Webb
  - Dr. Rebecca Wheeler
  - Dr. Mary Wright

- **Adjunct Faculty**

  - Margaret Bowen
  - Cynthia Connell
  - Gilbert Crippen
  - Dr. Joseph Emerson
  - Deborah Farina

- Courtney Frantz
- Billie Hetrick
- Rita Kohr
- Dr. Linda Morgan
- Dr. Judy Pantelides
- William Pearson
- Sue Rayfield
- Jean Stevens
- Robert Sulzberger
- Jacqueline Sykes
- Shirley Sypolt
- Dr. Lourdes Travioso-Parker
- Dr. Richard Weber

- **Student Teacher Supervisor K-12 Experiences Chart**

- **University Supervisors (not including those who may also be course adjuncts)**

  - Susan Booth
  - Dr. John Galloway
  - Marilee Hawkins
  - Wanda Mallette
  - Cecelia Owens-Graves
  - Julie Walker
  - Bonnie Williams
  - Lois Winter

- ***Teacher Preparation Council Minutes Notebook***

  Contains all minutes from TPC meetings 2005-present. Also includes Annual Goals for the Teacher Preparation Program.

- ***MAT Documents Notebook***

  - Audit Form
  - Faculty Evaluation Form (Eval-6)
  - CNU Vision 2010
  - Foundations of Liberal Learning
  - IT Services Strategic Plan
  - Teacher Preparation Program Budget
  - Newport News Partnership Agreement
  - Dean's Office Grant
  - Field Experience Evaluation forms (excluding student teaching)
  - Charlotte Danielson permission
  - Technology Matrix
  - Teacher Work Sample
  - Trible Library Information

- Biology 538/Apprenticeship in Teaching Biology
- Communication 201/Public Speaking
- Computer Science 110/Introduction to Computing
- Computer Science 580/Technology for Teachers
- English 123/Writing Seminar I
- ULLC 223/College Writing II
- English 310/Introduction to Linguistics
- English 314W/Children's Literature
- English 430/The Structure of English
- English 501/Teaching Literature
- English 511/Teaching English to Speakers of Other Languages
- English 514/Critical Readings of Children's Literature
- English 521/Teaching Composition
- English 532/Language Varieties in American Schools
- Fine Arts 534/Theory and Practice of Art Education
- Fine Arts 535/Integrating the Visual Arts
- Fine Arts 589/Teaching Crafts
- French 403/503/Advanced Writing and Stylistics
- Geography 595/World Geography for Teachers
- Government 570/Methods for Teaching Social Studies
- History 515/The Byzantine Empire
- History 472/572/The History of Virginia
- History 495/595/Women and Social Movements in U.S. History
- History 495/595/Atlantic World Encounters
- History 480/595/The United States as a World Power
- History 595/The Great Depression
- Math 538/Apprenticeship in Teaching Mathematics
- Math 570/The Study of Mathematics
- Math 578/Elementary Geometry from an Advanced Viewpoint
- Music 510/Measurement and Evaluation in Music Education
- Music 530/Wind Literature and Conducting
- Music 533-534/Applied Choral Conducting
- Music 537/Music in the Elementary School
- Music 538/Foundations of Music Education
- Music 550/Secondary Instrumental Methods
- Music 596/Vocal Pedagogy
- Natural Science 310/Exploring Science Concepts
- Psychology 207/Lifespan Development
- Psychology 208/Child Development
- Psychology 312/Educational Psychology
- Psychology 521/Reading Acquisition and Development
- Psychology 535/The Exceptional Learner
- Sociology 314L/Lab: Education, Culture, and Society
- Sociology 314: Education, Culture, and Society
- Sociology 501/Multiculturalism, Diversity, and Education

- Spanish 538/Apprenticeship in Teaching
- Teaching 516/Curriculum and Instruction
- Teaching 543/Classroom Management and Discipline
- Teaching 550/Teaching Across Cultures
- Theater 550/Stage Management
- Theater 561/The One Act Play
- Theater 468/568/Playwriting Seminar

- ***Evaluations of University Supervisors Notebook***

  Contain written evaluations of university supervisors, 2005-present. Also contains aggregated student teacher evaluations of university supervisors.

- ***Field Experiences Evaluation Notebook***

  - Evaluations for Undergraduate Courses:
  - Soc 314L/Education, Culture, and Society Lab
  - Psyc 312/Educational Psychology
  - Evaluations for Graduate Courses
  - Math 570/Teaching Math
  - Eng 532/Language Varieties
  - Psyc 532/Reading Acquisition
  - Eng 522/Content Area Reading
  - Tchg 516/Curriculum and Instruction
  - Student Teaching Internship
  - Graduate Exit Surveys of Student Teaching Internship

- ***Course/Instructional Evaluation Notebook***

  - <u>2005</u>

    - Psyc 521/Reading Acquisition
    - Psyc 535/Exceptional Learner
    - Tchg 516/Curriculum and Instruction
    - Tchg 543/Classroom Management
    - Soc 501/Multiculturalism and Diversity

  - <u>2006</u>

    - Soc 314/Education, Culture, and Society
    - Soc 314L/Education, Culture, and Society Lab
    - Tchg 516/Curriculum and Instruction
    - Tchg 543/Classroom Management

- 2007

  - CPSC 580/Technology for Teachers
  - Tchg 595/Multiculturalism and Diversity
  - Tchg 516/Curriculum and Instruction
  - Tchg 543/Classroom Management
  - Eng 532/Language Varieties
  - Eng 522/Content Area Reading

- 2008

  - Psyc 521/Reading Acquisition
  - Tchg 516/Curriculum and Instruction
  - Tchg 543/Classroom Management
  - Soc 314/Education, Culture, and Society
  - NSCI 310/Exploring Natural Science
  - Hist 595/Advanced Topics in History
  - Eng 315/Adolescent Literature

- 2009

  - Tchg 550/Teaching Across Cultures
  - Soc 501/Multiculturalism and Diversity
  - Geog 595/Teaching Geography
  - Eng 501/Teaching Literature
  - Tchg 516/Curriculum and Instruction
  - Tcgh 543/Classroom Management
  - Psyc 535/Exceptional Learner
  - NSCI 310/Exploring Natural Science
  - CPSC 580/Technology for Teachers
  - Hist 595/Advanced Topics in History
  - Psyc 312/Educational Psychology
  - Psych 521/Reading Acquisition
  - Govt 570/Methods for Teaching Social Studies

- **Program Evaluation/Annual Reports Notebook**

  - *Five-Year Summary Data*
  - *Quick Summary Evaluation of TPP*
  - *Annual Reports: Newport News School Board and Dean*
  - *Three-year Program Reports*
  - *Student Teacher Evaluation of Program*
  - Copies of *Field Experience Forms*
  - *Comparison of Supervisor and Cooperating Teacher Evaluations of Students*
  - *Employer Surveys of 1st Year Teachers*
  - *Summary of VRA Scores*
  - *Praxis II Recipients of "Excellent" Scores*

- *Praxis II Institutional Reports*
- *VITAL 2008 Program Completer Exit Survey*
- Unsolicited Testimonies

- **Other Evaluations 2005-Present**

  - *University Supervisor Evaluation of Program*
  - *Cooperating Teacher Evaluation of Program*
  - *Administrative Evaluation of Student Teaching*
  - Informal and Other Evaluations

- ***MAT Faculty Publications Notebooks: A-L and M-Z***

  A complete listing of all publications is in the front of the notebooks under the Works Cited tab.

- ***Approved Program Notebook***

  Contains all state-approved matrices for endorsements in 5-year, MAT with licensure, and licensure-only programs.

- Biennial Reporting Notebook

  - *Standards for Biennial Approval of Education Programs/Program Compliance Certification*
  - Biennial Reporting: Standard One
  - Biennial Reporting: Standard Two
  - Biennial Reporting: Standard Three A
  - Biennial Reporting: Standard Three B
  - Biennial Reporting: Standard Four
  - Biennial Reporting: Standard Five

- **Documentation of How CNU Implemented the Corrective Plan of Action to Address Identified Weaknesses Within the Standards and 2010 Update**

  Contain information and documentation related to program weaknesses noted upon last accreditation visit and corrective measures taken.

- ***Work Sample Notebooks***

  Contain elementary, middle, and secondary examples of the Teacher Work Sample conducted by student teachers in 2009.

- ***Field Experience Sample 2009 Notebook***

  Contains samples of student reflective journals from the Soc 314 Lab/Education, Culture, and Society

- **Other Evidence**

  - Box with advising sheets for each program/endorsement area
  - Hard copies of all handbooks/catalogs referenced in the *Institutional Report*

Board of Education Agenda Item

Item: O. **Date:** November 18, 2010

Topic: Final Review of a Recommendation of the Advisory Board on Teacher Education and Licensure (ABTEL) to Approve the Accountability Measurement of Partnerships and Collaborations Based on PreK-12 School Needs Required by the *Regulations Governing the Review and Approval of Education Programs in Virginia*

Presenter: Mrs. Patty S. Pitts, Assistant Superintendent, Division of Teacher Education and Licensure

Telephone Number: (804) 371-2522 **E-Mail Address:** Patty.Pitts@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- ____ State or federal law or regulation
- _X_ Board of Education regulation
- ____ Other: _____

_X_ Action requested at this meeting ____ Action requested at future meeting: _____

Previous Review/Action:

____ No previous board review/action

_X_ Previous review/action
date: October 28, 2010
action: The Board of Education accepted this item for first review.

Background Information:

Thirty-seven institutions of higher education in Virginia have approved programs for the preparation of instructional personnel. Nineteen of the 37 institutions also have approved programs for the preparation of administrative and supervision preK-12 personnel.

Section 8VAC20-542-40--Standards for biennial approval of education programs of the *Regulations Governing the Review and Approval of Education Programs in Virginia* require that approved education programs in Virginia shall have national accreditation or be accredited by a process approved by the Board of Education and demonstrate achievement biennially of the following accountability measures:

1. Candidate progress and performance on prescribed Board of Education licensure assessments. Candidate passing rates, reported by percentages, shall not fall below 70 percent biennially for individuals completing and exiting the program. Achievement of an 80 percent biennial passing rate shall be required by July 1, 2010. Candidates completing a program shall have successfully completed all coursework, required assessments, including those prescribed by the Board of Education, and supervised student teaching or internship. Candidates exiting a program shall

have successfully completed all coursework, regardless of whether the individuals attempted, passed, or failed required assessments, including those prescribed by the Board of Education, and/or who may not have completed supervised student teaching or required internship.

2. Candidate progress and performance on an assessment of basic skills as prescribed by the Board of Education for individuals seeking entry into an approved education preparation program.

3. Structured and integrated field experiences to include student teaching requirements.

4. Evidence of opportunities for candidates to participate in diverse school settings that provide experiences with populations that include racial, economic, linguistic, and ethnic diversity throughout the program experiences.

5. Evidence of contributions to preK-12 student achievement by candidates completing the program.

6. Evidence of employer job satisfaction with candidates completing the program.

7. Partnerships and collaborations based on preK-12 school needs. Indicators of the achievement of this standard shall include the following:

    a. Documented evidence that the education program has established partnerships reflecting collaboratively designed program descriptions based on identified needs of the preK-12 community.

    b. Documented evidence that the administration and supervision program collaborates with partnering schools to identify and select candidates for school leadership programs who meet local needs, demonstrate both potential for and interest in school leadership, and meet the qualifications for admission to advanced programs.

The biennial data (item 1 above) and certification that items 2-6 have been met will be submitted by institutions of higher education in 2011. The established timeline requires that the seventh measure on "**partnerships and collaborations based on preK-12 school needs**" is to be reviewed and approved by December 2010.

Summary of Major Elements:

Each institution offering approved education preparation programs in Virginia submitted to the Department of Education a report documenting partnerships and collaborations based on preK-12 school needs for each program (endorsement) area offered. The institutions reported that they are engaged in multiple partnerships and collaborations with educational, governmental, professional, and community entities as well as with school divisions, private schools, parents, and preK-12 students. Attached is a summary of the partnerships and collaborations.

Approved Programs (Excluding Administration and Supervision)

Each of the 37 institutions of higher education offering approved programs submitted evidence that they had established partnerships and collaborations in the following categories:

1. **Field experience**: The partnerships and collaborations address experiences, such as internships, practica, clinical experience, student teaching, field placements, mentors for teachers, and tutoring preK-12 students.

2. **Professional development**: The partnerships and collaborations include staff development, research grants, workshops, training, conferences, best practices, strategy and method development, curriculum development, course offerings, and career development.

3. **Community outreach activities**: The partnerships and collaborations include after-school and summer programs and camps, field trips, mentors for preK-12 students, educational fairs, enrichment programs, cultural experiences and exchange, college visitations and transition, assessments and screening, and other extracurricular activities.

Administration and Supervision Programs

The 19 institutions of higher education offering administration and supervision programs submitted evidence that they had established partnerships and collaborations in the following areas:

1. Identifying, screening, and recruiting potential school leaders;

2. Preparing, training, and mentoring school leaders;

3. Providing professional development for school leaders; and

4. Offering internships, practica, and field experiences in school leadership.

On October 4, 2010, the Advisory Board on Teacher Education and Licensure recommended that the Board of Education approve the accountability measurement of partnerships and collaborations based on preK-12 school needs required by the *Regulations Governing the Review and Approval of Education Programs in Virginia* for each of the 37 institutions of higher education offering approved programs.

Superintendent's Recommendations:

1. The Superintendent of Public Instruction recommends that the Board of Education approve the Advisory Board on Teacher Education and Licensure's recommendation to approve the accountability measurement of partnerships and collaborations based on preK-12 school needs required by the *Regulations Governing the Review and Approval of Education Programs in Virginia* for The College of William and Mary.

2. The Superintendent of Public Instruction recommends that the Board of Education approve the Advisory Board on Teacher Education and Licensure's recommendation to approve the accountability measurement of partnerships and collaborations based on preK-12 school needs required by the *Regulations Governing the Review and Approval of Education Programs in Virginia* for The University of Virginia and The University of Virginia's College at Wise.

3. The Superintendent of Public Instruction recommends that the Board of Education approve the Advisory Board on Teacher Education and Licensure's recommendation to approve the accountability measurement of partnerships and collaborations based on preK-12 school needs required by the *Regulations Governing the Review and Approval of Education Programs in Virginia* for all other colleges and universities with approved programs.

Impact on Resources:

There is minimal impact on resources.

Timetable for Further Review/Action:

Not applicable.

Commonwealth of Virginia
Department of Education

Report on the Accountability Measurement of Partnerships and Collaborations for Approved Teacher Education Programs

Presented to the Board of Education on
October 28, 2010, and November 18, 2010

Table of Contents

EXECUTIVE SUMMARY ..... PAGE 1

TABLE 1: ACCOUNTABILITY OF PARTNERSHIPS AND COLLABORATIONS BASED ON PREK-12 SCHOOL NEEDS FOR APPROVED TEACHER EDUCATION PROGRAMS ..... TABLE 1- PAGE 1 OF 1

TABLE 2: ACCOUNTABILITY OF PARTNERSHIPS AND COLLABORATIONS FOR APPROVED ADMINISTRATION AND SUPERVISION PROGRAMS ..... TABLE 2 - PAGE 1 OF 1

APPENDICES:

SURVEY INSTRUMENT FOR ACCOUNTABILITY MEASUREMENT OF PARTNERSHIPS AND COLLABORATIONS

PART 1: EDUCATION PROGRAMS ..... PART 1 - PAGE 1 OF 1

PART 2: EDUCATION PROGRAM MATRIX ..... PART 2 - PAGE 1 OF 1

PART 3: ADMINISTRATION AND SUPERVISION PROGRAMS ..... PART 3 - PAGE 1 OF 1

PARTNERSHIPS AND COLLABORATIONS FOR VIRGINIA COLLEGES AND UNIVERSITIES

Executive Summary

Introduction

There are 37 institutions of higher education in Virginia with approved programs for the preparation of preK-12 instructional personnel. Nineteen of the 37 institutions also have approved programs for the preparation of administrative and supervision preK-12 personnel. (Reference Table 1.)

The review and approval of programs for the preparation of professional school personnel are a cooperative responsibility of institutions of higher education, school divisions, and the Department of Education. Programs are reviewed biennially and must demonstrate achievement of the accountability measures set forth in the *Regulations Governing the Review and Approval of Education Programs in Virginia,* 8VAC20-542-40.

This report specifically addresses the progress of the institutions of higher education in achieving accountability measures regarding ***partnerships and collaborations based on preK-12 school needs***, i.e., measures 7.a and 7.b., as part of the biennial review administered during the 2009-2011 time period.

Part 1 – Education Programs - Accountability Measure 7.a

Approved education programs in Virginia shall demonstrate achievement of partnerships and collaborations by providing documented evidence that the education program has established partnerships reflecting collaboratively designed program descriptions based on identified needs of the preK-12 community (8VAC20-542-40.7.a).

Summary Review of Results:

In July 2010, each of the 37 institutions of higher education electronically submitted evidence to the Virginia Department of Education that they had established partnerships and collaborations. The following information was provided for each of the partnerships and collaborations: name, description, prek-12 school needs addressed, partners and collaborators, agreement type, and participating content area approved program(s). (Refer to the survey instrument in the appendices, "*Part 1: Education Programs*" and "*Part 2: Education Programs Matrix.*")

Based on the documents submitted by the institutions, each of the institutions are engaged in multiple partnerships and collaborations with educational, governmental, professional, and social entities as well as with school divisions, private schools, parents, and prek-12 students.

The type of partnerships and collaborations fall into following three general categories:

1) Field experience – The partnerships and collaborations (PCs) address the identified needs of the preK-12 community via such activities as internships, practica, clinical experience, student teaching, field placements, mentors for teachers, and tutoring preK-12 students.

2) Professional development – The PCs address the identified needs of the preK-12 community via staff development, research grants, workshops, training, conferences, best practices, strategy and method development, curriculum development, course offerings, and career development.

3) Community outreach activities – The PCs address the identified needs of the preK-12 community via after school and summer programs and camps, field trips, mentors for preK-12 students, educational fairs, enrichment programs, cultural experiences and exchange, college visitations and transition, assessments and screening, and other extracurricular activities.

There were a total of 962 partnerships and collaborations identified by the institutions. Approximately, 45 percent were in the field experience category; 41 percent were in the professional development category; and 14 percent were in the outreach activities category.

All of the institutions had at least one partnership and collaboration per each of their content area approved teaching program. In addition, 92 percent of all of the content area approved programs are engaged in two or more partnerships and collaborations. (Reference Table 1.)

Part 2 – Administration and Supervision Programs - Accountability Measure 7.b

Approved education programs in Virginia shall demonstrate achievement of partnerships and collaborations by providing documented evidence that the administration and supervision program collaborates with partnering schools to identify and select candidates for school leadership programs who meet local needs, demonstrate both potential for and interest in school leadership, and meet the qualifications for admission to advanced programs (8VAC20-542-40.7.b).

Summary Review of Results:

In July 2010, each of the 19 institutions of higher education that offer an administration and supervision program electronically submitted evidence to the Virginia Department of Education that they had established partnerships and collaborations. The following information was provided for each of the partnerships and collaborations: name, description, school leadership needs addressed, partners and collaborators, and agreement

type. (Refer to the survey instrument in the appendices, "*Part 3: Administration and Supervision Programs.*")

The types of partnerships and collaborations identified by the institutions were inclusive of:

- identifying, screening, and recruiting potential school leaders;
- preparing, training, and mentoring school leaders;
- providing professional development for school leaders; and
- offering internships, practica, and field experiences in school leadership.

Overall, based on the documents submitted by the institutions:

- 102 partnerships and collaborations are identified.
- Each of the institutions is engaged in at least one partnership and collaboration.
- 15 out of 19 of the institutions are engaged in more than one partnership and collaboration.

Table 1

Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs for Approved Teacher Education Programs (excluding Administration and Supervision Programs)

Institutions of Higher Education (IHE) that have Approved Teacher Education Programs	Number of "Partnerships and Collaborations" Reported (July 2010)	Number of Approved Programs* (as of July 2010)	Percentage of IHE Approved Programs that took part in at least one "Partnership and Collaboration"	Percentage of IHE Approved Programs that took part in two or more "Partnerships and Collaborations"
Averett University	10	13	100%	100%
Bluefield College	5	14	100%	100%
Bridgewater College	19	19	100%	100%
Christopher Newport University	10	15	100%	100%
The College of William and Mary	17	21	100%	100%
Eastern Mennonite University	22	19	100%	95%
Emory & Henry College	8	22	100%	100%
Ferrum College	5	16	100%	100%
George Mason University	144	32	100%	69%
Hampton University	10	11	100%	91%
Hollins University	4	12	100%	100%
James Madison University	112	30	100%	97%
Liberty University	20	26	100%	100%
Longwood University	53	27	100%	81%
Lynchburg College	37	21	100%	100%
Mary Baldwin College	17	17	100%	100%
Marymount University	19	13	100%	100%
Norfolk State University	17	23	100%	78%
Old Dominion University	131	33	100%	100%
Radford University	23	25	100%	100%
Randolph College	16	19	100%	100%
Randolph-Macon College	8	13	100%	62%
Regent University	36	6	100%	50%
Roanoke College	10	19	100%	100%
Saint Paul's College	10	7	100%	100%
Shenandoah University	5	18	100%	100%
Sweet Briar College	22	17	100%	100%
University of Mary Washington	20	27	100%	100%
University of Richmond	6	18	100%	94%
University of Virginia	27	24	100%	92%
University of Virginia's College at Wise	20	17	100%	100%
Virginia Commonwealth University	22	23	100%	61%
Virginia Intermont University	17	8	100%	100%
Virginia Polytechnic Institute and State University	15	23	100%	48%
Virginia State University	27	16	100%	94%
Virginia Union University	7	8	100%	100%
Virginia Wesleyan College	11	13	100%	100%
Total - All IHE	**962**	**685**	**100%**	**92%**

**** Notes:***

a) Content area "Visual Impairment PreK-12" reflects program activities as members of the Visual Impairment Consortium and are not included in this count. George Mason University, James Madison University, Norfolk State University, Old Dominion University, and Radford University are consortium members.

Table 2

Accountability Measurement of Partnerships and Collaborations for Approved Administration and Supervision Programs

Institutions of Higher Education (IHE) that have an Approved Administration and Supervision Program	Number of Partnerships and Collaborations Reported (July 2010)
The College of William and Mary	5
George Mason University	7
Hampton University	3
James Madison University	1
Liberty University	7
Longwood University	1
Lynchburg College	2
Marymount University	14
Norfolk State University	1
Old Dominion University	3
Radford University	7
Regent University	5
Shenandoah University	1
University of Mary Washington	3
University of Richmond	5
University of Virginia	3
Virginia Commonwealth University	9
Virginia Polytechnic Institute and State University	7
Virginia State University	18
Total - All IHE	**102**

APPENDICES

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: _____
Contact Person: _____
Phone No.: _____
Reporting Date: _____

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: _____

Contact Person: _____

Phone No.: _____

Reporting Date: _____

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Other Foreign Language PreK-12*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Hearing Impairments PreK-12*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Early Childhood 3-4 Yr Olds (add-on endorseme*	*Gifted Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*	*Speech Communication (add-on endorsement)*
No.	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																													
1.																																															
2.																																															
3.																																															
4.																																															
5.																																															
6.																																															
7.																																															
8.																																															
9.																																															
10.																																															

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: _____
Contact Person: _____
Phone No.: _____
Date: _____

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Averett University
Contact Person: Lynn Wolf
Phone No.: (434) 773-3995
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Caswell County, NC Public Schools, and Averett University Education Department Partnership	Averett provides: licensure renewal courses, workshops, tutoring, endorsement programs, licensed teachers, grant partnering, facilities, consultation, Teachers for Tomorrow visits, educational consultation, advising, expertise, tuition assistance, and master's degree programs. School division provides: field placements for observations, teacher aiding, teacher assisting, tutoring, student teacher workshops, tuition and recruitment assistance, and grant partnering.	Licensed teachers, grant partners, SOL improvement, licensure renewal courses, points, stipends, add-on endorsements, master's degrees, in-service workshops, use of Averett facilities, college visits and competency acquisition, Teachers for Tomorrow, new endorsement programs or graduate cohorts as requested, driver education, gifted endorsement, mathematics MED, reading specialist MED, autism spectrum disorders training, and board membership.	Dr. Douglas Barker Division Superintendent Caswell County Public Schools	Yes
2.	Danville City, VA Public Schools, and Averett University Education Department Partnership	Averett provides: licensure renewal courses, workshops, tutoring, endorsement programs, licensed teachers, grant partnering, facilities, consultation, Teachers for Tomorrow visits, educational consultation, advising, expertise, tuition assistance, and master's degree programs. School division provides: field placements for observations, teacher aiding, teacher assisting, tutoring, student teacher workshops, tuition and recruitment assistance, and grant partnering.	Licensed teachers, grant partners, SOL improvement, licensure renewal courses, points, stipends, add-on endorsements, master's degrees, in-service workshops, use of Averett facilities, college visits and competency acquisition, Teachers for Tomorrow, new endorsement programs or graduate cohorts as requested, driver education, gifted endorsement, mathematics MED, reading specialist MED, autism spectrum disorders training, and board membership.	Dr. Sue Davis Division Superintendent Danville City Public School	Yes
3.	Halifax County, VA Public Schools, and Averett University Education Department Partnership	Averett provides: licensure renewal courses, workshops, tutoring, endorsement programs, licensed teachers, grant partnering, facilities, consultation, Teachers for Tomorrow visits, educational consultation, advising, expertise, tuition assistance, and master's degree programs. School division provides: field placements for observations, teacher aiding, teacher assisting, tutoring, student teacher workshops, tuition and recruitment assistance, and grant partnering.	Licensed teachers, grant partners, SOL improvement, licensure renewal courses, points, stipends, add-on endorsements, master's degrees, in-service workshops, use of Averett facilities, college visits and competency acquisition, Teachers for Tomorrow, new endorsement programs or graduate cohorts as requested, driver education, gifted endorsement, mathematics MED, reading specialist MED, autism spectrum disorders training, and board membership.	Mr. Paul Stapleton Division Superintendent Halifax County Public Schools	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Averett University
Contact Person: Lynn Wolf
Phone No.: (434) 773-3995
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
4.	Henry County, VA Public Schools, and Averett University Education Department Partnership	Averett provides: licensure renewal courses, workshops, tutoring, endorsement programs, licensed teachers, grant partnering, facilities, consultation, Teachers for Tomorrow visits, educational consultation, advising, expertise, tuition assistance, and master's degree programs. School division provides: field placements for observations, teacher aiding, teacher assisting, tutoring, student teacher workshops, tuition and recruitment assistance, and grant partnering.	Licensed teachers, grant partners, SOL improvement, licensure renewal courses, points, stipends, add-on endorsements, master's degrees, in-service workshops, use of Averett facilities, college visits and competency acquisition, Teachers for Tomorrow, new endorsement programs or graduate cohorts as requested, driver education, gifted endorsement, mathematics MED, reading specialist MED, autism spectrum disorders training, and board membership.	Dr. Sharon Dodson Division Superintendent Henry County Public Schools	Yes
5.	Martinsville City, VA Public Schools, and Averett University Education Department Partnership	Averett provides: licensure renewal courses, workshops, tutoring, endorsement programs, licensed teachers, grant partnering, facilities, consultation, Teachers for Tomorrow visits, educational consultation, advising, expertise, tuition assistance, and master's degree programs. School division provides: field placements for observations, teacher aiding, teacher assisting, tutoring, student teacher workshops, tuition and recruitment assistance, and grant partnering.	Licensed teachers, grant partners, SOL improvement, licensure renewal courses, points, stipends, add-on endorsements, master's degrees, in-service workshops, use of Averett facilities, college visits and competency acquisition, Teachers for Tomorrow, new endorsement programs or graduate cohorts as requested, driver education, gifted endorsement, mathematics MED, reading specialist MED, autism spectrum disorders training, and board membership.	Dr. Scott Kinzer Division Superintendent Martinsville City Public Schools	Yes
6.	Patrick County, VA Public Schools, and Averett University Education Department Partnership	Averett provides: licensure renewal courses, workshops, tutoring, endorsement programs, licensed teachers, grant partnering, facilities, consultation, Teachers for Tomorrow visits, educational consultation, advising, expertise, tuition assistance, and master's degree programs. School division provides: field placements for observations, teacher aiding, teacher assisting, tutoring, student teacher workshops, tuition and recruitment assistance, and grant partnering.	Licensed teachers, grant partners, SOL improvement, licensure renewal courses, points, stipends, add-on endorsements, master's degrees, in-service workshops, use of Averett facilities, college visits and competency acquisition, Teachers for Tomorrow, new endorsement programs or graduate cohorts as requested, driver education, gifted endorsement, mathematics MED, reading specialist MED, autism spectrum disorders training, and board membership.	Mr. Roger Morris Division Superintendent Patrick County Public Schools	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Averett University
Contact Person: Lynn Wolf
Phone No.: (434) 773-3995
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	Pittsylvania County, VA Public Schools, and Averett University Education Department Partnership	Averett provides: licensure renewal courses, workshops, tutoring, endorsement programs, licensed teachers, grant partnering, facilities, consultation, Teachers for Tomorrow visits, educational consultation, advising, expertise, tuition assistance, and master's degree programs. School division provides: field placements for observations, teacher aiding, teacher assisting, tutoring, student teacher workshops, tuition and recruitment assistance, and grant partnering.	Licensed teachers, grant partners, SOL improvement, licensure renewal courses, points, stipends, add-on endorsements, master's degrees, in-service workshops, use of Averett facilities, college visits and competency acquisition, Teachers for Tomorrow, new endorsement programs or graduate cohorts as requested, driver education, gifted endorsement, mathematics MED, reading specialist MED, autism spectrum disorders training, and board membership.	Mr. James McDaniel Division Superintendent Pittsylvania County Public Schools	Yes
8.	Danville Science Center and Averett University	Averett University provides: grant partnering, facilities, faculty for grant courses, educational consultation, assistance with marketing of grant courses, college credits for participants, and processing of participant admission and grades. Danville Science Center provides: facilities, grant writing and implementation assistance, faculty to teach courses, marketing of grant offerings, tuition assistance through grant monies, and additional students for Averett's programs.	Licensure renewal courses, courses to enhance SOL instruction in the sciences, grades K-12; and networking possibilities for regional teachers.	Dr. Jeff Liverman, Director, Danville Science Center	Yes
9.	Institute of Advanced Learning and Research (IALR)	Averett University provides: grant and workshop partnering, facilities, faculty for grant courses and workshops, assistance with marketing of workshops and courses, and college credit for participants, if applicable. Institute of Advanced Learning and Research provides: facilities, grant writing and implementation assistance for offerings, faculty to teach courses and workshops, marketing of offerings, and tuition assistance.	Courses and workshops for licensure renewal and to enhance SOL instruction in the sciences and technology, grades K-12; and networking opportunities for regional teachers.	Julie Brown, Director of Academic Outreach Programs Institute of Advanced Learning and Research	Yes
10.	Danville Museum of Fine Arts and History (DMFAH)	Averett University provides: students to visit the museum, take tours, and experience the guest speakers from Danville Museum of Fine Arts and History. Danville Museum of Fine Arts and History provides: unique experiences and tours associated with history and art, and written information on SOL connections for all grade levels.	Enhancement of SOL instruction in the areas of art and history.	Patsi Compton, Education Coordinator Danville Museum of Fine Arts and History	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Averett University
Contact Person: Lynn Wolf
Phone No.: (434) 773-3995
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Reading Specialist*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Driver Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Speech Communication (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.												
1.	Caswell County, NC Public Schools, and Averett University Education Department Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Danville City, VA Public Schools, and Averett University Education Department Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Halifax County, VA Public Schools, and Averett University Education Department Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	Henry County, VA Public Schools, and Averett University Education Department Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	Martinsville City, VA Public Schools, and Averett University Education Department Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X
6.	Patrick County, VA Public Schools, and Averett University Education Department Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	Pittsylvania County, VA Public Schools, and Averett University Education Department Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Danville Science Center and Averett University	X									X			
9.	Institute of Advanced Learning and Research (IALR)	X					X			X	X			
10.	Danville Museum of Fine Arts and History (DMFAH)	X		X					X					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Averett University
Contact Person: Lynn Wolf
Phone No.: (434) 773-3995
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Bluefield College
Contact Person: Dr. Donna H. Watson
Phone No.: (276) 326-4475
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Tazewell County Public Schools	Undergraduate students seeking teacher licensure in PreK-6, 6-12, and PreK-12 are placed each semester in the public schools for field experience courses and for student teaching with classroom teachers serving as mentors. Students observe in the classrooms, help with planning and preparation, and teach large and small groups.	Formal and informational feedback from local principals and teachers indicate areas of emphasis for first year teachers to include classroom management, SOL assessment, technology, and parent involvement. Students often assist mentor teachers with technology tools.	Tazewell County Public Schools	Yes
2.	Bland County Public Schools	Undergraduate students seeking teacher licensure in PreK-6, 6-12, and PreK-12 are placed each semester in the public schools for field experience courses and for student teaching with classroom teachers serving as mentors. Students observe in the classrooms, help with planning and preparation, and teach large and small groups.	Formal and informational feedback from local principals and teachers indicate areas of emphasis for first year teachers to include classroom management, SOL assessment, technology, and parent involvement. Students often assist mentor teachers with technology tools.	Bland County Public Schools	Yes
3.	Mercer County (West Virginia) Public Schools	Undergraduate students seeking teacher licensure in PreK-6, 6-12, and PreK-12 are placed each semester in the public schools for field experience courses and for student teaching with classroom teachers serving as mentors. Students observe in the classrooms, help with planning and preparation, and teach large and small groups.	Formal and informational feedback from local principals and teachers indicate areas of emphasis for first year teachers to include classroom management, SOL assessment, technology, and parent involvement. Students often assist mentor teachers with technology tools.	Mercer County (West Virginia) Public Schools	Yes
4.	T.A.S.K.--Taking Action for Special Kids through Clinch Valley Community Action--Tazewell, VA	Undergraduate students seeking teacher licensure in PreK-6, 6-12, and PreK-12 may be placed in this summer program for field experience courses or for introduction to the exceptional child course. Students work in and outside of the classroom with individual students or small groups, all of whom have IEPs.	Informal feedback from the director, teachers, and parents indicate that our students are needed to provide individual tutoring and help for the students with various disabilities. Students often assist the teacher in preparing or teaching lessons.	T.A.S.K.--Taking Action for Special Kids through Clinch Valley Community Action--Tazewell, VA	No
5.	Wade Community Center--Bluefield, WV	Undergraduate students seeking teacher licensure in PreK-6, 6-12, and PreK-12 may be placed here to complete some of their field experience requirements. Students work in this after-school program with students who are struggling in school.	Our students provide individual tutoring and individualized help for students who are struggling academically and socially. Students often assist in other ways such as preparing learning materials, serving food, and cleaning and painting the building.	Wade Community Center--Bluefield, WV	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Bluefield College
Contact Person: Dr. Donna H. Watson
Phone No.: (276) 326-4475
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Business and Information Technology*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*	*Speech Communication (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.													
1.	Tazewell County Public Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Bland County Public Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Mercer County (West Virginia) Public Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	T.A.S.K.--Taking Action for Special Kids through Clinch Valley Community Action--Tazewell, VA	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	Wade Community Center--Bluefield, WV	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Bluefield College
Contact Person: Dr. Donna H. Watson
Phone No.: (276) 326-4475
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	MidValley Consortium for Teacher Education	The MidValley Consortium was formed in 1989 and has trained over 1,000 teachers to be clinical faculty, with approximately 650 active clinical faculty. Two all-day training sessions are held in the fall and spring with about 40 PreK-12 teachers in attendance at each training session.	The MidValley Consortium was formed in 1989 and has trained over 1,000 teachers to be clinical faculty, with approximately 650 active clinical faculty. Two all-day training sessions are held in the fall and spring with about 40 PreK-12 teachers in attendance at each training session.	The following institutinos of higher education (IHEs) are members: Bridgewater College, Eastern Mennonite University, James Madison University, and Mary Baldwin College. The following public school systems are members: Augusta County, Harrisonburg City, Page County, Rockingham County, Shenandoah County, Staunton City, and Waynesboro City.	Yes
2.	Pre-service Clinical Experience - Student Teaching	As the final clinical experience, pre-service teachers are placed in local school systems for the entire semester. They are allowed to assume complete responsibility for the classroom during this time and engage in all activities related to teaching in the school community under the supervision of the supervising classroom teacher and a college supervisor who makes regular observational visits.	This collaboration meets the needs of the PreK-12 community by providing the opportunity for the classroom teacher to interact with the student teacher to discuss current/new instructional methodologies being taught at the college and new research the student teacher has read about/done. The student teacher also provides assistance to the classroom teacher to enhance student learning, working with students in various group configurations to promote further student learning. This partnership is also preparing the student teacher to be a potential employee with knowledge and skills needed in that particular school system.	Augusta County, Harrisonburg City, Rockingham County, Shenandoah County, Page County, Waynesboro City, and Staunton City.	No
3.	Pre-service Clinical Experience - Three-Week Practicum in Current Teaching Techniques	As an all day pre-student teaching experience, pre-service teachers are placed in local school systems for three weeks during the interterm for a total immersion into the school environment. Emphasis is placed on observation skills, modeling of desired teacher behaviors, and the development of two lesson presentations. This experience takes place in a collaborative manner with the classroom teacher and under the supervision of the college professor.	This partnership meets the needs of the PreK-12 community in much the same way as the student teaching experience but for a shorter period. The practicum teacher has the opportunity to discuss and be exposed to current teachings and methodologies. The practicum student is also able to assist the teacher in a variety of ways to enhance student learning while learning valuable skills himself/herself. This experience is valuable in that the practicum student will be a better student teacher and more effectively affect student learning.	Augusta County, Harrisonburg City, and Rockingham County.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
4.	Pre-service Field Experience for Classroom Management - 20 hours	This field experience takes place in PreK-12 classrooms. The student is a participant observer in the classroom to observe and to learn exemplary classroom management strategies from the teacher and to participate in various group configurations to practice the implementation of management strategies. Discussions with the teacher concerning management strategies occur. Related readings and a reflective journal are also requirements of this field experience.	This partnership meets the needs of the PreK-12 community by providing assistance to the classroom teacher in a variety of ways that affect student learning.	Augusta County, Harrisonburg City, Page County, Rockingham County, Shenandoah County, Staunton City, and Waynesboro City.	No
5.	Pre-service Elementary Field Experience for Reading - 40 hours	This field experience takes place in a first grade after-school tutoring program with an emphasis on literacy activities. The elementary licensure-tract student is an active participant in the classroom to observe and to tutor emergent readers, to learn to analyze reading assessments, and to write prescribed lesson plans for the tutoring session. Journals and directed reflections are required for this field experience. The student is also required to provide documentation of student learning.	This partnership meets the need of the PreK-6 community by tutoring emergent readers and below reading grade level students to improve their reading skills. The elementary licensure-tract students are in an after-school reading tutoring program at a school where many of the students have been identified as needing reading assistance. The students go to the school twice a week during the semester. Helping students to improve their reading skills will directly impact their future learning and interest in learning.	Rockingham County.	No
6.	Pre-service Secondary Field Experience for Reading - 20 hours	This field experience takes place in grades 6-12 classrooms with an emphasis on literacy activities. The PreK-12 and secondary licensure-tract students are involved in a variety of literacy activities in the content areas. Journals and directed reflections are required for this field experience.	This partnership meet the needs of the PreK-12 community by tutoring emergent readers and below reading grade level students to improve their reading skills. The students go to the school once a week during the semester. Helping students to improve their reading skills will directly impact their future learning and interest in learning.	Harrisonburg City and Rockingham County.	No
7.	Pre-service Field Experience for Working with Diverse Children with Exceptionalities - 10 hours	This field experience takes place in PreK-12 classrooms with an emphasis on pre-service teachers as participant observers working with public school children identified as having diverse cognitive, affective, behavioral, and social needs based on learning disabilities, giftedness, multicultural issues, and language differences. Journals, directed reflections, and end-of-course classroom presentations on the experience are required.	This partnership meets the needs of the PreK-12 community by providing assistance to the classroom teacher in a variety of ways that affect student learning. The students in these identified classrooms are able to receive additional attention to improve identified special needs. Also, their self-esteem is improved by having a college student willing to work and interact with them.	Harrisonburg City and Rockingham County.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Brethren Colleges Study Abroad Program (BCA)	This is a cooperative program sponsored by Bridgewater College and five other colleges affiliated with the Church of the Brethren. The BCA program provides an opportunity for first-hand knowledge of a foreign culture and an opportunity to become an active participant in the challenging task of creating a climate of mutual respect and understanding among the nations of the world.	While this partnership is not with the PreK-12 community, it will eventually affect the PreK-12 students who will have BCA students as future teachers. The BCA student will have a total immersion experience where a rich cultural understanding, and will develop and become an integral part of their educational philosophy and instructional methodology. Also, the BCA student will have an increased proficiency in the target language. The BCA pre-service teacher will be well prepared to teach in the multicultural and diverse classrooms present in the PreK-12 community. The BCA pre-service teacher will then meet the identified needs of their students.	BCA schools are located in the following countries: Spain, Mexico, Ecuador, France, Germany, China, Japan, and Greece. For more information please go to: www.bcanet.org.	Yes
9.	Future Educators Leadership Conference	A collaboration with eight (8) area Future Educators Associations (FEAs) to provide a one-day leadership session in the education profession.	This collaboration provides high school students who are interested in the teaching profession with leadership skills development and current pedagogical theory and practice. They return to their high schools to use these skills in their PreK-12 internships during their high school careers.	Strasburg High School, Central (Woodstock) High School, Stonewall Jackson High School, Spotswood High School, Turner Ashby High School, Broadway High School, Harrisonburg High School, Warren County High School, and Skyline Middle School.	No
10.	Bridgewater College Chapter of the Society of Physics Students (Physics Club)	The Physics Club is actively involved in performing science demonstrations in the local PreK-12 schools. They have given group assembly performances and illustrations of science concepts using lab equipment. Other visits have been more hands-on with classroom students directly participating in and/or doing experiments.	This collaboration meets the needs of the PreK-12 community by increasing the interest of the PreK-12 students in the field of science by seeing college students conduct various interesting experiments. The PreK-12 students have learned and developed an understanding of some basic science concepts. This potentially could have an impact on their SOL science scores.	In Rockingham County: Ottobine Elementary School, John Wayland Elementary School, and Peak View Elementary School. In Augusta County: Buffalo Gap High School.	No
11.	Educational Technology Committee - Subcommittee of Committee on Teacher Education	This subcommittee continues to be a technology task force whose purpose is to help re-vision the technology skills with which pre-service teachers should exit Bridgewater College's Teacher Education Program.	It meets the needs of the PreK-12 community by training future teachers to become producers of technologically enhanced learning rather than just users of technology. This will eventually enhance PreK-12 student learning.	Technology directors from Rockingham County and Harrisonburg City Schools, three NETS-T certified teachers, staff from Bridgewater's IT Department, a cross representation of Bridgewater faculty, two current Bridgewater students, and two Bridgewater College alumni who are currently teaching in the PreK-12 schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
12.	Curriculum Development and Best Practices Committee--subcommittee of Committee on Teacher Education	This subcommittee is an elementary best practices task force whose purpose is to discuss current best practices and curriculum being used in the PreK-6 schools. Information gained from this task force will give guidance to those responsible in our Teacher Education Program for ensuring that our pre-service teachers are receiving the proper knowledge and skills that will enable them to be prepared to teach today's curriculum in the PreK-6 schools.	It meets the needs of the PreK-6 community by training our future teachers to be trained in the most current methodology and possess the necessary content knowledge to exceed school divisions' expectations. This will enhance PreK-6 student learning.	Augusta County and Rockingham County Schools.	No
13.	Amigos Unidos (Tutoring Friendship Program)	This program brings together Bridgewater College students and the Hispanic community from a middle school to encourage a rich cultural exchange of ideas, customs, and activities, while also promoting lasting friendships.	This collaboration meets the needs of the PreK-12 community by providing role models for the Hispanic students by encouraging them to stay in school, becoming excited about school and learning, encouraging them to achieve in school, working with bilingual college students, providing them opportunities to practice English speaking and reading skills. This also increases the Hispanic students' self-esteem and enhances their learning.	Wilbur Pence Middle School in Rockingham County.	No
14.	Shenandoah Valley Reading Council Young Authors Celebration	A one-afternoon seminar in which an author reads from his/her works. The author talks to grades 1-5 students about being writers. The students are then grouped to read their own writings and provide peer feedback monitored by Bridgewater College pre-service candidates.	This collaboration helps the grades 1-5 students to see themselves as future writers and broaden their perspective of writing through their interaction with a published author.	Shenandoah Valley Reading Council, Bridgewater College Teacher Education students, and students from three area school divisions.	No
15.	College for a Day	Area Future Educator of America (FEA) students are invited to attend education and liberal arts classes in order for the students to understand the importance of a liberal arts education.	This collaboration allows high school students (grades 9-12) to attend college for a day in order to experience a liberal arts education and to increase their awareness of a college education. An awareness of state certification requirements, education coursework blended with liberal arts education, and course and field experience plans is the focus. From this day, the high school students begin to focus on their post-secondary education and its value.	Harrisonburg High School, Turner Ashby High School, and Broadway High School FEA chapters.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
16.	Pleasant Valley Elementary After-School Tutoring Program	Pre-service teachers (ESL endorsement) tutor fourth and fifth graders at Pleasant Valley Elementary School. The tutors help prepare students for their SOL testing. The special education and general education teachers at John Wayland Elementary School provide the tutors with guidance, consultation, support, and materials. The tutors create tutoring materials and collect data to write case studies of their assigned students.	This collaboration meets the needs of the PreK-12 community by providing those students with identified learning disabilities extra one-on-one instruction to help them develop test taking and study strategies (e.g., mnemonic strategies) for their Science and/or Social Studies SOL tests. This tutoring should help the students to score higher on their science and social studies SOL tests. If they do score higher, then their self-esteem and desire to learn will be higher.	Pleasant Valley Elementary School in Rockingham County.	Yes
17.	Shenandoah Valley Writing Academy at Bridgewater College. (Currently in the planning stage and to be implemented soon.)	The focus of the academy during week one will be to help teachers understand themselves as writers and how to more effectively use a process approach of writing instruction that develops writers (their students), who can not only write with an authentic voice but be communicators of critical thought. Week two of the workshop will involve a summer writing camp for adolescents, where the trained teachers will coach adolescents with the same set of skills that they have been learning in the writing academy.	This future collaboration will meet the needs of the PreK-12 community by working with PreK-12 classroom teachers to develop a process and skills to ultimately enhance the writing skills of their students. This will lead to increases in student learning, better student writing skills, and SOL and SAT writing scores.	Area school personnel.	Yes
18.	Science, Technology, Engineering, and Mathematics (STEM) Institute	The focus of the STEM Institute is to ensure that all eligible students with an interest in a STEM field are given academic support to excel during their pre-college or undergraduate years.	This collaborative institute encourages students to consider a major in one of the STEM areas during their collegiate career. It also helps them to be prepared to meet the demands of college-level courses and ultimately to excel in STEM coursework.	Local public school students and student and faculty staffing from Bridgewater and several other local colleges/universities.	Yes
19.	Field Experience Component for FCS 400: Child Growth and Development	This field experience takes place in a pre-school lab setting in the Family and Consumer Science Department, with an emphasis on working with pre-school children in a structured environment. The PreK-6 licensure-tract students are involved in a variety of activities teaching the children. Lesson plans, journals, and directed reflections are required for this field experience.	This partnership meets the needs of the PreK-6 community by providing learning opportunities for our program completers to be better equipped to work with PreK-6 students. This will allow school systems to consider applicants for a position who have actually worked in the PreK-6 classroom.	Bridgewater Church of the Brethren pre-school students, Augusta County, Harrisonburg City, Page County, Rockingham County, Shenandoah County, Staunton City, and Waynesboro City.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*Spanish PreK-12*	*Family and Consumer Sciences*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																		
1.	MidValley Consortium for Teacher Education	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Pre-service Clinical Experience -Student Teaching	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Pre-service Clinical Experience - Three-Week Practicum in Current Teaching Techniques	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	Pre-service Field Experience for Classroom Management - 20 hours	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	Pre-service Elementary Field Experience for Reading - 40 hours	X			X		X						X	X						X
6.	Pre-service Secondary Field Experience for Reading - 20 hours		X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X
7.	Pre-service Field Experience for Working with Diverse Children with Exceptionalities - 10 hours	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
8.	Brethren Colleges Study Abroad Program (BCA)	X	X	X			X							X						
9.	Future Educators Leadership Conference	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10.	Bridgewater College Chapter of the Society of Physics Students (Physics Club)																	X		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*Spanish PreK-12*	*Family and Consumer Sciences*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																		
11.	Educational Technology Committee - Subcommittee of Committee on Teacher Education	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12.	Curriculum Development and Best Practices Committee--subcommittee of Committee on Teacher Education	X					X							X						
13.	Amigos Unidos (Tutoring Friendship Program)		X	X																
14.	Shenandoah Valley Reading Council Young Authors Celebration	X																		
15.	College for a Day		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16.	Pleasant Valley Elementary After-School Tutoring Program	X																		
17.	Shenandoah Valley Writing Academy at Bridgewater College. (Currently in the planning stage and to be implemented soon.)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18.	Science, Technology, Engineering, and Mathematics (STEM) Institute											X			X	X	X	X		X
19.	Field Experience Component for FCS 400: Child Growth and Development	X			X															

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Bridgewater College
Contact Person: Dr. David E. Coffman
Phone No.: (540) 828-5352
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Christopher Newport University
Contact Person: Marsha M. Sprague
Phone No.: (757) 594-7388
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Newport News Public School Division (NNPS)	Newport News School Division acts as co-administrator of the Christopher Newport University (CNU) Teacher Preparation Program, providing a laboratory setting for all required field experiences. In addition, CNU faculty and NNPS staff collaborate in research and instructional design and delivery.	CNU students offer assistance to NNPS students and teachers in meeting achievement benchmarks. In addition, CNU students become skilled teacher candidates for first-year hiring.	Latanja Riley-Hedgepeth, Human Resources Coordinator; Kathleen Pietrasanta, Innovation and Development; Newport News Public Schools.	Yes
2.	NNPS: B.C. Charles Elementary School "Literacy Lab School"	MAT students enrolled in ENGL 521 - Teaching Writing work with elementary students in writing conferences; MAT students enrolled in Psyc 521 tutor students in reading comprehension; and school faculty study dialect issues with Dr. Rebecca Wheeler, CNU.	Focuses on NNPS Achievement Benchmark: Literacy to increase SOL pass rates and SOL achievement for NCLB subgroups.	John Tupponce, Principal; Shirley Bever, Reading Specialist; B.C. Charles Elementary School, NNPS.	No
3.	NNPS: Gildersleeve Middle School: Field Experience for English 522 - Reading and Writing in the Content Areas	MAT students spend 12 hours in tutoring students, utilizing strategies taught in the 522 course. Pre-MAT students who are interested in teaching meet in the school for the lab course. Students meet with a variety of school personnel as well as spend 30 hours observing and assisting.	Focuses on NNPS Achievement Benchmark: Literacy to increase SOL pass rates and SOL achievement for NCLB subgroups.	Jean Winkeler, Reading Specialist; Ben Hogan, Principal; Gilderleeve Middle School, NNPS.	No
4.	NNPS: Hidenwood Elementary School: Field Experience for Soc 314L - Sociology of Education	Pre-MAT students who are interested in teaching and MAT students seeking licensure in all endorsement areas meet in the school for the lab course. Students meet with a variety of school personnel as well as spend 30 hours observing and assisting.	CNU students offer assistance to NNPS students and teachers in meeting achievement benchmarks. In addition, CNU students become skilled teacher candidates for first-year hiring.	Brian Nichols, Principal; Hidenwood Elementary, NNPS (in 2010 will be Mark Kirk).	No
5.	NNPS: Menchville High School: Field Experience for Soc 314L - Sociology of Education	Pre-MAT students who are interested in teaching and MAT students seeking licensure in all endorsement areas meet in the school for the lab course. Students meet with a variety of school personnel as well as spend 30 hours observing and assisting.	CNU students offer assistance to NNPS students and teachers in meeting achievement benchmarks. In addition, CNU students become skilled teacher candidates for first-year hiring.	Bobby Surry, Principal; Menchville High School, NNPS.	No
6.	NNPS: McIntosh Elementary School: Field Experience for Math 570 - Teaching Mathematics	MAT students seeking elementary licensure utilize concepts taught in the 570 course to complete 12 hours of tutoring students who are experiencing difficulty in mathematics.	Focuses on NNPS Achievement Benchmark: Mathematics to increase SOL pass rates and SOL achievement for NCLB subgroups.	Jasmine Haris, Counselor; Steve Geiger, Lead Math Teacher; Barbara Jenkins, Principal; McIntosh Elementary, NNPS.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Christopher Newport University
Contact Person: Marsha M. Sprague
Phone No.: (757) 594-7388
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	NNPS: Sanford Elementary School: Field Experience for Psych 521 - Reading Acquisition	MAT students seeking elementary licensure utilize concepts taught in the 521 course to complete 18 hours of tutoring students who are experiencing difficulty in reading comprehension and/or decoding. Students work closely with the school's reading specialist and are matched with specific students for the duration of the experience.	Focuses on NNPS Achievement Benchmark: Literacy to increase SOL pass rates and SOL achievement for NCLB subgroups.	Kittie Morgan, Reading Specialist; Sanford Elementary, NNPS.	No
8.	NNPS: Richneck Elementary School: Field Experience for Math 570 - Teaching Mathematics	MAT students seeking elementary licensure utilize concepts taught in the 570 course to complete 12 hours of tutoring students who are experiencing difficulty in mathematics.	Focuses on NNPS Achievement Benchmark: Mathematics to increase SOL pass rates and SOL achievement for NCLB subgroups.	Cheryl Flemings, Principal; Richneck Elementary School, NNPS.	No
9.	Balboa Academy, Panama (K-12)	MAT students are given the opportunity to work for five weeks (almost half of the internship semester) in an American School in the Republic of Panama as part of their student teaching.	Balboa Academy seeks to prepare its graduates through the American educational system. Opportunities for teacher development are sought.	Jean Lamb, Director; Balboa Academy.	Yes
10.	Holy Cross Anglican School (K-8), Belize, Central America	MAT students may choose to select a course in "Teaching Across Cultures," which requires them to teach in a public Belize school for two weeks while they analyze the contrasting educational system of that country.	Holy Cross seeks to introduce its students and teachers to effective teaching methodology.	Francis Wilson, Director, Holy Cross Anglican School.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Christopher Newport University
Contact Person: Marsha M. Sprague
Phone No.: (757) 594-7388
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*Spanish PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.														
1.	Newport News Public School Division (NNPS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	NNPS: B.C. Charles Elementary School "Literacy Lab School"	X				X					X					
3.	NNPS: Gildersleeve Middle School: Field Experience for English 522 - Reading and Writing in the Content Areas		X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	NNPS: Hidenwood Elementary School: Field Experience for Soc 314L - Sociology of Education	X														
5.	NNPS: Menchville High School: Field Experience for Soc 314L - Sociology of Education		X	X	X	X			X	X	X	X	X	X	X	X
6.	NNPS: McIntosh Elementary School: Field Experience for Math 570 - Teaching Mathematics	X														
7.	NNPS: Sanford Elementary School: Field Experience for Psych 521 - Reading Acquisition	X				X										
8.	NNPS: Richneck Elementary School: Field Experience for Math 570 - Teaching Mathematics	X														
9.	Balboa Academy, Panama (K-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.	Holy Cross Anglican School (K-8), Belize, Central America	X		X	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Christopher Newport University
Contact Person: Marsha M. Sprague
Phone No.: (757) 594-7388
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	New Horizons Family Counseling Center	A long-standing partnership with public school systems in Williamsburg-James City County, Newport News, Hampton, York, Gloucester, and Poquoson through which supervised master's and doctoral interns provide family counseling to students experiencing serious emotional and behavioral problems that interfere with their academic progress.	This partnership aims to improve the welfare and academic progress of students in K-12 schools by providing free counseling services to students and to their families. The New Horizons Family Counseling Center provides services to students experiencing serious emotional and behavioral problems that school-based counseling services are not able to address.	Williamsburg-James City County, Newport News, Hampton, York, Gloucester, and Poquoson Public Schools (Dr. Johnston Brendel, Clinical Coordinator).	Yes
2.	William and Mary Clinical Faculty Program	A program supported by the Virginia Department of Education to prepare experienced teachers to mentor and support pre-service and beginning teacher development in six school divisions (Gloucester, Hampton, New Kent, Newport News, Williamsburg-James City County, and York County).	The mission of the William and Mary Clinical Faculty Program is to work through on going collaboration and professional development among School of Education faculty and exemplary cooperating teachers in order to improve the practica and student teaching experiences of aspiring teachers and the first-year experiences of novice teachers in K-12 school settings so that the most highly qualified teachers enter, remain in, and contribute to the profession, thereby resulting in improved K-12 student learning.	Gloucester, Hampton, New Kent, Newport News, Williamsburg-James City County, and York Public Schools; Virginia Department of Education (Dr. Chris Gareis, Associate Dean, Director).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
3.	Special Education Training and Technical Assistance Center (T/TAC) Demonstration Projects	The T/TAC Center at The College of William and Mary is part of a statewide network funded by the Virginia Department of Education to provide a variety of request-based support services and assistance to educational professionals serving school-age students with mild and moderate disabilities or transition needs in Eastern Virginia. The aim of these services is to improve student education through enhanced professional practice.	The purpose of this partnership is to provide targeted professional development, services, resources, and assistance to educational professionals and LEAs in order to service the needs of K-12 students with mild and moderate disabilities. Ultimately, the aim is to meet the identified learning and transition needs of individual students by improving student education through enhanced professional practice.	Region 2 (Accomack, Newport News, Southampton, Chesapeake, Norfolk, Suffolk, Franklin City, Northampton, Virginia Beach, Hampton, Poquoson, WJCC, Isle of Wight, Portsmouth, York); Region 3 (Caroline, King George, Northumberland, Colonial Beach, King William, Richmond County, Essex, Lancaster, Stafford, Fredericksburg, Mathews, Spotsylvania, Gloucester, Middlesex, Westmoreland, King and Queen, Northern Neck, West Point); State Operated Programs (Virginia School for the Deaf and Blind, Children's Hospital of the King's Daughters, Eastern State Hospital); Virginia Department of Education (Drs. Lori Korinek and Sharon deFur, Co-Principal Investigators).	Yes
4.	Project EMPOWER	A grant-funded project that was established to provide collaborative services to the neighboring communities of The College of William and Mary. The mission of Project EMPOWER is to provide school-based prevention programming through collaboration and community outreach, and promote the social-emotional development of children.	This partnership aims to improve the achievement of K-12 students by providing school-based prevention programs that address students' social-emotional needs. Partnering schools work in collaboration with Project EMPOWER staff to identify students, needs, and programs.	Williamsburg-James City County Public Schools (Dr. Sandy Ward, Director).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
5.	Project HOPE - Virginia	The Virginia Education Program for Homeless Children and Youth is a federally-funded grant authorized by the McKinney-Vento Homeless Assistance Act. Project HOPE-VA ensures the enrollment, attendance, and the success of homeless children and youth in school through public awareness efforts across the Commonwealth and subgrants to local school divisions. Project HOPE-VA collaborates with other federally-funded programs within Virginia, such as Title I, special education, and Head Start.	Homelessness increases risk for academic failure and identification for special education, and decreases the likelihood of high school graduation. Meeting the needs of children experiencing homelessness requires collaboration among state and local agencies supporting all areas of life, including food, shelter, health care, education, and a variety of social services.	Virginia Department of Education, Office of Student Services; VDOE, Office of Special Education; all 132 Virginia school divisions in Virginia; Office of Program Administration and Accountability – Title I; Early Childhood Special Education Priority Project; Head Start; Virginia Interagency Coordinating Council; Virginia Department of Housing and Community Development; Virginia Inter-Agency Council on Homelessness; U.S. Department of Education (SASA); National Center for Homeless Education; National Association for the Education of Homeless Children and Youth; National Law Center on Homelessness and Poverty (Dr. Patricia Popp, Director).	Yes
6.	Focus on the Future	A career and academic planning experience for high-ability students, grades 6-12 and their parents, Focus on the Future exposes high-ability learners to career opportunities related to the arts, humanities, mathematics, and sciences. The program also informs parents of considerations and guidelines for effective career and academic planning.	This project aims to promote the academic achievement of high-ability students in secondary schools by providing opportunities for students and their families to explore careers and to plan for post-secondary education. Focus on the Future complements and extends traditional guidance counseling that schools are able to provide, bringing resources, programs, and speakers to participants (not only students but also their families).	Statewide, with majority of participants from Regions 1 and 2; available to the general public as a service offered directly to families and children; Center for Gifted Education (Dr. Tracy Cross, Executive Director).	No
7.	Saturday and Summer Enrichment Programs	Programs for high ability students are offered through the Center for Gifted Education for students in grades K-9. The enrichment program enables students to explore specialized topics not typically studied in the regular classroom. Behaviors fostered by the enrichment program include students' abilities to apply process skills used in individual fields of inquiry, to recognize problems and approaches to problem-solving, to understand and appreciate individual differences, and to become self-directed learners.	This project aims to promote the academic achievement of high-ability students in grades K-9 by providing learning opportunities that extend beyond the conventional academic curriculum. The program develops students abilities, talents, and interests. It also promotes the exploration of academic disciplines. The SSSP extends learning opportunities and enriches the develop of high-ability learners, complementing and extending the educational programs that partnering schools are typically able to provide.	Statewide, with majority of participants from Regions 1 and 2; available to the general public as a service offered directly to families and children; Center for Gifted Education (Dr. Tracy Cross, Executive Director).	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	The Eastern Virginia Writing Project (EVWP)	The mission of the Eastern Virginia Writing Project (EVWP) is to improve the teaching of writing and to improve learning in Eastern Virginia's schools. The EVWP recognizes the primary importance of teacher knowledge, expertise, and leadership. Through its extensive network of teachers, the EVWP seeks to promote exemplary instruction of writing in every classroom in our region of Virginia.	This partnership aims to improve the academic achievement and learning outcomes of students in K-12 schools by providing targeted professional development to classroom teachers in the teaching of writing. Writing is an essential skill and is highly correlated with academic achievement. Therefore, the improved teaching of writing addresses the need of improving students' writing abilities and their learning across subject areas.	Regions 1, 2, and 3; National Endowment for the Humanities; Virginia Foundation for the Humanities (Dr. James W. Beers, Director).	Yes
9.	School-University Research Network (SURN)	The mission of the School-University Research Network is to improve teaching and learning for all learners through collaborative field-based research that informs the delivery of educational services. The goals include identifying best practices for resolving current instructional, administrative and policy issues and sharing proven strategies and services among division partners.	The aim of this partnership is to improve the teaching and learning of all students through targeted research and professional development. Superintendents and specialists collaboratively define annual priorities for the partnership. SURN secures resources for research and professional development in service of the defined needs of the constituent school divisions.	Charles City, Franklin, Gloucester, Hampton, Hopewell, Isle of Wight, King & Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Newport News, Norfolk, Northumberland, Petersburg, Poquoson, Portsmouth, Prince George, Southampton, Suffolk, Surry, Virginia School for the Deaf and Blind, West Point, Williamsburg-James City, York, Chesapeake, Virginia Department of Education (Dr. Jan Rozzelle, Director).	Yes
10.	SURN Lesson Study, Leadership and Literacy in Mathematics (NCLB Grant)	SURN Lesson Study, Leadership and Literacy in Mathematics is a collaborative project through William and Mary School-University Research Network (SURN) with funding from the State Council for Higher Education in Virginia (SCHEV) to provide professional development in content, pedagogy, and leadership to instructional leadership teams of 90 teachers, principals, and central office administrators in 18 middle schools from high-poverty divisions.	School teams participate in collaborative lesson study to increase administrator and teacher leadership capacity and student performance in mathematics.	Petersburg City Schools, Norfolk City Public Schools and Portsmouth City Schools (Dr. Marguerite Mason and Dr. Jan Rozzelle, Directors).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
11.	Math and Science Partnership	With funds through Virginia's Math and Science Partnership Grant, this program provides a high level of content-specific, inquiry-based and application-rich mathematics instruction that leads to a deep understanding of functions and their behaviors within the context of mathematical modeling and data analysis.	This partnership aims to increase the number of teachers who are highly qualified to teach Algebra, Functions, and Data Analysis, thus meeting the needs of the rising number of students in grades 9-12 who will take Algebra, Functions and Data Analysis. This partnership provides teachers the opportunity to investigate mathematical models and analyze data from real world situations, strengthen conceptual understandings in mathematics, further develop the connections between algebra and statistics, and incorporate current research-based practices.	Twelve divisions of the 24 consortium members having a minority majority at the high school level, including Sussex County, Charles City County, Franklin City, Portsmouth, and eight additional divisions that report half or more minorities at the high school level. (Dr. Marguerite Mason, Principal Investigator).	Yes
12.	Noyce Scholars / Twenty-first Century Teachers (TCT)	With funds from the National Science Foundation, the Noyce Scholars and TCT programs aim to increase the number of K-12 teachers with strong mathematics and science content knowledge and excellent pedagogical preparation, who will teach in high-need middle and secondary schools in the region.	The project aims to have a broad impact on candidates, the K-12 students they serve, teacher education at The College of William and Mary, and national professional communities in science and mathematics education. Intended project outcomes include increased numbers of science and math teachers in Virginia and improved quality of math and science teaching.	Noyce Scholars must commit to serving two years as a mathematics or science teacher in a high need local education agency within four years of graduation. (Dr. Marguerite Mason and Dr. Juanita Matkins, Principal Investigators).	Yes
13.	Achievable Dream	The College of William and Mary - Achievable Dream Partnership is designed to incorporate research-based practices in teacher education. The partnership promotes (1) rigorous and comprehensive training, (2) candidates in cohort groups, (3) on-going, supervised experiences in high-needs schools, (4) support from mentor teachers, (5) induction support when candidates become teachers of record, (6) payment of a living-wage stipend, and (7) three-year service obligation in high needs schools.	The partnership aims to have impact on candidate acquisition of essential knowledge, skills, and dispositions. The partnership also aims to strengthen the effectiveness of teachers for urban schools, where it has been well documented that the students most in need of high powered instruction and nurturing relationships have had the least qualified and effective teachers.	The Achievable Dream Academy, Achievable Dream, Inc., and Newport News Public Schools. (Dr. Virginia McLaughlin, Principal Investigator).	Yes
14.	Science, Technology, Engineering, and Mathematics (STEM) Education Alliance (formerly N-STAR)	The Virginia Demonstration project, sponsored by the Office of Naval Research and the National Defense Education Program, which began in 2004, involves the College of William and Mary, Stafford County Schools, and the Naval Warfare Center Dahlgren Division in an innovative partnership effort to increase the science, math, and technology skills of middle school students and their interest in pursuing future careers in science and engineering.	This partnership aims to improve middle school students' achievement in science, math, and technology and to promote their interest in pursuing future careers in science and engineering. The promotion of careers in STEM disciplines (science, technology, engineering, and mathematics) is a targeted need identified by the federal government.	Stafford County Schools, Office of Naval Research, and the Naval Warfare Center Dahlgren Division (Dr. Gail Hardinge, Principal Investigator).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
15.	Project Civics - a middle school social studies research demonstration project for underachieving promising learners.	With funds from the U.S. Department of Education, this program will demonstrate how the implementation of advanced, research-based curriculum in social studies, combined with enrichment and talent skills, will enhance civic awareness for underachieving learners in diverse settings.	This project is designed to: (1) implement research-based social studies curriculum units in grades 6-7; (2) pilot test innovative talent development strategies aimed at reversing underachievement for at-risk students; (3) develop curriculum models for teachers; and (4) conduct research on student learning and motivational gains.	School districts to be identified in Virginia and Alabama (Dr. Jeremy Stoddard and Dr. Carol Tieso, Principal Investigators).	Yes
16.	Preparing Inclusive Educators (PIE)	Funded by OSEP through 325T, this grant seeks to improve the recruitment, preparation, and retention of special education and general education teachers, with specific focus on employing evidence-based instructional practices and effectively reaching students from culturally and linguistically diverse backgrounds.	This five-year project seeks to address the need to prepare and retain greater numbers of professional teachers in the critical shortage area of special education and to meet the need to reach increasingly diverse populations of students from culturally and linguistically diverse backgrounds.	Local school divisions in the geographic service area of The College of William and Mary (including Williamsburg-James City County, York County, New Kent County, Gloucester County, Newport News, and Hampton). (Drs. Sharon deFur and Christopher Gareis are the Co-Principal Investigators.)	Yes
17.	Historic Triangle Substance Abuse Coalition (HTSAC)	The mission of the Historic Triangle Substance Abuse Coalition is to strengthen the capacity of the Historic Triangle region to create and maintain a safe, healthy and drug-free community.	HTSAC is a vehicle for bringing together various community sectors to reduce substance abuse. The aim of the project is to make the Historic Area free of substance abuse, thereby creating a healthier and safer community.	Communities of the Historic Triangle, including Williamsburg, James City County, and upper York County.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*English as a Second Language PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																				
1.	New Horizons Family Counseling Center				X	X																
2.	William and Mary Clinical Faculty Program	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Special Education Training and Technical Assistance Center (T/TAC) Demonstration Projects	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	Project EMPOWER					X																
5.	Project HOPE - Virginia				X	X																
6.	Focus on the Future																				X	
7.	Saturday and Summer Enrichment Programs																				X	
8.	The Eastern Virginia Writing Project (EVWP)	X		X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	School-University Research Network (SURN)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.	SURN Lesson Study, Leadership and Literacy in Mathematics (NCLB Grant)	X	X												X							X
11.	Math and Science Partnership		X												X	X	X	X	X			X
12.	Noyce Scholars / Twenty-first Century Teachers (TCT)														X	X	X	X	X			X
13.	Achievable Dream	X								X		X	X	X	X	X	X	X	X	X	X	X
14.	Science, Technology, Engineering, and Mathematics (STEM) Education Alliance (formerly N-STAR)	X	X												X	X	X	X	X			X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*English as a Second Language PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																				
15.	Project Civics - a middle school social studies research demonstration project for underachieving promising learners.	X												X							X	
16.	Preparing Inclusive Educators (PIE)	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17.	Historic Triangle Substance Abuse Coalition (HTSAC)				X	X																

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	The College of William and Mary Clinical Faculty Program	A program supported by the Virginia Department of Education to prepare experienced teachers to mentor and support pre-service and beginning teacher development in six school divisions.	The mission of the The College of William and Mary Clinical Faculty Program is to work through on-going collaboration and professional development among School of Education faculty and exemplary cooperating teachers in order to improve the practica and student teaching experiences of aspiring teachers and the first-year experiences of novice teachers in K-12 school settings so that the most highly qualified teachers enter, remain in, and contribute to the profession, thereby resulting in improved K-12 student learning. The Clinical Faculty Partnership network engages teachers, principals, and division-level administrators directly in the preparation and supervision of pre-service teachers. A hallmark feature of the program is the provision of teachers who serve as Lead Clinical Faculty members in partnership schools.	Gloucester, Hampton, New Kent, Newport News, Williamsburg-James City County, and York Public Schools; Virginia Department of Education (Dr. Chris Gareis, Associate Dean, Director).	Yes
2.	School-University Research Network (SURN)	The mission of the School University Research Network is to improve teaching and learning for all learners through collaborative field-based research that informs the delivery of educational services. The goals include identifying best practices for resolving current instructional, administrative and policy issues and sharing proven strategies and services among division partners.	The aim of this partnership is to improve the teaching and learning of all students through targeted research and professional development. Superintendents and specialists collaboratively define annual priorities for the partnership. SURN secures resources for research and professional development in service of the defined needs of the constituent school divisions.	Charles City, Franklin, Gloucester, Hampton, Hopewell, Isle of Wight, King & Queen, King William, Lancaster, Mathews, Middlesex, New Kent, Newport News, Norfolk, Northumberland, Petersburg, Poquoson, Portsmouth, Prince George, Southampton, Suffolk, Surry, Virginia School for the Deaf and Blind, West Point, Williamsburg-James City, York, Chesapeake, and Virginia Department of Education (Dr. Jan Rozzelle, Director).	Yes
3.	Educational Policy, Planning, and Leadership (EPPL) K-12 Preparation Cohort	The purpose of the EPPL K-12 Preparation Cohort is to identify, recruit, prepare, and support highly-qualified teachers to serve as building- and division-level leaders in LEAs.	This partnership aims to increase the number of committed, qualified professionals who will enter and remain in educational leadership roles at the school and division levels in LEAs. The School of Education works in partnership with LEAs to identify, recruit, prepare, and support cohort members, thereby addressing the need for highly-qualified and well-prepared educational leaders.	York, Williamsburg-James City, Hampton, Isle of Wight, Gloucester, New Kent, Poquoson, Charles City, and Middlesex (Dr. Mike DiPaola, Coordinator).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: The College of William and Mary
Contact Person: Christopher R. Gareis, Ed.D.
Phone No.: (757) 221-2319
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
4.	School Leadership Institute (SLI)	The purpose of the School Leadership Institute is to consistently provide a high-quality professional development venue for educational professionals from partnering school divisions. The SLI meets needs of teacher leaders and professionals in formal positions of educational leadership, including assistant principals, principals, program directors, etc.	The purpose of the School Leadership Institute is to consistently provide a high-quality professional development venue for educational professionals from partnering school divisions. As an arm of the School-University Research Network (SURN), the School Leadership Institute provides high-quality professional development in areas identified by partnering school divisions. For example, themes of the SLI in recent years have included focus on literacy, research-based instruction, data-driven decision-making, and professional learning communities.	School University Research Network; Albemarle, Charles City, Chesterfield, Dinwiddie, Fairfax, Franklin, Gloucester, Hampton, Hanover, Hopewell, Isle of Wight, King & Queen, King William, Lancaster, Martin, Mathews, Mecklenburg, Middlesex, Montgomery, New Kent, Newport News, Norfolk, Northumberland, Patrick, Petersburg, Poquoson, Portsmouth, Prince George, Roanoke City, Southampton, Stafford, Suffolk, Surry, Virginia School for the Deaf and Blind, West Point, Williamsburg-James City, York, Chesapeake, and Virginia Department of Education (Dr. Jan Rozzelle, Director).	Yes
5.	Virginia Model for School Improvement: District Leadership Support Teams	Through a grant administered by the Virginia Department of Education, the School of Education is providing extended professional development, support, and direction to District Leadership Support Teams in 37 school divisions in Virginia that are identified as needing to make improvement in meeting NCLB AYP targets.	A number of school divisions in Virginia are in need of support to address challenges associated with meeting NCLB's AYP standards. Promoting a model of district support, teaming, and professional coaching, The College of William and Mary faculty facilitate ongoing professional development for division personnel and external coaches.	Henrico County , Fredericksburg, Richmond, Rockbridge County, Craig County, Shenandoah County, Warren County, King and Queen County, Westmoreland County, Lancaster County, Newport News, Hampton, Fauquier County, Amherst County, Roanoke, Essex County, Arlington County, Franklin, Pulaski County, Pittsylvania County, Bedford County, Fairfax County, Alexandria, King George County, Lunenburg County, Northampton County, Albemarle County, Fluvanna County, Orange County, Culpepper County, Louisa County, Stafford County, Portsmouth, Williamsburg-James City County, Suffolk, Norfolk, and Virginia Department of Education (Drs. Mike Dipaola, Steve Staples, and Lucia Sebastian, Directors).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Eastern Mennonite University
Contact Person: Cathy Smeltzer Erb
Phone No.: (540) 432-4638
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Early Learning Center	The Early Learning Center serves as the laboratory school for the PreK-3 and PreK-6 endorsement programs.	Under the supervision of Early Learning Center faculty, Eastern Mennonite University (EMU) PreK-3 and PreK-6 candidates plan and implement developmentally appropriate curriculum for two - four year olds.	PreK-3 and PreK-6 teacher education candidates, Teacher Education faculty, and the Early Learning Center.	Yes
2.	Early Bird Tutoring	The field experience allows candidates to work with a struggling K-5 student in a one-on-one tutoring setting. Candidates will provide extra support in literacy with the hopes of gaining valuable information about the reading and writing process, and to help advance the literacy skills of the K-5 student.	The Rockingham County School District has requested that our candidates work with their K-5 students who need extra support in reading and writing. This one-on-one setting provides extra support for the K-5 student and provides valuable teaching experiences for our candidates.	Rockingham County School District K-5 teachers and EMU Candidates.	Yes
3.	Literacy Block - Harrisonburg Public City Schools placements	The field experience allows candidates to work with K-6 teachers in the regular classroom setting with the goal to integrate literacy and language arts in the classroom setting. Candidates will provide extra support to the classroom teacher during reading and writing small group and whole group sessions.	Harrisonburg City School District has requested that our candidates work with their K-6 classroom teachers in order to provide extra support during language arts. This provides help for the teacher and valuable classroom experiences for our candidates.	Harrisonburg City School District K-5 teachers and EMU Candidates.	Yes
4.	Assistive Technology Practical Day - EDS 333	Special Education pre-service candidates visit and serve students in the Harrisonburg City school system. Pre-service candidates used assistive technology to assist students with learning, life skills, and communication skills.	Provide students with disabilities one-on-one or small group support on mastering living skills.	Pre-service special education candidates and students with sever disabilities in the elementary setting at Harrisonburg City Schools.	Yes
5.	Assistive Technology Collaboration with Rockingham County Schools	The Assistive Technology Club at EMU (participants include pre-service special education candidates) will collect instructional materials from teachers in Rockingham County schools; augment the material to make it more accessible to all learners; and return the instructional materials back to the teachers for use with PreK-12 students in Special Education.	This allows students with disabilities in the Rockingham County schools access to the general curriculum.	EMU Assistive Technology participants (Special Education pre-service candidates) and all Rockingham County schools.	Yes
6.	LIT 330 Literature for Children and The Early Learning Center	Candidates from LIT 330 present storytelling to the 2-4 year olds at the Early Learning Center (ELC). The director of the Early Learning Center collaborates with the LIT 330 professor to teach the college candidates about storytelling with young children.	At the request of the director of the Early Learning Center, the young children are benefited as they are given the opportunity to hear stories embracing characteristics of effective storytelling from twenty or more college candidates.	LIT 330 Professor; twenty students from LIT 330; director of the Early Learning Center; and 30 young children.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Eastern Mennonite University
Contact Person: Cathy Smeltzer Erb
Phone No.: (540) 432-4638
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	Practicum in eight school divisions and a private school	Curriculum and methods courses require a practicum, supervised by EMU teacher education faculty, ranging from 20-60 hours, to allow students to link classroom theory with practice in schools.	Practicum students assist cooperating teachers with PreK-12 student achievement.	EMU Student Teachers and Faculty, and faculty in the following school divisions: Augusta County, Rockingham County, Shenandoah County, Waynesboro City, Harrisonburg City and Staunton City.	Yes
8.	Student Teaching in eight school divisions and a private school	The culminating teacher education experience is supervised student teaching.	With a cooperating teacher and a student teacher in the classroom, PreK-12 students increase the contact time with a teacher. Student teachers introduce cooperating teachers to new teaching practices. School divisions get an early start on mentoring beginning teachers as many student teachers are later hired by the hosting school division.	EMU Student Teachers, clinical faculty identified by the following school divisions: Augusta County, Rockingham County, Page County, Shenandoah County, Waynesboro City, Harrisonburg City and Staunton City.	Yes
9.	MidValley Consortium	The MidValley Consortium trains and supports a cadre of over 650 clinical faculty who supervise area student teachers. Clinical faculty are nominated by member school divisions and complete two days of intensive training for working with student teachers.	By training public school teachers to effectively supervise area student teachers, the quality of the student teaching experience is enhanced and PreK-12 students benefit from the positive learning experience.	EMU Student Teachers, clinical faculty identified by the following school divisions: Augusta County, Rockingham County, Page County, Shenandoah County, Waynesboro City, Harrisonburg City and Staunton City.	Yes
10.	Waterman Elementary School Family Fun Night	Faculty/teacher candidates in Health/PE and in General Curriculum K-12 partner with the faculty/staff of Waterman ES (Harrisonburg City Schools) to host a Family Fun Night with learning centers and activity centers (hosted on the campus of EMU).	The event provides a venue for family/K-12 school/university partnership, exposure to learning centers regarding the VA SOL curriculum, and communication with parents, including those with cultural/linguistic diversity.	Waterman Elementary School faculty and administration; Health and PE education faculty; and Special Education faculty.	Yes
11.	EMU's Hostetter Natural History Museum	The EMU Natural History Museum provides educational presentations and field trips to area elementary and middle school students.	Hands-on workshops focus on grades K-2 or grades 3-5 and are developed to enhance the Virginia Standards of Learning. Workshops include Exploring the World Around You; Amazing Adaptations; Getting to Know Rocks and Fossils; and Discovering Owls. There is also a Discovery Room open every Sunday afternoon.	Harrisonburg Public Schools, Rockingham County Public Schools, Augusta County Public Schools and other school districts send students to the EMU Natural History Museum, where EMU students and professors present the workshops.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Eastern Mennonite University
Contact Person: Cathy Smeltzer Erb
Phone No.: (540) 432-4638
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
12.	Conversations Between Mathematicians Project: Thomas Harrison Middle School, James Madison University (JMU), and EMU	A collaborative math research project with 6th graders from Thomas Harrison Middle School and an EMU/JMU college student. Groups correspond online and in person to research an assigned mathematical topic. The "math fair" night showcases research findings to parents, educators and other students.	Provides an opportunity for upper level middle school math students to work collaboratively with college students to research and present a complex mathematical problem.	Brian Nussbaum, Thomas Harrison Middle School math teacher, Laurie Cavey, JMU math education professor, and Toni Flanagan, EMU education professor, Harrisonburg, VA.	No
13.	Lacey Spring Business Partnership	EMU is a partner in education with Lacey Spring Elementary School to achieve established goals and objectives.	This partnership provides practicum and student teaching opportunities for EMU candidates; resource speakers for cultural awareness days; career days or other special programs; assistance with staff development; assistance with tutoring at-risk students; computer assistance in the classroom; Spanish translation of written materials; assistance in maintaining a student newspaper; opportunities for pen pals; and transportation for indigent parents to school conferences.	Lacey Spring Elementary School and EMU.	Yes
14.	Eastern Mennonite Elementary School (EMES) Writing Workshop	Writing in-service for K-5 teachers to help develop writing curriculum and assessment for Eastern Mennonite Elementary School.	The principal from EMES invited us to develop an in-service that would address ways to design and implement writing curriculum and assessments.	Teachers K-5 from Eastern Mennonite Elementary School and EMU Professor Tracy Hough.	No
15.	Master of Arts in Education - Rockingham County Public Schools (RCPS), New Century Master's Program	Partnership between Rockingham County Schools and EMU to provide teacher practitioners graduate courses in literacy, curriculum instruction, and diverse needs. RCPS provides full or reduced reimbursement for courses completed.	RCPS encourage teachers to take selected classes from the Master of Arts in Education program for completion of the master's program or for licensure renewal.	Rockingham County School Central Office Administration and the Director of the Master of Arts in Education.	Yes
16.	Master of Arts in Education - Harrisonburg City Schools - TESL Internships	Partnership and collaboration between Harrisonburg City Schools and EMU to provide graduate classes in Teaching English as a Second Language.	HCPS has a 30%+ population of ELL learners. HCPS has required all administrators and teachers to take at least one ESL class to better meet the needs of the K-12 ELL learners.	Harrisonburg City Schools Central Office staff, EMU, and the director of the Master of Arts in Education Program.	Yes
17.	Master of Arts in Education - Waynesboro City Public Schools (WCPS), MA Cohort in Curriculum and Instruction	The Waynesboro City School administration and M.A. in Education administration have partnered to offer the M.A. in Education in a cohort format, on-site in Waynesboro City Public Schools, that is tailored to meet the needs of the WCPS.	The M.A. in Education program allows a cohort of WCPS teacher practitioners to work collaboratively within their schools on graduate programs, while achieving a master's degree.	EMU M.A. Education Department and Waynesboro City Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Eastern Mennonite University
Contact Person: Cathy Smeltzer Erb
Phone No.: (540) 432-4638
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
18.	Master of Arts in Education - Rockingham County Schools, Reading Specialist Practicum	Partnership between Rockingham County Schools and EMU to provide practicum sites for candidates working toward the reading specialist endorsement.	RCPS encourages their teachers enrolled in EMU's literacy track for the MA program to participate in a summer school reading program designed for elementary pupils who struggle with reading difficulties.	Rockingham County School Central Office Administration and the director of the Master of Arts in Education.	Yes
19.	Master of Arts in Education - Shenandoah County Schools, Technology Courses	Partnership between Shenandoah County Schools and EMU to offer technology courses to teacher practitioners.	Shenandoah County Schools encourages their teachers to enroll in a set of technology classes designed to improve classroom instruction.	Shenandoah County School Central Office Administration and the director of the Master of Arts in Education.	Yes
20.	Master of Arts in Education - Rockingham County Schools, Technology Courses	Partnership between Rockingham County Schools and EMU to offer technology courses to teacher practitioners.	Rockingham County Schools encourages their teachers to enroll in a set of technology classes designed to improve classroom instruction.	Shenandoah County School Central Office Administration, the director of the Master of Arts in Education, and instructor Stephanie Failes.	Yes
21.	Augusta County Reading Course	Developed a three credit course for K-12 teachers and K-12 administrators to teach methods and best teaching practices dealing with literacy assessment.	Director of Augusta County curriculum instruction requested that we develop a course that focuses on methods and best teaching practices dealing with literacy assessment.	Augusta County School District teachers and principals in grades K-12 and EMU Professor Tracy Hough.	Yes
22.	Augusta County Courses	Collaborate teaching selective graduate courses.	Director of Augusta County pupil services in Augusta County and EMU collaborate to offer graduate courses in literacy and mathematics.	Augusta County School district teachers and EMU Master of Arts in Education program.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Eastern Mennonite University
Contact Person: Cathy Smeltzer Erb
Phone No.: (540) 432-4638
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Reading Specialist*	*Spanish PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Journalism (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																		
1.	Early Learning Center	X	X																	
2.	Early Bird Tutoring	X	X																X	
3.	Literacy Block - Harrisonburg Public City Schools placements	X	X																X	
4.	Assistive Technology Practical Day - EDS 333																		X	
5.	Assistive Technology Collaboration with Rockingham County Schools																		X	
6.	LIT 330 Literature for Children and The Early Learning Center	X	X																	
7.	Practicum in eight school divisions and a private school	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Student Teaching in eight school divisions and a private school	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
9.	MidValley Consortium	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.	Waterman Elementary School Family Fun Night							X											X	
11.	EMU's Hostetter Natural History Museum															X	X			
12.	Conversations Between Mathematicians Project: Thomas Harrison Middle School, James Madison University (JMU), and EMU														X					
13.	Lacey Spring Business Partnership	X	X																X	

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Eastern Mennonite University
Contact Person: Cathy Smeltzer Erb
Phone No.: (540) 432-4638
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Reading Specialist*	*Spanish PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Journalism (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																		
14.	Eastern Mennonite Elementary School (EMES) Writing Workshop	X	X																	
15.	Master of Arts in Education - Rockingham County Public Schools (RCPS), New Century Master's Program	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
16.	Master of Arts in Education - Harrisonburg City Schools - TESL Internships						X													
17.	Master of Arts in Education - Waynesboro City Public Schools (WCPS), MA Cohort in Curriculum and Instruction		X	X			X								X					
18.	Master of Arts in Education - Rockingham County Schools, Reading Specialist Practicum			X																
19.	Master of Arts in Education - Shenandoah County Schools, Technology Courses		X									X								
20.	Master of Arts in Education - Rockingham County Schools, Technology Courses		X									X								
21.	Augusta County Reading Course	X	X	X																
22.	Augusta County Courses	X	X	X											X					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Eastern Mennonite University
Contact Person: Cathy Smeltzer Erb
Phone No.: (540) 432-4638
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Emory and Henry College
Contact Person: Herb Thompson/Katherine Hanshew
Phone No.: (276) 944-6215/(276) 944-6218
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Southwest Virginia Science Teachers Academy	A grant-funded initiative to provide science content knowledge, and to address pedagogical and assessment issues with K-5 teachers.	Teacher development in K-5 science instruction as indicated by weaknesses in the Student Performance by Question Reports.	Southwest Virginia Public Education Foundation, Inc., and sixteen participating school systems.	Yes
2.	USDOE and VDOE MSP Mathematics Grant	A grant-funded initiative to provide mathematics professional development to a cohort of 50 grade 4-6 teachers from nineteen school divisions.	Teacher development in grades 4-6 mathematics instruction and preparing students for content changes in Virginia Mathematics Standards of Learning.	USDOE, VDOE, and nineteen school systems in Southwest Virginia.	Yes
3.	Southwest Virginia Public Education Consortium	Umbrella group for several cooperative programs.	Teacher development in math, science, and social studies content areas.	Emory and Henry College (EHC) Education faculty and Bland, Bristol, Carroll, Galax, Grayson, Smyth, Washington, and Wythe school divisions.	Yes
4.	Teacher Program Advisory Committee	School administrators meet with our faculty once each semester to discuss how our program interfaces with the schools, communicate current offerings and opportunities, receive feedback, and identify needs.	Helps us coordinate program development with the needs of our region. For example, our current initiative to implement a Special Education licensure program originated from discussion in this committee.	EHC Education faculty and administrators from Bristol, Russell, Smyth, and Washington schools, divisions that mentor most of our student teachers.	No
5.	Region Seven School Superintendents' Group	Advise and exchange information on student teacher and intern placements and staffing needs in the divisions.	Keeps the school divisions informed about our students who are available as student teachers, interns, and beginning teachers.	School superintendents in Region seven and EHC faculty.	No
6.	Summer Scholars	With supplemental funding from the school districts, middle school students attend one of two summer sessions.	Provides enrichment experience in summer for middle school students.	Attendees are students from public school districts. Staff are drawn from EHC faculty, EHC staff, EHC students, and public school personnel.	Yes
7.	Annual B.G. Raines Education Forum	Annual event (currently in it's 22nd year) for teachers, student teachers, and administrators. (Web page at http://www.forum.ehc.edu.)	Deals with issues in education; provides an opportunity for teachers and administrators to come together to share and learn; and brings in a speaker on a relevant topic in education.	Region seven schools, EHC, award-winning teachers, speakers, and other teacher education programs in the region.	Yes
8.	Mentor Teacher Training	An ongoing program of training in mentoring student teachers with sessions offered at times that teachers can attend, supplemented by a stipend for training and for attendance at mentor seminars each semester.	Involves teachers and schools in the teacher training activity.	EHC faculty and student teachers, along with teachers from regional schools, mostly Washington and Smyth school divisions.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Emory and Henry College
Contact Person: Herb Thompson/Katherine Hanshew
Phone No.: (276) 944-6215/(276) 944-6218
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*French PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																					
1.	Southwest Virginia Science Teachers Academy		X														X		X	X	X		
2.	USDOE and VDOE MSP Mathematics Grant		X													X					X		
3.	Southwest Virginia Public Education Consortium	X	X	X	X			X		X	X			X	X	X	X	X	X	X	X		X
4.	Teacher Program Advisory Committee	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	Region Seven School Superintendents' Group	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
6.	Summer Scholars			X					X	X	X	X	X	X	X	X			X		X	X	X
7.	Annual B.G. Raines Education Forum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Mentor Teacher Training	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Emory and Henry College
Contact Person: Herb Thompson/Katherine Hanshew
Phone No.: (276) 944-6215/(276) 944-6218
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Ferrum College
Contact Person: Dr. Mary Ann Norman
Phone No.: (540) 365-4605
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Early Field Experiences	In each education course, students are required to complete a 20 to 40 hour internship. The Ferrum College Teacher Education Program Director requests teachers from Franklin, Patrick, and Henry county as volunteers to participate, with approval from their principal and central administration.	Ferrum students provide tutorial assistance as well as clerical assistance for teachers in these counties. As students progress in the teacher education program, they begin to practice teaching lessons under the tutelage of cooperating teachers.	Franklin County Public Schools; Henry County Public Schools; Patrick County Public Schools; and Roanoke City Public Schools.	Yes
2.	Student Teaching Placements	Area school systems provide opportunities for pre-service teachers to complete program requirements for licensure.	Ferrum College graduates apply for and gain employment in nearby rural school divisions, which may often be hard to staff areas.	Franklin County Public Schools; Henry County Public Schools; Patrick County Public Schools; and Roanoke City Public Schools.	Yes
3.	Clinical Faculty Partnership	Public school teachers have a clinical faculty representative from Ferrum College, who coordinates and supervises early field experiences.	Public school teachers provide feedback to Ferrum College, via the clinical faculty, concerning the needs of their classrooms, as well as reporting on the success of student interns in the field.	Franklin County Public Schools; Henry County Public Schools; Patrick County Public Schools; and Roanoke City Public Schools.	Yes
4.	Tutorial Partnerships	Ferrum College provides specified tutorial opportunities for local schools who express a need for additional support, both during school hours and in after school programs.	Ferrum College partnered with Ferrum Elementary School to provide after-school tutorial assistance in reading and math.	Franklin County Public Schools	No
5.	America Reads	Ferrum College receives funds for work study initiatives that assist local schools with additional tutorial assistance during school hours in the area of reading.	Additional assistance in reading is identified by local schools in partnership with Ferrum College. Work study students are matched to needy students at local schools.	Franklin County Public Schools	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Ferrum College
Contact Person: Dr. Mary Ann Norman
Phone No.: (540) 365-4605
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Spanish PreK-12*	*Russian PreK-12*	*Agricultural Education*	*Business and Information Technology*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.															
1.	Early Field Experiences	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Student Teaching Placements	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Clinical Faculty Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	Tutorial Partnerships	X											X				X
5.	America Reads	X															

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Ferrum College
Contact Person: Dr. Mary Ann Norman
Phone No.: (540) 365-4605
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Early Childhood Education Program and Fairfax County Public Schools (FCPS)	The Early Childhood Education program and FCPS have formed a partnership that enables students to participate in the internships required for licensure and in field experiences required for their coursework. FCPS teachers teach as adjuncts in the ECE program and serve in an advisory capacity for the program.	The students that are engaged in internships and field experiences provide additional support within the classroom and in the school. ECE students teach intersession classes at modified year-round schools.	Fairfax County Public Schools Personnel.	No
2.	Early Childhood Education Program and Alexandria City Public Schools (ACPS)	The Early Childhood Education program and ACPS have formed a partnership that enables students to participate in the internships required for licensure and in field experiences required for their coursework. ACPS teachers teach as adjuncts in the ECE program and serve in an advisory capacity for the program.	The students that are engaged in internships and field experiences provide additional support within the classroom and in the school.	Alexandria City Public Schools Personnel.	No
3.	Early Childhood Education Program and Arlington County Public Schools (APS)	The Early Childhood Education program and APS have formed a partnership that enables students to participate in the internships required for licensure and in field experiences required for their coursework. APS teachers teach as adjuncts in the ECE program and serve in an advisory capacity for the program.	The students that are engaged in internships and field experiences provide additional support within the classroom and in the school.	Arlington County Public Schools Personnel.	No
4.	Early Childhood Education Program and Prince William County Public Schools (PWCS)	The Early Childhood Education program and PWCS have formed a partnership that enables students to participate in the internships required for licensure and in field experiences required for their coursework. PWCS teachers teach as adjuncts in the ECE program and serve in an advisory capacity for the program.	The students that are engaged in internships and field experiences provide additional support within the classroom and in the school.	Prince William County Public Schools Personnel.	No
5.	Early Childhood Education Program and Loudoun County Public Schools LCPS)	The Early Childhood Education program and LCPS have formed a partnership that enables students to participate in the internships required for licensure and in field experiences required for their coursework.	The students that are engaged in internships and field experiences provide additional support within the classroom and in the school.	Loudoun County Public Schools Personnel.	No
6.	Early Childhood Education Program and District of Columbia (DC) Public Schools	The Early Childhood Education program at George Mason University and DC Public Schools formed a partnership to provide DC teachers with an opportunity to pursue a Master of Education in Early Childhood Special Education.	The Master of Education program provided by ECE enabled teachers to develop the knowledge and skills needed to effectively work with diverse young children with disabilities and their families.	District of Columbia teachers employed by DC Public Schools.	Yes
7.	Early Childhood Education Program and Teach for America (TFA)	The Early Childhood Education program at George Mason University and Teach for America (TFA) have formed a partnership to provide TFA teachers with an opportunity to pursue a Master of Education in Curriculum and Instruction, with a concentration in early childhood education leading to pre-K though 3rd grade licensure.	The TFA teachers are employed teachers who are provisionally licensed. The Master of Education program provided by ECE enables teachers to develop the knowledge and skills needed to teach effectively and enables them to become licensed teachers.	Teach for America teachers employed in the District of Columbia Public Schools, District of Columbia Charter Schools, and Prince George's County Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
8.	Early Childhood Education Program and Infant/Toddler Connection of Fairfax/Falls Church (MCPS)	The Early Childhood Education program and the Infant/Toddler Connection of Fairfax/Falls Church have formed a partnership that enables students to participate in the internships required for licensure and field experiences required for their coursework.	The students engaged in internships and field experiences provide additional support within the classroom and in the school.	The Infant/Toddler Connection of Fairfax/Falls Church.	No
9.	Early Childhood Education Program and Manassas City Public Schools	The Early Childhood Education program and MCPS have formed a partnership that enables students to participate in the internships required for licensure and in field experiences required for their coursework. MCPS teachers teach as adjuncts in the ECE program and serve in an advisory capacity for the program.	The students that are engaged in internships and field experiences provide additional support within the classroom and in the school. ECE students teach intersession classes at modified year-round schools.	Manassas City Public Schools Personnel.	No
10.	Professional Development School Network - Fairfax County Public Schools	Interns doing full-year internships and interns doing semester-long internships are placed in selected schools with trained clinical faculty acting as cooperating teachers. University faculty assigned to each school supervise interns and work with school-based faculty.	Clinical faculty receive high level training and schools have highly trained interns. Faculty lead teachers in action research.	Annandale Terrace ES, Kings Park ES, Parklawn ES, Providence ES, Westlawn ES, Lynnebrook ES, Colin Powell ES, and Hunters Woods ES.	Yes
11.	Professional Development School Network - Arlington Public Schools	Interns doing full-year internships and interns doing semester-long internships are placed in selected schools with trained clinical faculty acting as cooperating teachers. University faculty assigned to each school supervise interns and work with school-based faculty.	Clinical faculty receive high level training and schools have highly trained interns. Faculty lead teachers in action research.	Randolph Elementary School.	Yes
12.	Professional Development School Network - Prince William County Schools	Interns doing full-year internships and interns doing semester-long internships are placed in selected schools with trained clinical faculty acting as cooperating teachers. University faculty assigned to each school supervise interns and work with school-based faculty.	Clinical faculty receive high level training and schools have highly trained interns. Faculty lead teachers in action research.	Old Bridge Elementary School and Occoquan Elementary School.	Yes
13.	Professional Development School Network - Loudoun County Public Schools	Students doing semester-long internships are placed in selected schools with trained clinical faculty acting as cooperating teachers. University faculty assigned to each school supervise interns and work with school-based faculty.	Clinical faculty receive high level training and schools have highly trained interns.	Cool Spring ES, Dominion Trail ES, and Sugarland ES.	No
14.	Professional Development School Network - Fairfax County Public Schools	Interns doing full-year internships and interns doing semester-long internships are placed in selected schools with trained clinical faculty acting as cooperating teachers. University faculty assigned to each school supervise interns and work with school-based faculty.	Clinical faculty receive high level training and schools have highly trained interns. Faculty lead teachers in action research.	Annandale Terrace ES, Kings Park ES, Parklawn ES, Providence ES, Westlawn ES, Lynnebrook ES, Colin Powell ES, and Hunters Woods ES.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
15.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Cross Institution Course Information	GMU entered into a collaboration with the University of Virginia (UVA) and Virginia Commonwealth University (VCU) to list courses for the Math Specialist Leader program on a common website maintained by UVA. Individuals interested in taking math specialist courses can access this information from the website and select from among the courses offered at one of several institutions.	Provides access to mathematics specialist courses for teachers at various university locations in Virginia.	UVA, VCU, and GMU.	Yes
16.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Cross Institution Course Revision/Approval	GMU entered into a collaboration with the University of Virginia (UVA) and Virginia Commonwealth University (VCU) to develop common courses across institutions to be offered at our respective Math Specialist Leader master's degree programs. Courses across institutions were developed, revised, and are approved for transfer among these programs.	Allows teachers in Virginia to transfer mathematics specialist courses across institutions when they relocate within the state.	UVA, VCU, and GMU.	Yes
17.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Fairfax County Public Schools Cohort	GMU entered into a collaboration with the Fairfax County Public Schools to offer a cohort of the Math Specialist Leader program at an FCPS school site from 2007-2010. Thirty FCPS teachers entered the program in Fall 2007.	Fairfax County Public Schools needs to strengthen mathematics teaching and learning experiences for K-8 teachers and students. This collaboration trains 30 FCPS teachers as school-based mathematics specialists.	GMU and FCPS.	No
18.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Prince William County Public Schools Cohort	GMU entered into a collaboration with the Prince William County Public Schools to offer a cohort of the Math Specialist Leader program at a PWC school site from 2008-2011. Twenty-five PWC teachers began the program in Fall 2008.	Prince William County Schools needs to strengthen mathematics teaching and learning experiences for K-8 teachers and students. This collaboration trains 25 PWC teachers as school-based mathematics specialists.	GMU and PWCS.	No
19.	Advanced Studies in Teaching and Learning, K-12 Reading Specialist Licensure	All students take a six-credit seminar and practicum in which they tutor a child or adolescent struggling in reading.	Children and adolescents often have literacy needs that can be addressed by individual diagnosis and remediation that cannot be provided in the local school. These partnerships provide tutoring after school and in the summer (not during school hours).	Manassas City Schools.	No
20.	Advanced Studies in Teaching and Learning, K-12 Reading Specialist Licensure	All students take a six-credit seminar and practicum in which they tutor a child or adolescent struggling in reading.	Children and adolescents often have literacy needs that can be addressed by individual diagnosis and remediation that cannot be provided in the local school. These partnerships provide tutoring after school and in the summer (not during school hours).	Manassas Park City Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
21.	Advanced Studies in Teaching and Learning, K-12 Reading Specialist Licensure	All students take a six-credit seminar and practicum in which they tutor a child or adolescent struggling in reading.	Children and adolescents often have literacy needs that can be addressed by individual diagnosis and remediation that cannot be provided in the local school. These partnerships provide tutoring after school and in the summer (not during school hours).	Woodburn Elementary, Fairfax County Public Schools, VA.	No
22.	School Counseling Leadership Team (SCLT)	The SCLT is a collaboration between counselor educators, school district supervisors, and state level professional school counseling leaders. The SCLT identifies best practices and provides professional development and advocates for issues pertaining to school counseling programs in Virginia.	The SCLT supports school counselors in their development of comprehensive school counseling programs that align with the mission of schools and assure that all students are provided with the resources needed to help all students achieve. The SCLT also advocates for school counseling positions and has supported state initiatives.	GMU C&D Faculty , Marymount, Va Tech, GW Counselor Educators, Fairfax, Loudoun, Prince William, Falls Church, and Arlington County Public School Counselor Supervisors, and State-level School Counseling Leadership.	No
23.	The School Reintegration Committee	The School Reintegration Committee developed and delivers training for school counselors, school social workers, and public health nurses in Fairfax County Public Schools. To date more than 500 FCPS staff have been trained.	Twenty percent of school age children have a chronic illness and seven percent have a chronic illness that impacts learning and psychosocial development. This population is absent more often and requires school support. Increasing programs and services and educating school personnel to the needs of this population is the goal of training.	GMU C&D Faculty, Fairfax Public School Counseling Specialist, Public Health School Coordinator, and School Social Work Coordinator, and school counselors.	No
24.	Arlington/Alexandria Coalition for Homeless/Career Counseling Outreach Program (CAACH)	Students provide supervised traditional and non-traditional career counseling services to underserved populations in the community.	Career education is a PreK-12 standard of learning, and providing career counseling services is a component of all school counseling programs. School counseling students receive training by providing career education and counseling to homeless families.	GMU C&D faculty and CAACH Counselors.	No
25.	School Psychology Internship: Fairfax County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Fairfax County Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
26.	School Psychology Internship: Arlington County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Arlington Public Schools.	Yes
27.	School Psychology Internship: Loudon County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Loudoun County Public Schools.	No
28.	School Psychology Internship: Prince William County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Prince William County Public Schools.	No
29.	School Psychology Internship: Alexandria County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Alexandria City Public Schools.	No
30.	School Psychology Internship: Falls Church Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Falls Church Public Schools.	No
31.	School Psychology Internship: Manassas City Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Manassas City Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
32.	School Psychology Internship: Frederick County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Frederick County Public Schools.	No
33.	School Psychology Internship: Montgomery County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Montgomery County Public Schools.	No
34.	School Psychology Internship: Anne Arundel County Public Schools	Internship of the School Psychology Masters and Certificate of Advanced Study Program at the end of the formal training period (after completion of at least 45 credit hours and a minimum of 200 supervised practicum hours). It takes place during the academic year and totals approximately 1,200 clock hours.	Provides for training of school psychologists.	Anne Arundel County Public Schools.	No
35.	Foreign Language: Multiple Intelligences	Working with Fairfax County Public Schools to co-host "Liven Up Teaching Arabic and Chinese through the Theory of Multiple Intelligences (MI)". The two week Summer 2009 institute focused on MI theory and how varied approaches can be applied to language learning. In 2010, the focus is on Transitioning to Teaching in US Schools in order to enhance teacher expertise and student performance.	This institute provides opportunities to help fill the void in the paucity of both Arabic and Chinese teachers in the Metro area. In-service as well as pre-service teachers are given practical applications of theory-to-practice, while working with students attending the FCPS children's summer language camps held at GMU.	Fairfax County Public Schools.	Yes
36.	Elementary Art Methods Practicum	As part of AVT 691, the elementary practicum assignment focuses on observation, participation and evaluation of the practice of art instruction. MAT students are paired with exemplary elementary art teachers and their students to attend essential dimensions of art teaching and learning.	The need for well-prepared art teachers to observe contemporary art education practice resulting in high quality student art work in area elementary schools.	Fairfax County Public Schools.	No
37.	Secondary Art Methods Practicum	As part of AVT 692, the secondary practicum assignment focuses on observation, participation and evaluation of the practice of art instruction. MAT students are paired with exemplary middle and high school art teachers and their students to attend essential dimensions of art teaching and learning.	The need for well-prepared art teachers to observe contemporary art education practice resulting in high quality student art work in area middle and high schools.	Fairfax County Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
38.	Student Teaching Internship	In AVT 695, MAT students teach in the elementary and secondary schools under direct supervision of cooperating teachers. Cooperating teachers guide the students' gradual assumption of the full-time responsibilities in their role as art teachers. University supervisors make periodic site visits to observe and critique each student's progress.	Working under the guidance of exemplary art teachers in area elementary and secondary schools, MAT student teachers pilot original, standard-based art units. The resulting high quality student art work is exhibited at the Art of Teaching Art Showcase, celebrating student artists, their families and cooperating art teachers.	Fairfax County and Prince William County Public Schools.	No
39.	AVT 495/595 School Observations	By visiting the art rooms of diverse area schools, pre-service art teachers will become familiar with art teaching while discovering a variety of ways art is taught and evaluated to meet the multiple educational needs of today's students. Students develop observation skills and analytical abilities to interpret and evaluate instructional practices.	The need for potential art teachers to observe contemporary art education practices, resulting in high quality student art work in area elementary, middle and high schools.	Fairfax County Public Schools.	No
40.	Artful Adventures at DC Art Museums	Pre-service students actively explore a selected DC art museum to collaboratively design, implement and evaluate object-specific family tours on the first weekend in March. After which they are engaged in researching an art object in order to create an instructional resource and an object-inspired artwork, that are shared with the institution.	The need for well prepared art teachers to engage area parents and children in meaningful art learning with original art objects in museum settings. (Reference: http://gazette.gmu.edu/articles/8075/ and http://gazette.gmu.edu/articles/11712.)	Kreeger Museum, Phillips Collection, National Museum of Women in the Arts, and National Portrait Gallery.	No
41.	George Mason University Dance Department Partnership with Woodbridge High School Center for the Arts Dance Program	The partnership in intended to prepare both undergraduate dance majors at George Mason for the challenges of teaching in a high school magnet dance program, and high school dancers for the rigors of a selective undergraduate dance degree program. George Mason dance majors and faculty observe and teach master classes at Woodbridge, and Woodbridge dancers (grades 9 - 12) visit George Mason to observe classes, attend workshops and see performances.	The partnership provides grades 9-12 dancers opportunities to investigate and experience dance as an art form in a broader perspective than is available in the secondary school or in popular culture. Woodbridge dancers participate in university production workshops, learn audition skills from university faculty, discuss technique training with dance majors, and investigate career opportunities with George Mason dance alumni. The goal is for Woodbridge dancers to develop individual goals and interests in the dance discipline, and understand pathways to achieving those goals.	George Mason University Dance Department and Woodbridge High School Center for the Arts Dance Program.	No
42.	English as a Second Language: Language Assessment Partnership	School-university partnership with Fairfax County Public Schools in language assessment since 1992. This long-term, annually renewing partnership has as its goal to improve the validity and reliability of assessments used to measure the language growth of over 19,000 students in the English as a Second Language program.	Fairfax County Public Schools needs to improve the reliability and validity of its language assessment procedures and measures in order to provide accurate information on student growth in the English language.	English as a Second Language Program, Fairfax County Public Schools, VA.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
43.	Health and Physical Education Student Teaching Internships	Purpose is to meet teacher candidate needs for a prolonged and full day experience in schools at the elementary and secondary levels, while learning from a high quality cooperating teacher.	Programs need knowledgeable and energetic pre-service teachers committed to learning to teach students. Internships prepare future teachers to meet needs of the states' youth.	Fairfax, Loudoun, and Prince William County Public Schools.	Yes
44.	Physical Education Field Experiences in Schools	Offers the opportunity for junior and senior level students to shadow a master teacher and teach classes unassisted in elementary, secondary, and adapted PE settings.	Learners experience a visiting teacher who quickly becomes part of the class and communicates positively with students. The focus is on developing management skills, instructional strategies, and increasing academic learning time.	Fairfax County Public Schools.	No
45.	Health Education Field Experience	Pre-service teachers experience for the first time teaching health education in a seated classroom within a middle school setting.	Learners experience well developed and innovative lessons presented by pre-service teachers eager to share their health education knowledge in a positive learning environment.	Fairfax County Public Schools.	No
46.	Collaborative Research	Research project that examined the mentor and mentee relationships and effectiveness of induction programs in two counties.	Learner needs are addressed most effectively when first year teachers have effective mentors who provide leadership in model teaching effectiveness, while providing feedback in helping first year teachers develop.	Prince William and Fairfax County Schools.	No
47.	Collaboration with In-Service Professional Development	PETE Faculty serve as presenters at Fairfax County physical education teacher in-service opportunities.	Assist teachers in emphasizing student knowledge about why they perform and in studying physical fitness activities.	Fairfax County Public Schools.	No
48.	Public school teachers who are employed in the Physical Education program to instruct pre-service teachers	High quality public school teachers collaborate with PETE faculty regarding content of courses and bring their experience and background to our students who become better prepared to teach youth in schools.	Public school teachers are critical links who enable teacher candidates to better understand children and youth through examples, stories, and sound pedagogical applications.	Fairfax County Public Schools.	No
49.	Online course in health education	Online course developed for and offered to health/physical education teachers on provisional license. The course was designed to meet the health methods course requirement for licensure.	The Commonwealth of Virginia requires teacher licensure or endorsement in health and physical education. This graduate-level course requires teachers to assess and analyze their school health program and provides resources for teaching K-12 health.	Fairfax, Loudoun, and Prince William County Public Schools.	No
50.	Student Teaching in Music Education - Instrumental	The Music Education program and Arlington Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. APS teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	Arlington Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
51.	Student Teaching in Music Education - Instrumental	The Music Education program and Fairfax County Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. FCPS teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	Fairfax County Public Schools.	No
52.	Student Teaching in Music Education - Instrumental	The Music Education program and Loudoun County Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. LCPS teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	Loudoun County Public Schools.	No
53.	Student Teaching in Music Education - Instrumental	The Music Education program and Prince William County Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. PW teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	Prince William County Public Schools.	No
54.	Student Teaching in Music Education - Vocal/Choral	The Music Education program and Arlington County Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. APS teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	ArlingtonCounty Public Schools.	No
55.	Student Teaching in Music Education - Vocal/Choral	The Music Education program and Fairfax County Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. FCPS teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	Fairfax County Public Schools.	No
56.	Student Teaching in Music Education - Vocal/Choral	The Music Education program and Loudoun County Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. LCPS teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	Loudoun County Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
57.	Student Teaching in Music Education - Vocal/Choral	The Music Education program and Prince William County Public Schools have formed a partnership that enables students to participate in student teaching as required for licensure and in field experiences required for their coursework. PW teachers serve as advisors, guest speakers, and clinicians for the program.	The students engaged in student teaching and field experiences provide additional support within the classroom and in the school. The program helps to meet the need for well prepared music teachers.	Prince William County Public Schools.	No
58.	Honor Band	The College of Visual and Performing Arts Music Education Program annually hosts a band festival for students from throughout the Commonwealth of Virginia and the Metropolitan Washington area.	High school students participate in a three-day festival of rehearsals and a culminating concert in the George Mason University Center for the Arts.	High schools throughout Virginia and the Metropolitan Washington area.	No
59.	Secondary Professional Development Schools Network - Fairfax County Public Schools	Students doing semester-long internships are placed in selected schools with trained clinical faculty acting as cooperating teachers. University faculty assigned to each school supervise interns and work with site-based faculty.	Clinical faculty receive high level training and schools have highly trained interns.	Robinson Secondary School, Holmes Middle School and South Lakes High School.	Yes
60.	Child Find (T-TAC): Alexandria City Schools	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Community of practice where coordinators collaborate in groups to discuss common issues in the region.	Alexandria City Public Schools.	No
61.	Child Find (T-TAC): Arlington Public Schools	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Community of practice where coordinators collaborate in groups to discuss common issues in the region.	Arlington County Public Schools.	No
62.	Child Find (T-TAC): Fairfax County Public Schools	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Community of practice where coordinators collaborate in groups to discuss common issues in the region.	Fairfax County Public Schools	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
63.	Child Find (T-TAC): Fauquier County Public Schools (Child Find) (T-TAC)	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Community of practice where coordinators collaborate in groups to discuss common issues in the region.	Fauquier County Public Schools.	No
64.	Early Childhood Priority Project (T-TAC): Higher Horizons Head Start	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Fairfax County Public Schools.	Yes
65.	Early Childhood Priority Project (T-TAC): Gum Springs Head Start	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Fairfax County Public Schools.	Yes
66.	Early Childhood Priority Project (T-TAC): Falls Church City	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Falls Church Public Schools.	Yes
67.	Child Find (T-TAC): Manassas City	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Community of practice where coordinators collaborate in groups to discuss common issues in the region.	Manassas City Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
68.	Child Find (T-TAC): Manassas Park City	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Community of practice where coordinators collaborate in groups to discuss common issues in the region.	Manassas Park City Public Schools.	No
69.	Child Find (T-TAC): Prince William County	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Community of practice where coordinators collaborate in groups to discuss common issues in the region.	Prince William County Public Schools.	No
70.	Early Childhood Priority Project (T-TAC): Frederick County	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Frederick County Public Schools.	Yes
71.	Early Childhood Priority Project (T-TAC): Page County	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Page County Public Schools.	Yes
72.	T-TAC: Berryville Elementary	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Berryville Elementary School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
73.	Early Childhood Priority Project (T-TAC): Shenandoah County	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Shenandoah County Public Schools.	Yes
74.	Early Childhood Priority Project (T-TAC): Winchester City Schools	The Early Childhood Priority Project supports professionals who provide special education and general education services to children, birth through kindergarten age, in a variety of settings. A specific goal of this project is to increase inclusive opportunities for children with developmental disabilities by promoting evidence-based educational strategies and collective partnerships.	Inclusive Placement Options for Preschoolers (IPOP), promoting the new standards for early childhood in literacy, mathematics, social studies, science, personal and social development, and physical and motor development through Virginia's Foundation Blocks for Early Learning.	Winchester City Public Schools.	Yes
75.	Academic Review (T-TAC): Gunston Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for the implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; and implementation of research-based instructional interventions for schools warned in English or Mathematics.	Gunston Middle School.	Yes
76.	Academic Review (T-TAC): Kenmore Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for the implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; and implementation of research-based instructional interventions for schools warned in English or Mathematics.	Kenmore Middle School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
77.	Academic Review (T-TAC): Culpeper Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for the implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; and implementation of research-based instructional interventions for schools warned in English or Mathematics.	Culpeper Middle School.	Yes
78.	Academic Review (T-TAC): W.C Taylor Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for the implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; and implementation of research-based instructional interventions for schools warned in English or Mathematics.	W. C. Taylor Middle School.	Yes
79.	Academic Review (T-TAC): Godwin Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for the implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; and implementation of research-based instructional interventions for schools warned in English or Mathematics.	Godwin Middle School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
80.	Academic Review (T-TAC): George Washington MS (Alexandria City)	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for the implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; and implementation of research-based instructional interventions for schools warned in English or Mathematics.	Alexandria City Public Schools.	Yes
81.	Academic Review (T-TAC): Francis Hammond (Alexandria City)	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for the implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; and implementation of research-based instructional interventions for schools warned in English or Mathematics.	Alexandria City Public Schools.	Yes
82.	Special Education Outreach: Loudoun County (Outreach Cohort)	Cohort Program to deliver special education - general curriculum licensure and M.Ed. programs to school divisions in Superintendent's Region 4 and the Teach for America D.C. Program.	This program is designed to meet a school division's need to hire and retain qualified teachers for students with disabilities. It allows teachers with provisional licenses to meet state licensing requirements within mandated time frames.	Loudoun County Public Schools.	No
83.	Special Education Outreach: Frederick County (Outreach Cohort)	Cohort Program to deliver special education - general curriculum licensure and M.Ed. programs to school divisions in Superintendent's Region 4 and the Teach for America D.C. Program.	This program is designed to meet a school division's need to hire and retain qualified teachers for students with disabilities. It allows teachers with provisional licenses to meet state licensing requirements within mandated time frames.	Frederick County Public Schools.	No
84.	Special Education Outreach: Piedmont (Orange, Culpeper and Madison County) (Outreach Cohort)	Cohort Program to deliver special education - general curriculum licensure and M.Ed. programs to school divisions in Superintendent's Region 4 and the Teach for America D.C. Program.	This program is designed to meet a school division's need to hire and retain qualified teachers for students with disabilities. It allows teachers with provisional licenses to meet state licensing requirements within mandated time frames.	Piedmont (Orange, Culpeper and Madison County).	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
85.	Special Education Outreach: Virginia Association of Independent Special Education Facilities (VAISEF) (Outreach Cohort)	Cohort Program to deliver special education - general curriculum licensure and M.Ed. programs to school divisions in Superintendent's Region 4 and the Teach for America D.C. Program.	This program is designed to meet a school division's need to hire and retain qualified teachers for students with disabilities. It allows teachers with provisional licenses to meet state licensing requirements within mandated time frames.	Virginia Association of Independent Special Education Facilities (VAISEF) (Outreach Cohort).	No
86.	Special Education Outreach: Teach for America (Outreach Cohort)	Cohort Program to deliver special education - general curriculum licensure and M.Ed. programs to school divisions in Superintendent's Region 4 and the Teach for America D.C. Program.	This program is designed to meet a school division's need to hire and retain qualified teachers for students with disabilities. It allows teachers with provisional licenses to meet state licensing requirements within mandated time frames.	Special Education Outreach: Teach for America (Outreach Cohort).	No
87.	Special Education Outreach: Fairfax County (Outreach Cohort)	Cohort Program to deliver special education - general curriculum licensure and M.Ed. programs to school divisions in Superintendent's Region 4 and the Teach for America D.C. Program.	This program is designed to meet a school division's need to hire and retain qualified teachers for students with disabilities. It allows teachers with provisional licenses to meet state licensing requirements within mandated time frames.	Fairfax County.	No
88.	Special Education Outreach: Prince William County (Outreach Cohort)	Cohort Program to deliver special education - general curriculum licensure and M.Ed. programs to school divisions in Superintendent's Region 4 and the Teach for America D.C. Program.	This program is designed to meet a school division's need to hire and retain qualified teachers for students with disabilities. It allows teachers with provisional licenses to meet state licensing requirements within mandated time frames.	Prince William County.	No
89.	Instructional Support Team (T-TAC): Halley Elementary School	The Instructional Support Team (IST) Priority Project is a general education initiative funded through special education. The goal is to enhance, improve, and increase student and staff performance. IST provides two interrelated and complementary services: student intervention and professional development. Although initially applied to elementary schools, the IST model has been implemented in middle schools.	Schools with ISTs have reported: a reduction in student retentions; a reduction in the number of student referrals for multi-disciplinary evaluations; and fewer students found eligible for special education services.	Halley Elementary School.	Yes
90.	Instructional Support Team (T-TAC): Westlawn Elementary School	The Instructional Support Team (IST) Priority Project is a general education initiative funded through special education. The goal is to enhance, improve, and increase student and staff performance. IST provides two interrelated and complementary services: student intervention and professional development. Although initially applied to elementary schools, the IST model has been implemented in middle schools.	Schools with ISTs have reported: a reduction in student retentions; a reduction in the number of student referrals for multi-disciplinary evaluations; and fewer students found eligible for special education services.	Westlawn Elementary School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
91.	Instructional Support Team (T-TAC): Canterbury Woods	The Instructional Support Team (IST) Priority Project is a general education initiative funded through special education. The goal is to enhance, improve, and increase student and staff performance. IST provides two interrelated and complementary services: student intervention and professional development. Although initially applied to elementary schools, the IST model has been implemented in middle schools.	Schools with ISTs have reported: a reduction in student retentions; a reduction in the number of student referrals for multi-disciplinary evaluations; and fewer students found eligible for special education services.	Canterbury Woods.	Yes
92.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Alexandria City Schools.	No
93.	T-TAC: Arlington Archdiocese	Professional development.	Provided two workshops on evidence based best practice instructional and behavioral support strategies for students with ASD, K-12.	St. Leo the Great, St. Ann School, and GMU T-TAC.	Yes
94.	NOVAS (T-TAC): Northern Virginia Autism Support Team	Community of Practice that meets bi-monthly to share resources, training and strategies information regarding Autism Spectrum Disorders.	Review and discuss evidence-based best practice interventions and strategies for the education of students with ASD, PreK-12.	Alexandria, Arlington, Fairfax, Fauquier, Fairfax, and GMU T-TAC.	No
95.	The Secondary Transition Activities Priority Project (T-TAC): Arlington County	The Secondary Transition Activities Priority Project provides leadership, support, resources, training, and technical assistance to the VTOP program; self determination, secondary data collection; regional projects; transition matrix/college guide; and state transition events.	The goal is to improve self-determination skills (self-advocacy, problem solving, leadership skills) in youth with disabilities. Resources are developed for educators at the elementary through secondary levels. Collecting, analyzing, and disseminating data on Indicators 13 and 14, that address transition and postsecondary outcomes for Virginia's State Performance Report, are targeted activities.	Arlington County (The Secondary Transition Activities Priority Project) (T-TAC).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
96.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Arlington County.	No
97.	T-TAC: Clarke County	Professional development.	Provided three workshops on ASOL instruction for students with significant cognitive disabilities: communication, literacy, and teaching thematically.	Clarke County.	Yes
98.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Clark County.	Yes
99.	Effective School-wide Discipline Cohort 1 (T-TAC): Floyd T. Binns Middle	The Effective schoolwide Discipline (ESD) Priority Project uses a team-based process designed to address the unique needs of individual schools. School divisions must assign a division level coordinator, and interested schools need to submit a readiness packet and assign a coach, who is the point of contact for the school. School teams are required to attend a series of training events based on the phases of the positive behavioral support model. Then they are responsible for taking the model back to their school staff for training and implementation. Schools submit schoolwide data at the readiness phase, midyear and end-of-year phases of implementation.	Build the rationale and support for an ESD model; ensure the components of their model are research-based (Benchmarks of Quality); and submit evaluation which is designed to measure the impact of the model on identified areas of concern. Cohort 1, with 15 participating schools.	Floyd T. Binns Middle.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
100.	T-TAC: Culpeper	Virginia Department of Education Train-the-Trainer Autism Team.	Build capacity within LEA by implementing staff development training and consultative services for professionals involved in the education of students with ASD.	Culpeper, GMU T-TAC, and Autism Priority Project.	Yes
101.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Fairfax County.	No
102.	T-TAC: Glasgow Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; and design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; implementation of research-based instructional interventions for schools warned in English or Mathematics.	Glasgow Middle School.	Yes
103.	T-TAC: Homes Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Provides for implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; and design of ongoing, school-based program of professional development; implementation of school improvement plan addressing identified areas of weakness; implementation of research-based instructional interventions for schools warned in English or Mathematics.	Homes Middle School.	Yes
104.	T-TAC: Fairfax	Professional development	Provides divisionwide training on social skills instruction for students PreK-12 with ASD.	Fairfax County.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
105.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share of AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided 3 series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Falls Church City.	No
106.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Fauquier County Public Schools.	No
107.	ESD (T-TAC): Cedar Lee Middle	The Effective schoolwide Discipline (ESD) Priority Project uses a team-based process designed to address the unique needs of individual schools. School divisions must assign a division level coordinator, and interested schools need to submit a readiness packet and assign a coach, who is the point of contact for the school. School teams are required to attend a series of training events based on the phases of the positive behavioral support model. Then they are responsible for taking the model back to their school staff for training and implementation. Schools submit schoolwide data at the readiness phase, midyear and end-of-year phases of implementation.	Build the rationale and support for an ESD model; ensure the components of their model are research-based (Benchmarks of Quality); and submit evaluation which is designed to measure the impact of the model on identified areas of concern.	Cedar Lee Middle School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
108.	The Secondary Transition Activities Priority Project (T-TAC): Fauquier County Public Schools	The Secondary Transition Activities Priority Project provides leadership, support, resources, training, and technical assistance to the VTOP program; self-determination, secondary data collection; regional projects; transition matrix/college guide; and state transition events.	The goal is to improve self- determination skills (self-advocacy, problem solving, leadership skills) in youth with disabilities. Resources are developed for educators at the elementary through secondary levels. Collecting, analyzing, and disseminating data on Indicators 13 and 14, that address transition and postsecondary outcomes for Virginia's State Performance Report, are targeted activities.	Fauquier County Public Schools.	Yes
109.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Frederick County Public Schools.	Yes
110.	Instructional Support Team (T-TAC): Apple Pie Ridge Elementary	The Instructional Support Team (IST) Priority Project is a general education initiative funded through special education. The goal is to enhance, improve, and increase student and staff performance. IST provides two interrelated and complementary services: student intervention and professional development. Although initially applied to elementary schools, the IST model has been implemented in middle schools.	Schools with ISTs have reported: a reduction in student retentions; a reduction in the number of student referrals for multi-disciplinary evaluations; fewer students found eligible for special education services.	Apple Pie Ridge Elementary.	Yes
111.	The Secondary Transition Priority Project (T-TAC): Frederick County	The Secondary Transition Activities Priority Project provides leadership, support, resources, training, and technical assistance to the VTOP program, self determination, secondary data collection, regional projects, transition matrix/college guide, state transition events.	The goal is to improve self determination skills (self advocacy, problem solving, leadership skills) in youth with disabilities. Resources are developed for educators at the elementary through secondary levels. Collecting, analyzing, and disseminating data on Indicators 13 and 14, that address transition and postsecondary outcomes for Virginia's State Performance Report, are targeted activities.	Frederick County Public Schools.	Yes
112.	T-TAC: Frederick County	Professional development	Provided workshop on evidence based best inclusive practices for students with disabilities, K-6.	Frederick County Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
113.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Loudoun County Public Schools.	Yes
114.	T-TAC: North Spring Behavioral Health	North Spring Behavioral Healthcare is a residential and private psychiatric center, which provides therapeutic, behavioral, and educational residential programs for students, ages 9-18. T/TAC has a Long Term Technical Assistance (LTTA) for the 2007-2008 school year, to provide a series of professional development workshops, which have focused on the following:	Provided the following workshops: • Marzano's nine most Effective Instructional Strategies; • Strategies to Increase Literacy and Learning in Content Areas; • The Writing Process; • Mathematics Instruction; and • Effective Assessment Strategies, Formative and Summative.	North Spring Behavioral Health.	Yes
115.	T-TAC: Metz Middle School	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; and implementation of school improvement plan addressing identified areas of weakness; implementation of research-based instructional interventions for schools warned in English or Mathematics.	Metz Middle School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
116.	T-TAC: Locust Grove Middle	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; and implementation of school improvement plan addressing identified areas of weakness; implementation of research-based instructional interventions for schools warned in English or Mathematics.	Locust Grove Middle.	Yes
117.	T-TAC: Prospect Heights Middle	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; and implementation of school improvement plan addressing identified areas of weakness; implementation of research-based instructional interventions for schools warned in English or Mathematics.	Prospect Heights Middle.	Yes
118.	T-TAC: Orange Elementary	Academic Review-The Virginia Department of Education (VDOE) Academic Review and Instructional Review Teams are designed to help schools identify and analyze instructional and organizational factors affecting student achievement. The focus is on improvement in the systems, processes, and practices that are implemented at the school level. The overall goal is academic success for all students.	Implementation of curriculum aligned with the Standards of Learning; use of time and school scheduling practices that maximize instruction; use of data to make instructional and planning decisions; design of ongoing, school-based program of professional development; and implementation of school improvement plan addressing identified areas of weakness; implementation of research-based instructional interventions for schools warned in English or Mathematics.	Orange Elementary.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
119.	The Secondary Transition Activates Priority Project (T-TAC): Page County	The Secondary Transition Activities Priority Project provides leadership, support, resources, training, and technical assistance to the VTOP program, self-determination, secondary data collection, regional projects, transition matrix/college guide, state transition events.	The goal is to improve self-determination skills (self-advocacy, problem solving, leadership skills) in youth with disabilities. Resources are developed for educators at the elementary through secondary levels. Collecting, analyzing, and disseminating data on Indicators 13 and 14, that address transition and postsecondary outcomes for Virginia's State Performance Report, are targeted activities.	Page County.	Yes
120.	T-TAC: Prince William	Professional development.	Provided four workshops on evidence-based best practice strategies for the education of students with ASD: overview, communication/social, sensory/behavior, and data collection.	Prince William County Schools and GMU T-TAC.	Yes
121.	Effective School-wide Discipline Cohorts 1 and 2 (T-TAC): Prince William Schools	The Effective schoolwide Discipline (ESD) Priority Project uses a team-based process designed to address the unique needs of individual schools. School divisions must assign a division level coordinator, and interested schools need to submit a readiness packet and assign a coach, who is the point of contact for the school. School teams are required to attend a series of training events based on the phases of the positive behavioral support model. Then they are responsible for taking the model back to their school staff for training and implementation. Schools submit schoolwide data at the readiness phase, midyear and end-of-year phases of implementation.	Build the rationale and support for an ESD model; ensure the components of their model are research-based (Benchmarks of Quality); and submit evaluation which is designed to measure the impact of the model on identified areas of concern. Cohort 1, with 15 participating schools.	ESD project in PW is with Beville Middle, Potomac High, Bull Run Middle, Graham Park Middle, Parkside Middle, Saunders Middle, Woodbridge Middle, Dale City, Penn Elem., Yorkshire Elem., Marstellar Middle, Bel Air, Glenkirk Elem., Lake Ridge, Leesylvannia Elem., King Elem., Mullen Elem., Potomac View Elem., Rosa Parks, and Victory Elem..	Yes
122.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Prince William County Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
123.	VTOP (T-TAC): Rappahannock County	The Secondary Transition Activities Priority Project provides leadership, support, resources, training, and technical assistance to the VTOP program; self-determination, secondary data collection; regional projects; transition matrix/college guide; and state transition events.	The goal is to improve self-determination skills (self-advocacy, problem solving, leadership skills) in youth with disabilities. Resources are developed for educators at the elementary through secondary levels. Collecting, analyzing, and disseminating data on Indicators 13 and 14, that address transition and postsecondary outcomes for Virginia's State Performance Report, are targeted activities.	Rappahannock County.	Yes
124.	Effective School-wide Discipline Cohort (T-TAC): Warren County	The Effective schoolwide Discipline (ESD) Priority Project uses a team-based process designed to address the unique needs of individual schools. School divisions must assign a division level coordinator, and interested schools need to submit a readiness packet and assign a coach, who is the point of contact for the school. School teams are required to attend a series of training events based on the phases of the positive behavioral support model. Then they are responsible for taking the model back to their school staff for training and implementation. Schools submit schoolwide data at the readiness phase, midyear and end-of-year phases of implementation.	Build the rationale and support for an ESD model; ensure the components of their model are research-based (Benchmarks of Quality); submit evaluation which is designed to measure the impact of the model on identified areas of concern. Cohort 1, with 15 participating schools.	ESD project in Warren is at E. Wilson Morrison Elem., Ressie Jefferies Elem., Warren County Middle.	Yes
125.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Shenandoah.	Yes
126.	T-TAC: Warren	Virginia Department of Education Train-the-Trainer Autism Team.	Build capacity within LEA by implementing staff development training and consultative services for professionals involved in the education of students with ASD.	Warren, GMU T-TAC, and Autism Priority Project.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
127.	Instructional Support Team (T-TAC): Virginia Avenue Charlotte de Hart E.S, Winchester City Schools	The Instructional Support Team (IST) Priority Project is a general education initiative funded through special education. The goal is to enhance, improve, and increase student and staff performance. IST provides two interrelated and complementary services: student intervention and professional development. Although initially applied to elementary schools, the IST model has been implemented in middle schools.	Schools with ISTs have reported: a reduction in student retentions; a reduction in the number of student referrals for multi-disciplinary evaluations; and fewer students found eligible for special education services.	Virginia Avenue Charlotte de Hart E.S, Winchester City Schools.	Yes
128.	T-TAC: Arlington Department of Human Services	Professional Development.	Provided workshop on evidence based best practices for early intervention and preschool instructional and behavioral support strategies for Pre-K students with ASD.	Arlington Preschool directors/lead teachers.	Yes
129.	T-TAC: Commonwealth Autism Services	Statewide training.	Provides workshop on evidence based Ziggurat framework for parents and professionals supporting students with ASD, PreK-12.	Commonwealth Autism Services, GMU T-TAC.	No
130.	T-TAC: Commonwealth Autism Services	Statewide training.	Provides training by Dr. Scott Bellini on social skills instruction for students with ASD, PreK-12.	Commonwealth Autism Services, GMU T-TAC.	Yes
131.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Winchester.	No
132.	T-TAC: NOVA Assistive Technology Coordinators	NOVA AT Coordinators group has arranged to share of AT Resources and develop AT solutions for the needs of students with disabilities among regional AT Coordinators working in school districts. This group formed at the end of 2006.	The NOVA AT Coordinators blackboard site has opened to share information. AT events including workshop, training, and conference provided by T/TAC approach their needs and update AT resources. For example, T/TAC has provided three series of workshop concerning AT Consideration and Evaluation. T/TAC library is one way to find a solution to support the needs of students with disabilities in trials of AT devices and software.	Spotsylvania .	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
133.	Skill Survey for Student Teachers Working with Students with Disabilities (King-Sears)	This is a multi-year research project in which student teachers in general and special education programs are queried about their skills in working with students with disabilities during their student teaching experiences. Student teachers self-rate their skills using a Likert-scale rating system, and their respective school-based supervising/cooperating teachers and college/university supervisors also rate the student teachers. The purpose of this research is to compare participants' responses, and multiple comparisons occur, such as general education student teachers' self-ratings compared to special education student teachers' self-ratings.	Beginning general and special education teachers need to graduate from teacher preparation programs that have prepared them well to teach students with disabilities. Analyzing data from student teaching personnel at the pre-service level enables teacher preparation programs to be responsive to programmatic needs so that if there are areas that need to addressed within the teacher preparation program to better prepare general and special educators to teach students with disabilities, that can occur.	Johns Hopkins University, Marywood University, York College, and University of South Florida.	Yes
134.	DC Public Schools: Coolridge High School (Jackman)	The aim of this partnership is to lead a team of school personnel through the development of comprehensive school wide behavioral management program.	This partnership provides the tools for the school community to build, implement and sustain positive school-wide discipline management system.	DC Public Schools: Coolridge High School.	Yes
135.	KIHD System Project (Graff, Behrmann, Wang, Chung)	Through a USDOE steppingstones grant a collaboration was formed to use a technology data collection tool. The technology tool, the KIHD System, enables the teachers to collect data more efficiently.	The KIHD system graphs the data automatically allowing the teacher to have more time to build new lessons and prepare materials. Additionally, since the students' data is collected and graphed in real time, the teacher has the information needed to make evidence based decisions about the current intervention.	The Helen A. Kellar Institute of Human Disabilities and Ivymount School.	Yes
136.	George Mason University - Burke School (Fairfax County Public Schools) (Margo Mastropieri)	This is a research partnership to teach expressive writing to students with serious emotional disabilities at the middle school. The research project is a subcontract with Penn State University and funded by the US Department of Education, Institute of Education Sciences.	Students in the eighth grade are required to take the writing SOL exam. The GMU research project is designed to teach students with serious emotional disabilities, a persuasive writing strategy designed to facilitate their writing in school and to generalize to performance in other classes and on the high stakes tests.	George Mason University, Burke School, Fairfax County Public Schools, and Penn State University.	No
137.	Driver Education Endorsement for Local School Divisions	GMU's College of Education of Human Services (CEHD) offers two driver education endorsement courses, HEAL 402 Introduction to Driver Education, and HEAL 403 Driver Education Practice and Administration, through CEHD's Office of Educational Services to local school divisions.	The school divisions offer classroom driver education and behind-the-wheel instruction to secondary level students. This requires a sufficient number of available VA DOE certified driver education instructors. Professional preparation is based on the Administrative and Curriculum Guide for Driver Education in Virginia.	Fairfax County Public Schools, Loudoun County Public Schools, and Prince William County Public Schools.	Yes
138.	Fairfax County Public Schools - Gifted Education	Marketing, recruiting, staffing, and grant work.	Opportunity to acquire specialized preparation in gifted education.	Fairfax County Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	**Partnership and Collaboration Description** - Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs -** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators -** Please list the names of the entities that took part in the partnership and collaboration.	**Evidence of Agreement** - Is there written documentation with the partners and collaborators? Yes or No?
139.	FAST TRAIN ESOL Endorsement Outreach Initiatives	Marketing, recruiting, staffing, and grant work.	Opportunity to acquire preparation in ESOL through FAST TRAIN cohort.	Albemarle, Chesterfield, Frederick, Hanover, Henrico, Loudoun, and Prince William Counties; and Manassas City.	Yes
140.	FAST TRAIN Elementary Program Endorsement Outreach Initiatives	Marketing, recruiting, staffing, and grant work.	Opportunity to acquire preparation in elementary education preK-6 through FAST TRAIN cohort.	Anne Arundel County, Fairfax County, Arlington County Public Schools, Washington International School; and Roberta Schlichter at VDOE.	Yes
141.	FAST TRAIN International Baccalaureate Programs	Advanced IB Studies graduate certificate cohort.	Opportunity to acquire the IB Teacher Award Level I, which is required for school authorization and evaluation from IB through FAST TRAIN cohort.	Islamic Saudi Academy and Alexandria City Public Schools.	Yes
142.	KIHD - The VI Consortium	The VI Consortium is made up of six universities: George Mason University, James Madison University, Norfolk State University, Old Dominion University, Radford University, and Virginia Commonwealth University, to prepare teachers to be highly skilled at working with students with visual impairment and blindness.	The VI Consortium enables teachers to develop the knowledge and skills needed to be highly skilled at working with students with visual impairment and blindness.	James Madison University, Norfolk State University, Old Dominion University, Radford University, and Virginia Commonwealth University.	Yes
143.	Virginia School for the Deaf and Blind	Professional development.	The partnership between KIHD and VSDB provides professional development to teachers in the knowledge and skills needed to be highly skilled at working with students with visual impairment and blindness.	Virginia School for the Deaf and Blind.	Yes
144.	Virginia Department for Blind and Vision Impaired	DBVI and AIM-VA (Accessible Instructional Materials - Virginia) have created a collaborative partnership to offer greater access to instructional materials. The Library and Resource Center is a component of the Department for the Blind and Vision Impaired (DBVI). Resource Center services are provided to local school divisions to support education of visually impaired and blind children.	DBVI and AIM-VA collaborate to support local school divisions in the education of their visually impaired and blind children.	DBVI and AIM-VA.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
1.	Early Childhood Education Program and Fairfax County Public Schools (FCPS)	X																										X						
2.	Early Childhood Education Program and Alexandria City Public Schools (ACPS)	X																										X						
3.	Early Childhood Education Program and Arlington County Public Schools (APS)	X																										X						
4.	Early Childhood Education Program and Prince William County Public Schools (PWCS)	X																										X						
5.	Early Childhood Education Program and Loudoun County Public Schools LCPS)	X																										X						
6.	Early Childhood Education Program and District of Columbia (DC) Public Schools	X																										X						
7.	Early Childhood Education Program and Teach for America (TFA)	X																																
8.	Early Childhood Education Program and Infant/Toddler Connection of Fairfax/Falls Church (MCPS)																											X						
9.	Early Childhood Education Program and Manassas City Public Schools	X																										X						
10.	Professional Development School Network - Fairfax County Public Schools		X																															
11.	Professional Development School Network - Arlington Public Schools		X																															
12.	Professional Development School Network - Prince William County Schools		X																															
13.	Professional Development School Network - Loudoun County Public Schools		X																															
14.	Professional Development School Network - Fairfax County Public Schools		X																															

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
15.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Cross Institution Course Information			X																														
16.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Cross Institution Course Revision/Approval			X																														
17.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Fairfax County Public Schools Cohort			X																														
18.	Mathematics Education Leadership - Math Specialist Leader (EDLE MSLR): Prince William County Public Schools Cohort			X																														
19.	Advanced Studies in Teaching and Learning, K-12 Reading Specialist Licensure				X																													
20.	Advanced Studies in Teaching and Learning, K-12 Reading Specialist Licensure				X																													
21.	Advanced Studies in Teaching and Learning, K-12 Reading Specialist Licensure				X																													
22.	School Counseling Leadership Team (SCLT)					X																												
23.	The School Reintegration Committee					X																												
24.	Arlington/Alexandria Coalition for Homeless/Career Counseling Outreach Program (CAACH)					X																												
25.	School Psychology Internship: Fairfax County Public Schools						X																											
26.	School Psychology Internship: Arlington County Public Schools						X																											
27.	School Psychology Internship: Loudon County Public Schools						X																											
28.	School Psychology Internship: Prince William County Public Schools						X																											
29.	School Psychology Internship: Alexandria County Public Schools						X																											

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
30.	School Psychology Internship: Falls Church Public Schools						X																											
31.	School Psychology Internship: Manassas City Public Schools						X																											
32.	School Psychology Internship: Frederick County Public Schools						X																											
33.	School Psychology Internship: Montgomery County Public Schools						X																											
34.	School Psychology Internship: Anne Arundel County Public Schools						X																											
35.	Foreign Language: Multiple Intelligences							X	X	X	X	X	X	X																				
36.	Elementary Art Methods Practicum														X																			
37.	Secondary Art Methods Practicum														X																			
38.	Student Teaching Internship														X																			
39.	AVT 495/595 School Observations														X																			
40.	Artful Adventures at DC Art Museums														X																			
41.	George Mason University Dance Department Partnership with Woodbridge High School Center for the Arts Dance Program															X																		
42.	English as a Second Language: Language Assessment Partnership																X																	
43.	Health and Physical Education Student Teaching Internships																	X																
44.	Physical Education Field Experiences in Schools																	X																
45.	Health Education Field Experience																	X																
46.	Collaborative Research																	X																
47.	Collaboration with In-Service Professional Development																	X																

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
48.	Public school teachers who are employed in the Physical Education program to instruct pre-service teachers																	X																
49.	Online course in health education																	X																
50.	Student Teaching in Music Education - Instrumental																		X															
51.	Student Teaching in Music Education - Instrumental																		X															
52.	Student Teaching in Music Education - Instrumental																		X															
53.	Student Teaching in Music Education - Instrumental																		X															
54.	Student Teaching in Music Education - Vocal/Choral																			X														
55.	Student Teaching in Music Education - Vocal/Choral																			X														
56.	Student Teaching in Music Education - Vocal/Choral																			X														
57.	Student Teaching in Music Education - Vocal/Choral																			X														
58.	Honor Band																		X															
59.	Secondary Professional Development Schools Network - Fairfax County Public Schools																				X	X	X	X	X	X	X							X
60.	Child Find (T-TAC): Alexandria City Schools																											X						
61.	Child Find (T-TAC): Arlington Public Schools																											X						
62.	Child Find (T-TAC): Fairfax County Public Schools																											X						
63.	Child Find (T-TAC): Fauquier County Public Schools (Child Find) (T-TAC)																											X						
64.	Early Childhood Priority Project (T-TAC): Higher Horizons Head Start																											X						
65.	Early Childhood Priority Project (T-TAC): Gum Springs Head Start																											X						

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
66.	Early Childhood Priority Project (T-TAC): Falls Church City																											X						
67.	Child Find (T-TAC): Manassas City																											X						
68.	Child Find (T-TAC): Manassas Park City																											X						
69.	Child Find (T-TAC): Prince William County																											X						
70.	Early Childhood Priority Project (T-TAC): Frederick County																											X						
71.	Early Childhood Priority Project (T-TAC): Page County																											X						
72.	T-TAC: Berryville Elementary																											X						
73.	Early Childhood Priority Project (T-TAC): Shenandoah County																											X						
74.	Early Childhood Priority Project (T-TAC): Winchester City Schools																											X						
75.	Academic Review (T-TAC): Gunston Middle School																												X	X				
76.	Academic Review (T-TAC): Kenmore Middle School																												X	X				
77.	Academic Review (T-TAC): Culpeper Middle School																												X	X				
78.	Academic Review (T-TAC): W.C Taylor Middle School																												X	X				
79.	Academic Review (T-TAC): Godwin Middle School																												X	X				
80.	Academic Review (T-TAC): George Washington MS (Alexandria City)																												X	X				
81.	Academic Review (T-TAC): Francis Hammond (Alexandria City)																												X	X				
82.	Special Education Outreach: Loudoun County (Outreach Cohort)																												X	X				

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* *(* Part of a consortium offering a VI endorsement.)*	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
83.	Special Education Outreach: Frederick County (Outreach Cohort)																												X	X				
84.	Special Education Outreach: Piedmont (Orange, Culpeper and Madison County) (Outreach Cohort)																												X	X				
85.	Special Education Outreach: Virginia Association of Independent Special Education Facilities (VAISEF) (Outreach Cohort)																												X	X				
86.	Special Education Outreach: Teach for America (Outreach Cohort)																												X	X				
87.	Special Education Outreach: Fairfax County (Outreach Cohort)																												X	X				
88.	Special Education Outreach: Prince William County (Outreach Cohort)																												X	X				
89.	Instructional Support Team (T-TAC): Halley Elementary School																												X	X				
90.	Instructional Support Team (T-TAC): Westlawn Elementary School																												X	X				
91.	Instructional Support Team (T-TAC): Canterbury Woods																												X	X				
92.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
93.	T-TAC: Arlington Archdiocese																												X	X				
94.	NOVAS (T-TAC): Northern Virginia Autism Support Team																												X	X				
95.	The Secondary Transition Activities Priority Project (T-TAC): Arlington County																												X	X				
96.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
97.	T-TAC: Clarke County																												X	X				
98.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
99.	Effective School-wide Discipline Cohort 1 (T-TAC): Floyd T. Binns Middle																												X	X				
100.	T-TAC: Culpeper																												X	X				
101.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
102.	T-TAC: Glasgow Middle School																												X	X				
103.	T-TAC: Homes Middle School																												X	X				
104.	T-TAC: Fairfax																												X	X				
105.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
106.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
107.	ESD (T-TAC): Cedar Lee Middle																												X	X				
108.	The Secondary Transition Activities Priority Project (T-TAC): Fauquier County Public Schools																												X	X				
109.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
110.	Instructional Support Team (T-TAC): Apple Pie Ridge Elementary																												X	X				
111.	The Secondary Transition Priority Project (T-TAC): Frederick County																												X	X				
112.	T-TAC: Frederick County																												X	X				
113.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
114.	T-TAC: North Spring Behavioral Health																												X	X				
115.	T-TAC: Metz Middle School																												X	X				
116.	T-TAC: Locust Grove Middle																												X	X				

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
117.	T-TAC: Prospect Heights Middle																												X	X				
118.	T-TAC: Orange Elementary																												X	X				
119.	The Secondary Transition Activates Priority Project (T-TAC): Page County																												X	X				
120.	T-TAC: Prince William																												X	X				
121.	Effective School-wide Discipline Cohorts 1 and 2 (T-TAC): Prince William Schools																												X	X				
122.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
123.	VTOP (T-TAC): Rappahannock County																												X	X				
124.	Effective School-wide Discipline Cohort (T-TAC): Warren County																												X	X				
125.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
126.	T-TAC: Warren																												X	X				
127.	Instructional Support Team (T-TAC): Virginia Avenue Charlotte de Hart E.S, Winchester City Schools																												X	X				
128.	T-TAC: Arlington Department of Human Services																												X	X				
129.	T-TAC: Commonwealth Autism Services																												X	X				
130.	T-TAC: Commonwealth Autism Services																												X	X				
131.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
132.	T-TAC: NOVA Assistive Technology Coordinators																												X	X				
133.	Skill Survey for Student Teachers Working with Students with Disabilities (King-Sears)																												X	X				
134.	DC Public Schools: Coolridge High School (Jackman)																												X	X				

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 993-2004
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*Arabic PreK-12*	*Chinese PreK-12*	*French PreK-12*	*German PreK-12*	*Japanese PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
135.	KIHD System Project (Graff, Behrmann, Wang, Chung)																												X	X				
136.	George Mason University - Burke School (Fairfax County Public Schools) (Margo Mastropieri)																												X	X				
137.	Driver Education Endorsement for Local School Divisions																															X		
138.	Fairfax County Public Schools - Gifted Education																																X	
139.	FAST TRAIN ESOL Endorsement Outreach Initiatives																X																	
140.	FAST TRAIN Elementary Program Endorsement Outreach Initiatives		X																															
141.	FAST TRAIN International Baccalaureate Programs		X					X													X	X	X	X	X	X	X							
142.	KIHD - The VI Consortium																														X			
143.	Virginia School for the Deaf and Blind																														X			
144.	Virginia Department for Blind and Vision Impaired																														X			

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 933-2004
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Prince William Cohort	Each year we recruit and run a cohort in Prince William County Schools. Cohort members are teachers from the county who are interested in school leadership. These cohorts are often large and range between 25-30 students and follow the regular CEHD/EDLE admission and selection process and meet at a school in PW.	Prince William County Public Schools are experiencing growth and increasing need for qualified administrators. The EDLE/PW cohorts help identify and train potential school leaders and provide a steady stream of candidates for the county.	Prince William County Public Schools, Office of Professional Development, Natalie Bonshire.	No
2.	Frederick Cohort	Every two years we start a cohort in Frederick County Public Schools. The cohort is made up of teachers from Frederick, Winchester and Winchester City, who aspire to be administrators. These cohorts range in size from 20-25 students and meet in a location in Frederick County and follow regular GMU selection and admission process. Frederick County teachers partake in the county's tuition reimbursement program.	Frederick County Public Schools, as well as its neighboring counties, are in a more rural area with limited access to higher education institutions. Having a program that comes to them enables them to have a qualified pool of candidates for leadership positions that become available.	Frederick County Public Schools, Superintendent, Ms. Patricia Taylor and Janet Goodhand, Coordinator of Staff Development and Federal Programs.	No
3.	Loudoun 6 Cohort	This cohort is comprised of teachers from Loudoun County Public Schools and Fairfax County Public Schools who aspire to be school leaders. The 23 member cohort meets in GMU's Loudoun Campus and goes through the regular CEHD/EDLE selection and admission process. Loudoun County pays for 40% of the tuition for Loudoun County employees.	Loudoun is a growing county with an increasing need for administrators. The various EDLE cohort provides a qualified pool of applicants for leadership positions. The participants sign an agreement to stay in the county for a minimum of two years after the completion of their degrees.	Loudoun County Public Schools, Office of Professional Development, John O'Connor, Director.	No
4.	Metropolitan Cohort	This cohort is made up of teachers from Washington, D.C., Arlington , Alexandria, and Fairfax counties. This cohort is now at 16 and meets in Arlington. It has undergone the regular CEHD/EDLE selection and admission process. The diversity of the participants and school districts provides a unique educational opportunity for the participants. Different tuition reimbursement is in place for participants based on each county's plan.	Washington, D.C., requires all administrators to have a master's degree in Education Leadership. This cohort enables many sitting administrators to meet this new requirement. It also provides a desirable location for aspirants from a range of school districts to meet. All school districts help with the advertising and recruitment efforts.	Various principals in D.C.; Arlington, Assistant Superintendent, Meg Tuccillo; Alexandria, Director of Staff Development, Melissa Deak; and Fairfax, Rita Cloutier.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: George Mason University
Contact Person: Martin E. Ford/Ellen Rodgers
Phone No.: (703) 933-2004
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
5.	Fairfax Cohort 9	This cohort is similar to previous EDLE/Fairfax cohorts. The members will all be teachers from FCPS, who go through a rigorous screening process by the Selection Committee made up of FCPS and EDLE representatives in addition to the CEHD admissions process. This 28 member cohort meets in Fairfax and participates in the FCPS tuition reimbursement program.	FCPS is a large school district with many administrators who are close to retirement age. This cohort provides quality candidates for leadership positions.	Fairfax County Public Schools, - Office of Professional Learning and Training, Rita Cloutier, Elma Hinson, and Andy Cole.	No
6.	Regional North 7	This cohort is comprised of teachers from FCPS, Alexandria City Schools, Arlington Public Schools and PW County Public Schools. This 27 member cohort meets in a school in FCPS and has undergone the regular CHED admissions process. Different tuition reimbursement is in place based on each school district's plan. The diversity of school districts provides a unique educational opportunity.	All of these school districts have a need for qualified school leaders and this cohort provides quality candidates for leadership positions in these districts.	FCPS-Rita Cloutier; Arlington-Meg Tucillo; ACPS-Melissa Deak; and PW-Natalie Bonshire.	No
7.	AFA 2	This cohort is scheduled to complete this year and is made up of Alexandria and Arlington teachers who have undergone a rigorous screening process by the AFA Steering Committee, made up of representatives from CEHD/EDLE and the two school districts, in addition to the CEHD admissions process. The cohort has approximately 20 members. They meet in Arlington and receive tuition benefits.	Arlington and Alexandria are both highly diverse school districts with special needs. This cohort enables them to participate actively in development of the next generation of quality candidates to lead their schools.	Arlington-Meg Tucillo; Alexandria- Current contact is not known.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Hampton University
Contact Person: Dr. Cassandra Herring
Phone No.: (757) 727-2072
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Clinical Faculty Mentor/Teacher Program	Candidates complete the student teaching experiences in the classrooms of National Board Certified teachers.	Partnership increases the pool of licensed highly qualified teachers and increases future teachers awareness of the NBPTS. Partnership addresses critical shortage teaching endorsement areas.	Hampton City Schools Division	Yes
2.	Clinical Experiences Partnership	Candidates complete field experiences in the classrooms of cooperating teachers.	Partnership increases the pool of licensed highly qualified teachers. Partnership address critical shortage teaching endorsement areas.	Hampton City Schools, Newport News Public Schools, Chesapeake Public Schools, Suffolk Public Schools, Norfolk Public Schools, and Portsmouth Public Schools.	Yes
3.	NASA Pre-Service Teacher Program	Candidates participate in a two-week summer institute that focuses on mathematics and science instruction at the elementary and middle school levels. Participants develop lessons and teach them to local students.	Partnership increases candidates' pedagogical skills in mathematics and science and better prepares them to meet the needs of learners. Partnership allows students to participate in hands-on problem-based mathematics and science lessons.	National Aeronautics and Space Administration (NASA) and the National Institute of Aerospace (NIA).	No
4.	W.E.B. DuBois Invitational Honors Conference	This conference invites students grades 8-12 to participate in a conference which provides them with tools to be successful in school, increase their academic achievement, and expose them to the possibilities of attending college.	The conference motivates participants to be successful in school and attend college. Students who participate tend to increase their performance in school and see college as a viable possibility, and thus increase the graduation rates in high schools.	Hampton City Schools, Newport News Public Schools, Chesapeake Public Schools, Norfolk Public Schools, Suffolk Public Schools, and Gloucester County Schools.	No
5.	Montessori Education Partnership	Teachers at Parkview Elementary school who complete Montessori certification may transfer nine hours of coursework toward the Master of Arts in Education.	Partnership offers teachers an incentive for earning the Master's degree and increases the number of teachers in the school with an advanced degree.	Parkview Elementary School (Portsmouth) and the VA Montessori Teacher Education Center.	No
6.	Paraprofessional to Teacher Program	Paraprofessionals enroll in the teacher preparation program to receive teacher licensure.	Partnership increases the pool of potential educators for the school division. Partnership addresses critical shortage teaching endorsement areas.	Hampton City Schools	Yes
7.	Tutoring Programs	University students tutor PreK-12 students in various subject areas.	Partnership increases student achievement among PreK-12 students.	Hampton City Schools	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Hampton University
Contact Person: Dr. Cassandra Herring
Phone No.: (757) 727-2072
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Teacher Education Advisory Board	Representatives from local school divisions meet with the Division of Professional Education to provide input on the development, revision, and implementation of the teacher education programs.	Local school divisions contribute to the quality and enhancement of teacher education programs. This input impacts the quality of teachers who will enter the pool of licensed, highly qualified teachers.	Hampton City Schools, Newport News Public Schools, Chesapeake Public Schools, Norfolk Public Schools, and Suffolk Public Schools.	Yes
9.	Teaching American History Grant	A grant-generated program that includes study trips, reflective collaboration seminars, and summer colloquia. The program consists of 15-20 teachers, who are grouped as elementary or secondary teachers.	PK-12 educators receive professional development that enhances their content, pedagogical, and professional knowledge.	Hampton City Schools	Yes
10.	All-Star Obesity Prevention Grant	A grant program that promotes obesity prevention through instruction, family fitness, and academic enrichment.	Participants in the partnership participate in activities that enhance their knowledge of health related issues to decrease the potential for childhood obesity.	Charles City Elementary School	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Hampton University
Contact Person: Dr. Cassandra Herring
Phone No.: (757) 727-2072
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*School Counselor PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*Mathematics*	*Science - Biology*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.										
1.	Clinical Faculty Mentor/Teacher Program		X	X	X	X	X	X	X	X	X	
2.	Clinical Experiences Partnership		X	X	X	X	X	X	X	X	X	X
3.	NASA Pre-Service Teacher Program		X						X	X		
4.	W.E.B. DuBois Invitational Honors Conference	X	X	X	X	X	X	X	X	X		
5.	Montessori Education Partnership	X	X									
6.	Paraprofessional to Teacher Program	X	X									
7.	Tutoring Programs	X	X	X	X	X	X	X	X	X		
8.	Teacher Education Advisory Board		X	X	X	X	X	X	X	X		
9.	Teaching American History Grant	X	X									
10.	All-Star Obesity Prevention Grant		X		X							

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Hampton University
Contact Person: Dr. Cassandra Herring
Phone No.: (757) 727-2072
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Teacher Education Advisory Board	Representatives from local school divisions meet with the Division of Professional Education to provide input on the development, revision, and implementation of the teacher education programs.	Local school divisions contribute to the quality and enhancement of teacher education programs. This input impacts the quality of teachers who will enter the pool of licensed, highly qualified teachers.	Hampton City Schools, Newport News Public Schools, Chesapeake Public Schools, Norfolk Public Schools, and Suffolk Public Schools.	Yes
2.	Principals' Roundtable Advisory Council	Certified Educational Administrators from local and area school district meet regularly with the Educational Leadership Program to provide input in the development, revision and implementation of the Master of Arts in Educational Leadership Program.	Our educational partners contribute to the quality and enhancement of principal preparation program. Their input impacts the overall quality of aspiring leaders who enter the field of educational administration.	Hampton City Schools, Newport News Public Schools, Chesapeake Public Schools, Norfolk Public Schools, Portsmouth Public Schools and Suffolk Public Schools.	Yes
3.	Clinical Experiences Partnership	Candidates complete field experiences in partner schools and districts.	Partnership increases the pool of licensed and well prepared school leaders. Partnership address critical need for school leaders.	Hampton City Schools, Newport News Public Schools, Chesapeake Public Schools, Suffolk Public Schools, Norfolk Public Schools, and Portsmouth Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Hollins University
Contact Person: Dr. Kristi S Fowler
Phone No.: (540) 362-6249
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Southwest Virginia Professional Educators Consortium	The SWVAPEC was developed in 1998 to formalize the collaborations between PK-12 schools in the New River and Roanoke Valleys and regional institutions of higher education. The purpose of the consortium is to enhance teacher preparation and continuing teacher education by identifying and helping meet the needs of the K-12 schools.	To develop a cadre of clinical faculty who are exemplary models of effective teaching and strong mentors for student teachers and new teachers; to develop and nurture exemplary leadership abilities and instructional practice; to facilitate greater cooperation and communication among members of the consortium; to create a community of life-long inquiry into learning; to teach and promote the development of school cultures that promote life-long learning for all members of the communities.	Hollins University, Radford University, Roanoke College, Virginia Tech, Botetourt Co., Carroll Co., Floyd Co., Giles Co., Montgomery Co., Pulaski Co., Radford City, Roanoke City, Roanoke Co., Salem City, and Wythe Co. schools.	Yes
2.	Science Museum - Field Experience	Hollins has worked closely with the Science Museum of Western VA in Roanoke to expose them to diverse teaching opportunities. Hollins faculty member and science educator Professor Rebecca Reiff has set up field experiences for education students to observe outreach programs, to volunteer as docents for various exhibits, to explore exhibit design, and to staff summer science camps.	With increased accountability, the schools need teachers who are highly qualified, particularly in high need areas as the sciences often are.	Hollins University and the Science Museum of Western VA.	No
3.	Internship Experience	The purpose is to acquaint the prospective teacher with the realities of classroom life and prepare him/her for the full semester student teaching experience.	Local schools need highly qualified teachers. The internship is one of the integral steps in preparing our graduates to fill that need.	Roanoke City	No
4.	Student Teaching Experience	This capstone experience takes place in area schools to further develop understanding of the principles of learning; the application of skills in discipline-specific methodology; communication processes; classroom management; selection and use of resources; evaluation of pupil performance; as well as current and legal issues in education.	Local schools need highly qualified teachers and the student teaching experience is the final step in preparing our graduates to fill that need.	Botetourt County, Roanoke County, and Salem City.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Hollins University
Contact Person: Dr. Kristi S. Fowler
Phone No.: (540) 362-6249
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.											
1.	Southwest Virginia Professional Educators Consortium	X	X	X	X	X	X	X	X	X	X	X	X
2.	Science Museum - Field Experience	X								X	X	X	X
3.	Internship Experience	X	X	X	X	X	X	X	X	X	X	X	X
4.	Student Teaching Experience	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Hollins University
Contact Person: Dr. Kristi S Fowler
Phone No.: (540) 362-6249
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1-2.	Augusta County School/James Madison University (JMU) Partnership; Waynesboro City Schools/JMU Partnership	Partnership with Augusta County and Waynesboro City School Divisions dedicated to strengthening the supportive relationship of the collaborating partners in enhancing public education and pre-service preparation of future educators.	The partnership provides support for the professional development of classroom teachers, while at the same time providing additional classroom support.	John Chase, Linda Krause, Larry Landes, Bill Roberts, Pam Unger: Augusta County Schools/Sue Wright, Director of Instruction; Sharon Tooley, Principal: Waynesboro City Schools.	Yes
3.	Career Development Academy: Partnership for 21st Century Learning Centers	The ESOL Career Development Academy (CDA) serves students 17-25, in partnership with the Harrisonburg City Schools and James Madison University.	CDA serves as an alternative to high school and as a preparatory for the transition to work or college. Course offering include: English, Workplace English, GET & TOEFL prep and Art.	Mike Loso, Assistant Superintendent, Harrisonburg City Schools.	Yes
4.	Early Engagement: Partnership for 21st Century Learning Centers	The Early Engagement: Partnership for 21st Century Learning Centers serves children and families in elementary schools through a partnership between JMU and the Harrisonburg Public Schools.	Early Engagement activities support the roles of families in providing academic support to their elementary-aged children.	Anne Lintner, Principal; Gary Painter, Principal; Linda McCormick, Principal; Harrisonburg City Schools.	Yes
5-7.	College for Kids	Partnership among JMU and the Harrisonburg City, Rockingham County and Page County school divisions.	Children from 9 to 15 years of age are provided opportunities to expand learning experiences through Saturday enrichment programs.	Fred Babbitt, Rockingham County; Krista Hogan, Harrisonburg; Donna Whitley-Smith, Page County.	Yes
8.	ESL Certificate Program	Partnership with Harrisonburg City Schools to support professional development of teachers and collaboratively develop and implement ESL certificate program.	The program will result in an increase in the number of qualified teachers who will positively impact the instruction of English Language Learners (ELL) in the classroom.	Wanda Hamilton, Inst. Spvr. for L.A., Foreign Lang., Title I.	Yes
9.	Gifted Education Program	Partnership with Harrisonburg City Schools to support professional development of teachers and collaboratively develop and implement a gifted education program.	The program will result in the preparation of highly qualified teachers for gifted education that will positively impact the teaching and learning of children.	Krista Hogan, Inst. Spvr. for Special Education Gifted.	Yes
10.	Learning Leaders	Partnership with Harrisonburg City Schools that connects JMU students with learning disabilities and attention problems to PK-5 students with similar disabilities.	The program provides mentoring of K-5 students with learning problems that results in improved academic progress and self-concept.	Anne Lintner, Principal, Keister Elementary.	Yes
11.	Middle Ground: Partnership for 21st Century Learners	Partnership with Harrisonburg City Schools that provides additional support services to children and their families.	The program provides support for middle level student learning through tutoring, family supports and mentoring.	Betsy Dunnenberger, Principal, THMS; Joe Glick, Principal, Skyline Middle.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
12-21.	MidValley Consortium	Partnership among the JMU, EMU, Mary Baldwin, and Bridgewater teacher prep programs and seven regional school divisions (Rockingham County, Augusta County, Shenandoah County, Page County, Harrisonburg City, Staunton City, and Waynesboro City), which host education candidate practicum and student teachers during their field placements.	The program provides support for the classroom teachers and also additional academic support in the classrooms.	Seven school divisions are partnering with JMU and three other IHEs.	Yes
22-24.	Professor in Residence	Partnership between JMU and Richmond City schools, Harrisonburg City Schools, and Roanoke City Schools.	The program provides mentoring, personal support and academic opportunities for minority high school students.	Cynthia Gentry, Richmond Public Schools; Irving Jones, Richmond Public Schools; Beverly Mountain, Irene Reynolds, Harrisonburg City Schools; Susan Morris, William Fleming High School Richmond Public Schools; Rita Richardson, Richmond Public Schools; Zymora Scott, Richmond Public Schools.	Yes
25-37.	Content Teaching Academy	Collaborative initiative between JMU faculty and Alleghany, Bedford, Brunswick, Campbell, Covington, Franklin, Frederick, Manassas, Shenandoah, Spotsylvania, Suffolk, Warren and York School Divisions, and VDOE specialists.	Content/Teaching Academies provide intellectually rigorous and enriching, content-based, Standards of Learning (SOL)-focused professional development opportunities for teachers from across the state.	David Slykhuis, JMU; Pat Abrams, Phyllis Mondak, John Eisenburg, DOE.	Yes
38-39.	Augusta County Schools; Waynesboro City Schools	Teacher In Resident program provides support for shared professional educator position between Augusta County and Waynesboro City Schools and JMU Teacher Education program.	The partnership provides increased academic support utilizing skills and services of additional practicum students and tutoring for children at Clymore Elementary School in Augusta County and Berkley Glenn Elementary School in Waynesboro.	John Chase, Principal, Clymore Elementary School; Sharon Tooey, Principal, Berkely Glenn Elementary School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
40-71.	Training/Technical Assistance Center (T-TAC)	The VDOE Region Five T/TAC at JMU is part of a statewide network of training/technical assistance centers operated in collaboration with the VDOE. Region 5 T'/TAC serves the following school divisions: Albemarle, Amherst, Augusta, Bath, Bedford, Buena Vista, Campbell, Charlottesville, Fluvanna, Greene, Harrisonburg, Highland, Lexington, Louisa, Lynchburg, Nelson, Rockbridge, Rockingham, Staunton, Waynesboro, five Early Intervention Programs, and five State Operated Programs.	The goal is to increase the capacity of school personnel, service providers and families to meet the needs of children and youth with disabilities by providing high quality professional development.	Cheryl Henderson, Melinda Bright: VDOE Region 5 T/TAC JMU.	Yes
72-78.	VIRSE	Partnership among Richmond, Martinsville, Harrisonburg, Staunton, Waynesboro, Augusta and Page School Divisions.	VIRSE is robotics as professional development for upper elementary - high school teachers.	Page County - BH Snelling, Ron Vickers. Harrisonburg - Anne Loso, Terry Murray, Geoff Estes. Augusta/Waynesboro/Staunton - John Mustachio (SVRGS). Richmond - John Stevens, Sandra Taylor, Martinsville - Mark Toole.	*Yes*
79-86.	VIRSE 2	Partnership with Hopewell Public Schools in addition to Richmond, Martinsville, Harrisonburg, Staunton, Waynesboro, Augusta and Page School Divisions.	VIRSE is robotics as professional development for upper elementary to High school teachers, and increases JMU's presence in that region of high need LEAs. The program includes a pilot STEM literacy program in Richmond's Thompson Middle Schools.	Page County - BH Snelling, Ron Vickers. Harrisonburg - Anne Loso, Terry Murray, Geoff Estes. Augusta/Waynesboro/Staunton - John Mustachio (SVRGS). Richmond - John Stevens, Sandra Taylor. Martinsville - Mark Toole. Hopewell - Cheryl Riggins, Alex Salas.	Yes
87.	X-SEL: Partnership for 21st Century Learning Centers	Partnership between JMU and Spotswood Elementary School, Harrisonburg, VA.	The partnership offers academic enrichment and remediation to elementary-aged children.	Ann Conners, Harrisonburg City Schools.	Yes
88.	Project Bridge	Partnership between JMU and Clarke County Schools.	The Partnership supports the senior year of high school students by offering JMU general education on site at the Clarke County High School.	Kim Wilk, Clarke County High School; Violet Allain, James Madison University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
89.	Blast Homework Program	Partnership between JMU and Thomas Harrison Middle School, Harrisonburg, VA.	The partnership supports tutoring and mentoring after school hours for middle level students by JMU teacher education students seeking licensure in middle school.	Wendell Shank, Home School coordinator; David Lane, James Madison University,	Yes
90-98.	Practica/Internship	Partnership between JMU Communication Sciences and Disorders program and the following public school systems in Virginia: Staunton City Schools, Rockingham County, Harrisonburg City, Fairfax County, Augusta County, Arlington County, Frederick County, Henrico County, and Prince William County.	This partnership ensures JMU Communication Sciences and Disorders students engage in practica and internship activities which are comprehensive, rigorous and real opportunities to experience what it is like to be a speech language pathologist in the public schools and to obtain required clinical training hours required for certification.	Staunton City Schools, Rockingham County, Harrisonburg City, Fairfax County, Augusta County, Arlington County, Frederick County, Henrico County, and Prince William County.	Yes
99.	PHETE	Partnership between Rockbridge County Schools and JMU in a million dollar PEP grant.	This partnership involves JMU faculty to consult in workshops directed at improving instructional methods, content knowledge and curriculum development to support the learning of children in the schools.	Gloria Brown, elementary and middle school PE teachers, Rockbridge County Schools; Susan Nye, Jacqueline Williams, Bobby Likfa and graduate students, JMU.	No
100.	JMU School Psychology-Clymore Elementary Partnership	Partnership between JMU School Psychology and Clymore Elementary, Augusta County School Division.	This partnership provides opportunities for one-on-one support and intervention in the classroom to respond to the educational and mental health needs of the child.	Patricia Warner, JMU; Kristi Peery, Augusta County Teacher in Residence; Tamara Boxler, Lois Ocheltree, and Sherrill Robinson, Clymore Elementary School.	No
101.	JMU EXED Faculty and Warren County Faculty	Partnership between JMU College of Education Department of Exceptional Education and Warren County Schools.	The partnership provides support for the professional development of classroom teachers, initially focusing on RTI implementation in one school.	Christy Bartholomew, Allison Kretlow, JMU; Lisa Rudicille, Antoinette Funk, Warren County Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
102-106.	Practica/Internship	Partnership between JMU and Augusta, Harrisonburg, Rockingham, Staunton, and Waynesboro School Divisions.	This partnership ensures that JMU School Counseling Program students engage in practica and internship activities that are comprehensive, rigorous and real opportunities to experience what it is like to be a school counselor.	Irene Reynold, Principal, Harrisonburg High; Dori Walk, Assistant Superintendent, Staunton; Sue Wright, Director of Instruction, Waynesboro; Mike McCormick, Principal, Central High; and, Barry Arey, CTE Supervisor Shenandoah; and, Christopher Newman Principal, Luray Elementary, Page.	Yes
107-111.	Developing Mathematics Content Knowledge	Partnership with Harrisonburg, Rockingham, Staunton, Waynesboro, Page Counties.	Two VDOE grants support the development of specialized content knowledge for teachers of mathematics in grades K-3 and grades 4-6.	John Matherly - Augusta County, Joe Hill - Rockingham County, Donna Whitley-Smith - Page County, Bobby Wells - Page County, Vermell Grant - Waynesboro City, Sue Wright - Waynesboro City, Pat Lintner - Harrisonburg City , Dori Walk - Staunton City, Ann Wallace - MU, LouAnn Lovin - JMU, and Judy Kidd - JMU.	Yes
112	Student Centered Mathematics Instruction	Partnership with Staunton City Schools.	This is a multi-year project to work with differentiation specialists, math coaches and elementary teachers on effective mathematics instruction.	Dori Walk and Stephanie Haskins - Staunton City Schools, LouAnn Lovin and Maggie Kyger - JMU.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Gifted Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																														
1-2.	Augusta County School/James Madison University (JMU) Partnership; Waynesboro City Schools/JMU Partnership	X	X	X	X														X	X	X	X	X	X	X	X	X					
3.	Career Development Academy: Partnership for 21st Century Learning Centers													X																		
4.	Early Engagement: Partnership for 21st Century Learning Centers	X	X																													
5-7.	College for Kids		X	X																												
8.	ESL Certificate Program	X	X	X										X					X	X	X	X	X	X	X		X					
9.	Gifted Education Program	X	X	X							X								X	X	X	X	X	X	X	X	X			X		
10.	Learning Leaders	X	X																								X					
11.	Middle Ground: Partnership for 21st Century Learners			X																												
12-21.	MidValley Consortium	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22-24.	Professor in Residence																		X	X	X	X	X	X	X	X						
25-37.	Content Teaching Academy	X	X	X										X					X	X	X	X	X	X	X	X						
38-39.	Augusta County Schools; Waynesboro City Schools	X	X	X							X								X	X	X	X	X	X	X	X	X					
40-71.	Training/Technical Assistance Center (T-TAC)	X	X	X							X								X	X	X	X	X	X	X	X	X					
72-78.	VIRSE		X	X															X	X	X	X	X	X	X	X						
79-86.	VIRSE 2		X	X															X	X	X	X	X	X	X	X						
87.	X-SEL: Partnership for 21st Century Learning Centers	X	X																													
88.	Project Bridge																		X	X	X	X	X	X	X							
89.	Blast Homework Program			X																												
90-98.	Practica/Internship																											X				

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Gifted Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																														
99.	PHETE														X																	
100.	JMU School Psychology-Clymore Elementary Partnership						X																									
101.	JMU EXED Faculty and Warren County Faculty																										X					
102-106.	Practica/Internship					X																										
107-11.	Developing Mathematics Content Knowledge	X	X																													
112.	Student Centered Mathematics Instruction	X	X																													

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: James Madison University
Contact Person: Dr. Phil Wishon
Phone No.: (540) 568-3664
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Practica/Internship	Partnership between JMU and Harrisonburg, Rockingham, Shenandoah, Staunton, Page and Waynesboro School Divisions	This partnership ensures JMU Education Leadership Program students engage in practica and internship activities which are comprehensive, rigorous and real opportunities to experience what it is like to be a school or division administrator.	Irene Reynold, Principal, Harrisonburg High; Dori Walk, Assistant Superintendent, Staunton; Sue Wright, Director of Instructional Services, Waynesboro; Mike McCormick, Principal, Central High; and, Barry Arey, CTE Supervisor Shenandoah; and, Christopher Newman Principal, Luray Elementary, Page.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Liberty University
Contact Person: Dr. Karen L. Parker
Phone No.: (434) 582-2195
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	All Nation Community Church (ANCC)	An after school tutorial program targeted for urban students in downtown Lynchburg, VA (many of which would be considered to be "at risk" by the school division). It is a partnership between Lynchburg City Schools (LCS), ANCC, and the Liberty University (LU) School of Education.	These "at risk" students receive free tutoring and resources provided by ANCC, LCS, and LU education candidates.	LU: Michelle Goodwin; ANCC: Emma Coleman; LCS: Pam Smith-Johnson or Dr. Merle Herndon.	Yes
2.	Bass Elementary School	This is a partnership between Bass and the LU School of Education to provide education candidates the opportunity to plan, implement, and reflect on the teaching of a language arts unit.	Bass Elementary is an urban school in the Lynchburg City division with much cultural diversity and a high number of students receiving free and reduced lunch services. This partnership helps LU candidates to be prepared for working with diverse P-12 students and, in turn, provides Bass faculty with additional opportunities to have candidates co-teach, assist, and tutor the elementary students.	LU: Annyce Maddox (SOE Faculty Member); Bass Elementary: Leverne Marshall (Principal).	Yes
3.	Linkhorne Elementary	This is an informal partnership between Linkhorne Elementary School and the LU School of Education. LU education candidates assist and co-teach in a Linkhorne classroom and must teach a lesson in a content area that integrates the fine arts.	Linkhorne Elementary School is located in the Lynchburg City division. Students that attend are diverse in both culture and SES status. Linkhorne faculty use the LU candidates to assist, tutor, and co-teach.	LU: Connie McDonald (SOE Faculty Member); Linkhorne: Donna Rinker (Administrative Assistant).	No
4.	Madison Heights Elementary	This is an informal partnership between Madison Heights Elementary School and the LU School of Education. LU education candidates assist and co-teach in a tutorial program and must teach a lesson in a content area that integrates the fine arts.	Madison Heights Elementary School is located in the Amherst County division. Students that attend are diverse in both culture and SES status. Madison Heights faculty use the LU candidates to assist, tutor, and co-teach.	LU: Kathy Pickard & Miranda Arnold; Amherst: Charlotte Gilbar (Principal).	Yes
5.	Liberty Christian Academy (LCA) - General Education	An academic coaching opportunity for LU candidates to come serve in classrooms at LCA.	The academic coaches (LU education candidates) are placed in LCA classrooms to assist the teacher, tutor in one-on-one situations, oversee small groups, and sometimes teach whole-group lessons.	LU: Michelle Goodwin (SOE Faculty Member); LCA: Tamia Colbert (LCA Vice Principal).	Yes
6.	Liberty Chrisitain Academy (LCA) - Special Education	LU sends practicum ISSE students to LCA to assist identified special needs students with math and reading help, tutoring assistance, curriculum modifications, one-on-one attention and other special needs support.	LCA has seen a rise in special needs students wanting to attend its schools. As a result, additional instructional support is necessary for these students to experience success in this learning environment.	LU – Dr. Deanna Keith; CVTC – Cindy Bargabos.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Liberty University
Contact Person: Dr. Karen L. Parker
Phone No.: (434) 582-2195
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	Central Virginia Transition Council/ CEC	CEC supports logistical needs of Central Virginia Transition Council with annual conferences and area meetings focusing on improving transitional services.	Recent pressures form performance indicators highlight needs for improved transition services (especially in area of employment in post-secondary statuses).	LU – Randall Dunn; CVTC – Dottie Narodny.	No
8.	OCTP/ College for Living Plus	ISSE practicum students mentor and act as peers for post-secondary transition experiences in on-campus environments for post-secondary students served in Lynchburg area public schools. The experiences is set at Central Virginia Community College, where participants take courses in academics and life/ vocational/community skills subjects.	Local public schools' post-secondary transition students need mentors to act as peers in a least restrictive environment.	LU – Randall Dunn; Lynchburg City Schools – Dana Koenig.	No
9.	Liberty University Health Fair	The students are put into groups of three to four. The students choose a topic from a predetermined list that goes along with the health fair theme for that year. All groups prepare a 10 minute presentation on their topic. Each group wears the same outfit which relates to their topic. The students teach and present their topics to the K-6 students of the school.	The topics and information that the Liberty University students present are all in accordance with the Virginia Standards of Learning.	LU - Eric Brubaker; Big Island-Dr. Deborah Shelton.	No
10.	Mathematics Teacher-Amherst High School	We have been able to arrange for the LU students in the Secondary Mathematics Methods class to complete their practicum in the Mathematics classes at Amherst High School.	Mathematics Teacher-Amherst High School is for MATH 420, serves as a practicum for future highly qualified teachers in mathematics. Students are required to complete a specified number of hours and teach an SOL/NCTM driven math unit written in MATH 419, which is taken concurrently with MATH 420.	LU - Sandra Rumore; Amherst HS - Donna Ratliff, math teacher.	No
11.	Amherst County Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Amherst - Dr. Maryan Mayhew.	No
12.	Appomattox County Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Appomattox - Bruce McMillian.	No
13.	Bedford County Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Bedford - Dr. Mac Duis.	No
14.	Campbell County Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Campbell - Tracie Dobyns.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Liberty University
Contact Person: Dr. Karen L. Parker
Phone No.: (434) 582-2195
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
15.	Danville Public Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Danville - Mona Whittle.	No
16.	Lynchburg City Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Lynchburg City - Dr. Merle Herndon.	No
17.	Nelson County Public Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Nelson - Shannon Irvin.	No
18.	Pittsylvania County Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Pittsylvania - Dr. Lillian	No
19.	Roanoke City Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Roanoke City - Cassandra Ervin.	No
20	Roanoke County Schools	Early field experiences, student teaching, and internships.	Instructional assistance and co-teaching provided for classroom teachers.	LU - Kathy Pickard & Miranda Arnold; Roanoke County - Dr. BJ Brewer.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Liberty University
Contact Person: Dr. Karen L. Parker
Phone No.: (434) 582-2195
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Family and Consumer Sciences*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Special Ed. - General Curriculum K-12*	*Early Childhood 3-4 Yr Olds (add-on endorsement)*	*Gifted Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*	*Speech Communication (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																										
1.	All Nation Community Church (ANCC)	X	X				X	X	X		X	X	X	X	X	X	X	X	X	X	X	X			X	X	X
2.	Bass Elementary School	X	X		X	X																X	X	X		X	X
3.	Linkhorne Elementary	X	X		X	X																X		X		X	X
4.	Madison Heights Elementary	X			X	X																X		X		X	
5.	Liberty Christian Academy (LCA) - General Education	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X
6.	Liberty Chrisitain Academy (LCA) - Special Education																					X					
7.	Central Virginia Transition Council/ CEC																					X					
8.	OCTP/ College for Living Plus																					X					
9.	Liberty University Health Fair											X															
10.	Mathematics Teacher-Amherst High School																		X							X	
11.	Amherst County Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
12.	Appomattox County Schools	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
13.	Bedford County Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
14.	Campbell County Schools	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
15.	Danville Public Schools	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
16.	Lynchburg City Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
17.	Nelson County Public Schools	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
18.	Pittsylvania County Schools	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
19.	Roanoke City Schools	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
20.	Roanoke County Schools	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Liberty University
Contact Person: Dr. Samuel J. Smith
Phone No.: (434) 582-2445
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Staunton River Middle School, Bedford Schools	The school provides an on-site supervisor and arranges internship experiences for School Administration candidates.	The partnership assists in preparing qualified candidates who will enter the school district prepared to serve as building principals and assistant principals.	David Melton, Assistant Principal at Staunton River Middle School.	No
2.	Sandusky Middle School, Lynchburg City Schools	The school provides an on-site supervisor and arranges internship experiences for School Administration candidates.	The partnership assists in preparing qualified candidates who will enter the school district prepared to serve as building principals and assistant principals.	Jay Sales, Principal at Sandusky Middle School.	No
3.	Liberty Christian Academy (LCA)	The school provides an on-site supervisor and arranges internship experiences for School Administration candidates.	The partnership assists in preparing qualified candidates who will enter the school district prepared to serve as building principals and assistant principals.	Winnie Taber, High School Principal at LCA.	No
4.	Liberty High School, Bedford County Schools	The school provides an on-site supervisor and arranges internship experiences for School Administration candidates.	The partnership assists in preparing qualified candidates who will enter the school district prepared to serve as building principals and assistant principals.	Mr. Overstreet, Assistant Principal at Liberty High School.	No
5.	Dunbar Middle School, Lynchburg City Schools	The school provides an on-site supervisor and arranges internship experiences for School Administration candidates.	The partnership assists in preparing qualified candidates who will enter the school district prepared to serve as building principals and assistant principals.	Wray, Brian, Principal.	No
6.	Woodrow Wilson Elementary School, Danville, VA	The school provides an on-site supervisor and arranges internship experiences for School Administration candidates.	The partnership assists in preparing qualified candidates who will enter the school district prepared to serve as building principals and assistant principals.	Jocelyn Fitzgerald, Principal.	No
7.	GLH Johnson Elementary School, Danville, VA	The school provides an on-site supervisor and arranges internship experiences for School Administration candidates.	The partnership assists in preparing qualified candidates who will enter the school district prepared to serve as building principals and assistant principals.	George Macklyn, Principal.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Field Placements for Albemarle County Public Schools	Practicum I and Practicum II choices, and student teaching in K-2 and non SOL subjects.	Albemarle County Public Schools is interested in sponsoring field experiences for the College of Education and Human Services graduates to obtain selected student in specific subject areas.	The Superintendent or the superintendent's representative and Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
2.	Field Placements for Amelia County Public Schools Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Amelia County Public Schools is interested in sponsoring field experiences for the CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
3.	Field Placements for Amherst County Public Schools Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Amherst County Public Schools is interested in sponsoring field experiences for the CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
4.	Field Placements for Appomattox County Public Schools Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Appomattox County Public Schools is interested in sponsoring field experiences for the CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
5.	Field Placements for Augusta County Public Schools Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Augusta County Public Schools is interested in sponsoring field experiences for the CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
6.	Field Placements for Bedford County Public Schools Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Bedford County Public Schools is interested in sponsoring field experiences for the CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	Field Placements for Buckingham County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Buckingham County Public School is interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
8.	Field Placements for Campbell County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
9.	Field Placements for Charlotte County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
10.	Field Placements for Chesapeake Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
11.	Field Placements for Chesterfield Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
12.	Field Placements for Charlottesville City Public Schools	Field placement for student teaching.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
13.	Field Placements for Colonial Heights Public Schools	Field placement for student teaching.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
14.	Field Placements for Culpepper Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
15.	Field Placements for Cumberland County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
16.	Field Placements for Danville Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
17.	Field Placements for Dinwiddie Public Schools	Practicum I students, Practicum II students, and Student Teachers.	Interested in sponsoring field experiences for CEHS graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
18.	Field Placements for Fairfax Public Schools	Practicum I and Practicum II placements only.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
19.	Field Placements for Fluvanna Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
20.	Field Placements for Greensville County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
21.	Field Placements for Halifax Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
22.	Field Placements for Hampton Public Schools	Field placement for student teaching.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
23.	Field Placements for Hanover Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
24.	Field Placements for Henrico Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
25.	Field Placements for Henry County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
26.	Field Placements for Hopewell Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
27.	Field Placements for Isle of Wight Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
28.	Field Placement for Loudon Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
29.	Field Placements for Louisa Public Schools	Student teaching field placements.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
30.	Filed Placements for Lunenburg Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
31.	Filed Placements for Lynchburg Public Schools	Practicum I students, Practicum II students, (residents only) and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
32.	Field Placement for Martinsville City Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
33.	Field Placements for Mecklenburg Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
34.	Field Placements for Newport News Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
35.	Field Placements for Norfolk City Public Schools	Student teaching field placements.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
36.	Field Placements for Nottoway Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
37.	Field Placements for Orange County Public Schools	Student teaching field placements.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
38.	Field Placements for Patrick County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
39.	Field Placements for Pittsylvania County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
40.	Field Placements for Powhatan Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
41.	Field Placements for Prince Edward Public Schools	Student teaching field placements.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
42.	Field Placements for Prince George Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
43.	Filed Placements for Prince William Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
44.	Field Placements for Richmond City Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
45.	Field Placements for Roanoke County Public Schools	Practicum I and Practicum II Students (non SOL subjects only); and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
46.	Field Placements for Salem City Public Schools	Student teaching field placements.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
47.	Field Placements for Southampton County Public Schools	Practicum I and Practicum II Students (non SOL subjects only); and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
48.	Field Placements for Spotsylvania County Public Schools	Student teaching field placements.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
49.	Field Placements for Stafford County Public Schools	Practicum I students only and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
50.	Field Placements for Sussex County Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
51.	Field Placements for Suffolk City Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
52.	Field Placements for Virginia Beach City Public Schools	Practicum I students, Practicum II students, and Student Teachers.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes
53.	Field Placements for York County Public Schools	Student teaching field placements.	The school division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	The Superintendent or the superintendent's representative and Dr. Connie Ballard, the Director of the Office of Professional Services for Longwood University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Marketing Education*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																										
1.	Field Placements for Albemarle County Public Schools	X	X											X				X							X			
2.	Field Placements for Amelia County Public Schools Public Schools	X	X							X										X					X	X	X	
3.	Field Placements for Amherst County Public Schools Public Schools	X	X												X													
4.	Field Placements for Appomattox County Public Schools Public Schools	X	X											X						X					X			
5.	Field Placements for Augusta County Public Schools Public Schools	X	X																									
6.	Field Placements for Bedford County Public Schools Public Schools	X																										
7.	Field Placements for Buckingham County Public Schools	X	X	X		X													X						X		X	X
8.	Field Placements for Campbell County Public Schools	X	X																									
9.	Field Placements for Charlotte County Public Schools	X	X			X		X			X								X	X			X	X		X	X	X
10.	Field Placements for Chesapeake Public Schools	X	X									X							X									
11.	Field Placements for Chesterfield Public Schools	X	X		X		X		X	X		X	X	X	X	X			X	X					X		X	
12.	Field Placements for Charlottesville City Public Schools	X																										
13.	Field Placements for Colonial Heights Public Schools	X	X																									
14.	Field Placements for Culpepper Public Schools	X																										
15.	Field Placements for Cumberland County Public Schools	X	X					X			X								X		X		X	X	X		X	
16.	Field Placements for Danville Public Schools	X	X															X			X							
17.	Field Placements for Dinwiddie Public Schools	X	X																									
18.	Field Placements for Fairfax Public Schools	X																										

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Marketing Education*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																										
19.	Field Placements for Fluvanna Public Schools	X																										
20.	Field Placements for Greensville County Public Schools	X																										
21.	Field Placements for Halifax Public Schools	X		X	X	X								X							X						X	X
22.	Field Placements for Hampton Public Schools	X													X													
23.	Field Placements for Hanover Public Schools	X	X												X				X	X		X						
24.	Field Placements for Henrico Public Schools	X	X											X	X				X						X			
25.	Field Placements for Henry County Public Schools	X																										
26.	Field Placements for Hopewell Public Schools	X													X													
27.	Field Placements for Isle of Wight Public Schools	X																										
28.	Field Placement for Loudon Public Schools	X	X												X					X					X			
29.	Field Placements for Louisa Public Schools	X	X									X													X			
30.	Filed Placements for Lunenburg Public Schools	X																X		X					X			
31.	Filed Placements for Lynchburg Public Schools	X	X											X	X					X	X							
32.	Field Placement for Martinsville City Public Schools	X																										
33.	Field Placements for Mecklenburg Public Schools	X	X	X	X														X									
34.	Field Placements for Newport News Public Schools	X	X																						X			
35.	Field Placements for Norfolk City Public Schools	X	X																						X			
36.	Field Placements for Nottoway Public Schools	X																		X					X	X		
37.	Field Placements for Orange County Public Schools	X													X													
38.	Field Placements for Patrick County Public Schools	X																										

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Marketing Education*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																										
39.	Field Placements for Pittsylvania County Public Schools	X																										
40.	Field Placements for Powhatan Public Schools	X			X							X				X	X											
41.	Field Placements for Prince Edward Public Schools	X																							X	X		
42.	Field Placements for Prince George Public Schools	X																										
43.	Filed Placements for Prince William Public Schools	X										X		X		X		X	X									
44.	Field Placements for Richmond City Public Schools	X																										
45.	Field Placements for Roanoke County Public Schools	X																										
46.	Field Placements for Salem City Public Schools	X																										
47.	Field Placements for Southampton County Public Schools	X																										
48.	Field Placements for Spotsylvania County Public Schools	X	X												X													
49.	Field Placements for Stafford County Public Schools	X	X												X										X			
50.	Field Placements for Sussex County Public Schools	X																										
51.	Field Placements for Suffolk City Public Schools	X																										
52.	Field Placements for Virginia Beach City Public Schools	X																							X			
53.	Field Placements for York County Public Schools	X										X													X			

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: (434) 395-2481
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Educational Leadership Master's Degree Program and Licensure only Program	The educational leadership degree program is for teachers who hold at least a Collegiate Professional license or equivalent from another state, have taught successfully for at least two years, and wish to pursue a career in school administration. Students are provided preparation for administrative and/or supervisory roles in public and private schools.	Region 8 experiences a constant demand for school building leadership. According to superintendents, the turnover rate for building leaders, especially at the secondary level, is significant and has an impact on their school programs. CEHS's program has been revamped to meet the needs of the region.	Amelia, Appomattox, Buckingham, Brunswick, Charlotte, Cumberland, Greensville, Halifax, Lunenburg, Mecklenburg, Nottoway, and Prince Edward superintendents or their representatives have all dialogued with Dr. Gerry Sokol, program coordinator for CEHS.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Math and Literature Connection 4th/5th Grade - EDCI 661	Instructor worked with Lynchburg City 4th/5th grade teachers to promote teaching strategies in math concepts and literature.	Student SOL scores in some Lynchburg City Schools (LCS) were not at the level they should have been. More differentiated instruction is needed.	Dr. Patty West-Math Superintendent in LCS , Payne Elementary Resource Center, LCS.	Yes
2.	"Book Buddies" Field Experience II	Pre-service elementary and SPED students work one-on-one with identified 2nd graders to improve reading and composition skills. Master teachers provide support.	2nd graders identified as reading below grade level need one-on-one with pre-service students twice per week.	Lynchburg College (LC) coordinator K. Husted, master teachers in Amelon, Bedford Hills, and TC Miller.	No
3.	Field Experience I Elementary, SPED, and Secondary Pre-service Teachers	Pre-service teachers observe K-12 classes weekly and help teachers with a variety of tasks; sort, return, and record papers; and monitor small group testing. Pre-service teachers work in the schools twice weekly.	Students help teachers by performing tasks and monitoring small groups to free up teachers to work with other students.	LC faculty: Husted, Kelly. Teachers in Lynchburg City Schools and one school each in Bedford, Campbell, and Amherst.	Yes
4.	Field Experience II Secondary Pre-service Teachers	Pre-service teachers work with co-operating teachers to plan lessons for small group instruction and then whole group instruction. They also work to prepare students for SOLS in schools twice weekly for whole semester.	Pre-service teachers work closely with co-op teachers to hone teaching skills. They also act as paraprofessionals instructing small and whole groups.	LC faculty: Kelly, Booth, Cash, Watts. Teachers in Amherst, Bedford, Campbell, Appomattox, and Lynchburg City middle and high schools.	No
5.	Field Experience III Elementary SPED	Pre-service teachers work with various grade levels and co-operating teachers to teach small and whole groups. SPED pre-service teachers also work one-on-one.	Pre-service teachers act as paraprofessionals in instructing small and whole groups. One-on-one instruction is also included.	LC faculty: Booth, Kelly, Tolbert; teachers in Amherst, Bedford, Campbell, Appomattox, and Lynchburg City schools.	Yes
6.	Counseling: Parent Education	Counseling faculty members present workshops and information sessions on a variety of topics related to family. Free parenting sessions are offered at area school systems as well as on Lynchburg College campus.	Sessions are on a variety of current topics, including talking to teens, sex education, drug abuse, and bullying.	Schools in Central Virginia area.	No
7.	Counseling Practicum and Internships	Graduate counseling students conduct sessions on campus and in schools with individuals and very small groups. They provide individual counseling services and small group sessions for school students and parents under the supervision of Counseling faculty members.	Counseling sessions are very helpful for students who have social, emotional, and academic problems. These counseling students also work with licensed counselors as paraprofessionals.	Central Virginia area schools. LC faculty: Nielsen, Booth, and Perryman.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Teachers for Tomorrow	LC partners with three local school systems to offer dual enrollment courses (Field Experience I and EDUC 101) for four credit hours. Most instruction is done by master teachers in home-based schools. LC faculty teach seminars on LC campus.	Students get a head start on their education programs. LC's fee is affordable at $100. School systems pay the fee and get students to return as teachers, which helps alleviate shortages.	Anne Jennings, Campbell Co.; Marge Johnson, Bedford; Merle Herndon Lynchburg City Schools; LC faculty: Deanna Cash, coordinator, and Roger Jones.	Yes
9.	Graduate Science Course for Bedford County Teachers	Request from Bedford county school system to offer a graduate science course to cover major topics and competencies to enhance science teachers' knowledge. LC will offer a special tuition rate.	Teachers want a course to improve their own knowledge and skills in order to offer more to their own students. The course will be taught at a location in Bedford and at Claytor Nature Study Center.	Greg Eaton, Director of Claytor Nature Study Center, will teach the course.	Yes
10.	Claytor Nature Study Center (CNSC)	Area school systems send K-12 students to visit the Center for interdisciplinary studies appropriate to grade level and subjects. Visits are coordinated and implemented by LC science faculty and teachers. Saturday programs are conducted with LC faculty and CNSC director.	Visits and programs help students understand various aspects of science and interdisciplinary topics and subjects.	LC faculty: McKenzie; Claytor Nature Study Center Dir. Eaton.	No
11.	Tri-College Consortium Grant Team	Tri-College Consortium Grant Team (i.e., Lynchburg, Randolph, and Sweet Briar) meet every year regarding grant proposals for partnership school systems and collaboration with the three colleges.	The Tri-College Consortium Grant Team has been successful in securing Clinical Faculty mentoring grants for 2008-2009 and 2009-2010. Includes workshop sessions, working with pre-service teachers, and improving mentoring skills using the Santa Cruz model. Some teachers have moved to Model IV.	Grant Team: Alouf, Brown, Gould, Schimmeler, Stennette , and Mayhew from Amherst Co.	Yes
12.	Tri-College Consortium Colloquia	In conjunction with Randolph and Sweet Briar Colleges, Lynchburg College hosts an annual colloquia for pre-service teachers from the three colleges and all partnership teachers in Clinical Faculty training sessions. All teachers participate in intensive sessions, focusing on a current topic.	Master teachers present workshop and information sessions on specific topics each year (differentiation of instruction 2009 topic . Master teachers have completed at least three modules of Santa Cruz training and share knowledge and skills for best practices.	Amherst, Appomattox, Bedford, Campbell, and Lynchburg City Schools; Tri-College Consortium Education faculty.	No
13.	Workshop in Literacy K-6	LC faculty led instruction for three sessions of workshops.	Teachers benefited from additional instruction in developing techniques to increase literacy for K-6 students.	Amherst, Bedford, Campbell, and Lynchburg City Schools; LC faculty: Jeri Watts and two graduate students in Reading Specialist degree program.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
14.	Third Annual History Symposium	The School of Education and History department collaborated to present fall symposium for area teachers. Presentations were made by history faculty, including handouts and teaching materials matching with SOLS.	Area teachers responded well to previous symposiums and asked for specific topics. 2009 topic was on 20th century topics.	Amherst, Bedford, Campbell, and Lynchburg City Schools; LC History Department faculty.	No
15.	SPED Distance Learning: Radford and Lynchburg College	Faculty at Radford and LC share offering distance learning courses so that more teachers receive the necessary courses for SPED licensure.	By offering these courses, more teachers can become licensed with the necessary expertise to work with special needs students.	Radford University and Lynchburg College SPED faculty, Dr. Glenn Buck, and teachers across the state who need the course.	Yes
16.	Daura Gallery	Offers special tours and programs scheduled per teacher requests for students to view exhibits and participate in special programs designed for their grade level and content area.	Special tours and programs are designed for K-12 students in area school systems and SOLs are incorporated for appropriate grade levels.	Tours and program offered for region and beyond. Barbara Rothermel, Director, is contact person.	No
17.	Schewel Lecture Series	This lecture series brings nationally known experts in the field of education and/or human diversity. The speaker is frequently co-sponsored by a related community agency. Area teachers attend as well as pre-service teachers from Tri-College institutions.	Teachers and pre-service teachers use the presenter's information in working with their own classes.	LC School of Education, SBC and RC faculty and students, area teachers, and area community agency representatives.	No
18.	EDHD Advisory Board	Teachers, LC faculty members, and appropriate community leaders serve on this board. They provide input to the School of Education and Human Development regarding needs in the schools. They also provide suggestions for the School to consider.	It is a very positive situation to hold meetings with open discussions from the individuals representing the different groups. Suggestions are made regarding revisions in current program practices and alternative timing for on-site experiences.	Dean, School of Education; representatives for each of the six school systems; and appropriate community leaders (local youth agencies, CVCC).	Yes
19.	Spanish Classes for Students in Grades 6-12	LC Spanish faculty members provide free Spanish classes to area middle and secondary students who come to LC campus.	Free classes help students become more proficient in Spanish and provides individual help where needed. Students are screened and recommended by their individual schools.	LC Spanish faculty and area school systems.	No
20.	Spanish Faculty Presentations on Culture	Faculty members make annual presentations to secondary Spanish classes related to Spanish culture.	Presentations motivate students in their classes to learn more about Spanish culture as well as the language.	LC faculty member: Dr. Kern; Lunsford, EC Glass HS, (Lynchburg City Schools); Brookville High School (Campbell Co.); and Liberty HS (Bedford Co.).	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
21.	Family Fitness Night	Students from Health and Physical Education (HPE) volunteer with the Family Fitness Night held annually at R.S. Payne Elementary School.	HPE students help parents understand the need for physical fitness as related to themselves and their families.	RS Payne Elementary School in Lynchburg City School system and LC HPE students.	No
22.	National Women's Sport Day	HPE students work with elementary students on a variety of sports-related and physical education skills for this annual sports day.	Celebration of National Women's Sports Day helps over fifty elementary students develop their motor skills. Workshops also help students get into the habit of movement as a good habit to develop.	Tomahawk (Campbell Co.), RS Payne (Lynchburg city), Amelon (Amherst Co.), Boonsboro (Bedford Co.), and LC Faculty and HPE students.	No
23.	Produce School Musicals	Students in music and theatre arts collaborate with local school drama and music departments to produce school musicals.	High school students get opportunities to perform in drama and musical presentations, thereby improving their own skills.	Heritage HS (Lynchburg City), LC faculty Dr. Oeida Hatcher, and LC faculty and students.	No
24.	Improve Marching Band Field and Competition Shows	LC music faculty members collaborate with area high schools during multiple visits at each school to help students improve. A variety of activities are offered including band camp instruction, marching and maneuvering critiques, music rehearsals, color guard instruction, general effect, and movement.	Students benefit from this collaboration as they fine turn their own skills and have the opportunity of working with more than one instructor.	Amherst Co. HS, Chilhowie HS, Altavista HS, Liberty HS, and LC faculty: Dr. Hatcher and Dr. Cynthia Ramsey.	No
25.	Improve Concert Band Festival Performances	LC music faculty members collaborate with area high schools to improve concert band festival performances. Multiple visits to the school sites include activities such as conducting, music instruction, and performance critiques.	Students benefit from this collaboration as they fine tune their own skills and have the opportunity to work with more than one instructor.	Campbell Co. - 4 schools; Amherst Co. HS; Lynchburg City - 2 schools; Bedford Co. - 3 schools; Frederick Co. - 1 school; and LC faculty Dr. Hatcher and Dr. Ramsey.	No
26.	AIMS Math Workshops for 4th and 5th Grade Teachers	Workshops for 5th- and 6th-grade teachers to enhance their teaching strategies for instruction of math students. This will help build students skills for better performance on those grade level tests as well as prepare them for higher math level tests.	LC faculty will conduct workshops to help teachers learn new strategies to enhance math students performance on tests.	Five partnership schools: Amherst, Appomattox, Bedford, and Campbell counties, and Lynchburg City schools.	Yes
27.	Math Solutions Workshop--October 2009	Workshops for 6th- and 7th-grade math teachers to learn new strategies to enhance students' performance in math.	These two grade level math scores are the most problematic. Workshops designed to help teachers develop new strategies to enhance students' skills and performance in math.	Five partnership schools as listed above, LC Faculty.	Yes
28.	Astronomy Instruction: SCIE 610 and SCIE 680	Available to any area teacher for licensure renewal, personal interest, or new license.	Courses are taught in evenings and weekends at the Claytor Nature Study Center, which is the location of a new high-powered telescope.	Open to any area teachers, and taught by LC faculty .	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
29.	Special Adapted Curriculum Endorsement	Studies indicated that there was a need for endorsement in Special Adapted Curriculum endorsement in this area.	Program is open to licensed teachers who also want to be endorsed in Adapted Curriculum. Program was approved and began this summer.	Open to area teachers, with courses being taught by qualified LC faculty.	Yes
30.	Literacy Courses: RDNG 643 and 672	Courses are offered in our Reading Specialist master's program, but are also offered to teachers who want to add to their own knowledge of literacy.	Teachers have asked for courses that will help them improve their own teaching of reading and literacy.	Area teachers and LC faculty.	No
31.	Reading Courses - Nelson County (Spring 2010)	Incentive grant from Nelson County was awarded to provide identified teachers instruction in elementary and secondary reading courses.	Nelson County teachers indicated a need to help students in all grade levels improve their reading performances.	Nelson County Administration and LC Faculty: Drs. Cash, Thompson, and Watts.	Yes
32.	Special Topics Reading Courses for Lynchburg City Schools.	Lynchburg College provides special tuition rates and oversight of special topics taught in LCS by master teachers in LCS. Teachers enrolled in the special program receive graduate credit and expert instructors.	LCS indicated a need for the special topic reading courses to be offered on-site for their identified teachers.	LCS and LC.	Yes
33.	ECON 600 (Summer 2009)	Area school systems indicated a need for an Economics course for their middle and secondary teachers due to an upcoming requirement from VDOE that all secondary social studies teachers be able to teach economics.	Over 40 area teachers benefitted for the instruction in ECON 600 which include economics professors and the director of the Center for Economic Education.	Area teachers; LC faculty Dr. Joe Turek and Dir. CEE Cheryl Ayers.	No
34.	EDHD 669C/EDUC 398C Teaching with Today's Technology - Verizon/VFIC (Summer 2010)	Course open to students at both graduate and undergraduate levels for instruction in using up-to-date technology. Grant received from Verizon/VFIC.	All students enrolled benefitted from the instruction provided by LC's IT department members.	LC IT department members.	Yes
35.	Reading Courses: Special Topics (offered by Lynchburg City Schools in conjunction with Lynchburg College)	Special topics courses taught by master teachers on-site in Lynchburg City Schools. One section each for elementary teachers and one for middle and secondary teachers to enhance their reading skills in instructing students.	Teachers will hone their skills in teaching reading at the various grade levels.	Lynchburg City Schools and Lynchburg College.	Yes
36.	Content Courses for Secondary Teachers	Content courses for secondary teachers consists of a regional program to provide coursework in mathematics, biology, English, earth science, and history at the graduate level for either new endorsements and/or eligibility to teach dual enrollment courses.	Consortium meets bi-monthly to discuss current projects and identify future needs. The focus is dual enrollment and added endorsements.	Five partnership schools and Lynchburg College faculty.	Yes
37.	Highly Qualified Institutes: Central Virginia Regional Consortium	Highly qualified institutes supported by VDOE. The institutes afford an on-line option for special education teachers to become highly qualified in middle and secondary schools.	The consortium meets bi-monthly to discuss current projects and identify future needs. The focus is to enable special educators to become highly qualified.	Five partnership schools and LC faculty.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*Spanish PreK-12*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																				
1.	Math and Literature Connection 4th/5th Grade - EDCI 661	X												X								X
2.	"Book Buddies" Field Experience II	X																	X		X	
3.	Field Experience I Elementary, SPED, and Secondary Pre-service Teachers	X			X	X	X					X	X	X	X	X	X	X	X			
4.	Field Experience II Secondary Pre-service Teachers				X	X	X					X	X	X	X	X	X	X				X
5.	Field Experience III Elementary SPED																				X	
6.	Counseling: Parent Education			X																		
7.	Counseling Practicum and Internships			X																		
8.	Teachers for Tomorrow	X			X	X	X					X	X	X	X	X	X	X			X	
9.	Graduate Science Course for Bedford County Teachers														X	X	X	X				
10.	Claytor Nature Study Center (CNSC)														X	X	X	X				
11.	Tri-College Consortium Grant Team	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	
12.	Tri-College Consortium Colloquia	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
13.	Workshop in Literacy K-6	X	X																			
14.	Third Annual History Symposium	X											X									
15.	SPED Distance Learning: Radford and Lynchburg College	X																	X	X	X	
16.	Daura Gallery	X					X				X											
17.	Schewel Lecture Series	X	X	X	X	X	X	X					X						X		X	
18.	EDHD Advisory Board	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19.	Spanish Classes for Students in Grades 6-12					X																

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*Spanish PreK-12*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																				
20.	Spanish Faculty Presentations on Culture					X																
21.	Family Fitness Night							X														
22.	National Women's Sport Day							X														
23.	Produce School Musicals								X	X	X											
24.	Improve Marching Band Field and Competition Shows								X	X												
25.	Improve Concert Band Festival Performances								X	X												
26.	AIMS Math Workshops for 4th and 5th Grade Teachers	X																				
27.	Math Solutions Workshop--October 2009	X																				
28.	Astronomy Instruction: SCIE 610 and SCIE 680	X													X	X	X	X				
29.	Special Adapted Curriculum Endorsement																			X		
30.	Literacy Courses: RDNG 643 and 672	X	X									X										
31.	Reading Courses - Nelson County (Spring 2010)	X	X									X										
32.	Special Topics Reading Courses for Lynchburg City Schools.	X	X									X										
33.	ECON 600 (Summer 2009)												X									
34.	EDHD 669C/EDUC 398C Teaching with Today's Technology - Verizon/VFIC (Summer 2010)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
35.	Reading Courses: Special Topics (offered by Lynchburg City Schools in conjunction with Lynchburg College)		X																			
36.	Content Courses for Secondary Teachers											X	X	X	X	X						
37.	Highly Qualified Institutes: Central Virginia Regional Consortium																	X		X		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Lynchburg College
Contact Person: Jan S. Stennette
Phone No.: (434) 544-8662 or (434) 544-8382
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	EDHD Cohort (to complete program in August 2010)	Individuals were selected by area school systems to participate in the Educational Leadership master's program.	New administrators will be needed to fill the near-future vacancies due to retirement.	Five partnership schools: Amherst, Appomattox, Bedford, Campbell, and Lynchburg City Schools, and Lynchburg College.	Yes
2.	EDLS 700 Course	EDLS 700 course was designed for administrators who want to keep up with current issues in leadership.	It is offered on an individual basis for those administrators who want to do an independent type of study on an issue of their concern and interest.	Special tuition rate is offered by Lynchburg College.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Mary Baldwin College
Contact Person: James C. McCrory
Phone No.: (540) 887-7298
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Practica with Methods courses	Each of the "methods" courses includes a 30 clock-hour practicum in the local public schools.	The extra set of "helping hands" provides opportunity for the classroom teacher to work more one-on-one and with small groups of students.	All cities and counties in proximity to MBC regional areas in Virginia: Staunton, Weyers Cave, Charlottesville, Richmond, Roanoke, Hampton, and southside Virginia.	No
2.	Practicum ED 110	Prior to the senior year, with its supervised student teaching, students in the teacher education program will have a 90 clock-hour practicum experience that includes observation and involvement activities in the local public schools.	Prior to the senior year, with its supervised student teaching, students in the teacher education program will have a 90 clock-hour practicum experience that includes observation and involvement activities in the local public schools.	All cities and counties in proximity to MBC regional areas in Virginia: Staunton, Weyers Cave, Charlottesville, Richmond, Roanoke, Hampton, and southside Virginia.	No
3.	Student Teaching	One semester working directly with students in a classroom on a full-time basis under the direction of a classroom teacher and college supervisor.	Student teaching meets the identified need of preparing experienced beginning teachers, and provides extra support for the PreK-12 students with two teaching adults.	All cities and counties in proximity to MBC regional areas in Virginia: Staunton, Weyers Cave, Charlottesville, Richmond, Roanoke, Hampton, and southside Virginia.	No
4.	Clinical Faculty	The Mid Valley Clinical Faculty Consortium connects four institutions of higher education (Mary Baldwin College, James Madison University, Eastern Mennonite University, and Bridgewater College) with teachers in the public schools, and provides training and high quality selection	The training provided by the consortium paves a pathway for smooth working relations with the teacher, and prepares the students for a better understanding of the role of the student teacher.	Staunton, Waynesboro, Harrisonburg, Augusta County, and Rockingham County.	Yes
5.	Mentoring for the First-Year Teacher	The first-year teacher is helped by an experienced teacher trained to mentor the novice teacher.	This program addresses the need for a seamless transition from student teaching to first year teaching.	Staunton, Waynesboro, Harrisonburg, Augusta County, and Rockingham County.	Yes
6.	One Child at a Time (OCAT)	Content Area Reading students tutor PK-12 students in the local public schools.	SOL scores show need for improvement in reading by students in the public schools.	Staunton, Waynesboro, Harrisonburg, Augusta County, and Rockingham County.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Mary Baldwin College
Contact Person: James C. McCrory
Phone No.: (540) 887-7298
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	Career Fair Waynesboro	Students are given the opportunity to meet and talk with representatives of business and higher education institutions about employment and educational opportunities. This experience helps students understand requirements for employment, career options, and potential for career advancement.	High school students often have difficulty connecting their school experiences to job opportunities or higher education options. Students become more motivated when they have the chance to talk about "real world" situations with individuals who are outside the public school setting.	Waynesboro.	Yes
8.	Black History Month Oratorical Contest	Sponsored every year by the MBC Office of African American and Multicultural Affairs, MBC students work as interns to help local public school students prepare speeches.	The extra help is direly needed since this is an extracurricular program for which the practicing school teacher would have little or no time.	Staunton, Waynesboro, Augusta County, and Roanoke.	Yes
9.	PEARL Program	The program connects minority public school students with minority women of color at MBC. The program is named "pearl" because the college students believed the children and youth in the public schools to be as precious as pearls.	MBC students make every effort to increase the public school students' cultural awareness, while enhancing their academic capabilities through regular tutoring sessions.	Staunton and Augusta County.	Yes
10.	Black Baby Doll Day	The Ida B. Wells Living Learning Community gives dolls to African American and Latino girls in the local public schools each year.	This program helps the public schools to meet the need of enhancing the cultural pride of female students of color by providing baby dolls that appear to share their ethnic backgrounds.	Staunton and Augusta County.	Yes
11.	NETS*T Certification	Local Teachers, initiated by an MBC Adjunct Professor of Mathematics, use examples from MBC such as blackboard, testing online, and communicating with MBC students to achieve this certification.	The SOL score results show a need for improvement in mathematics, which will improve with more teachers incorporating technology into their teaching.	Staunton and Augusta County.	No
12.	Preparing Students to Excel in Mathematics	Grant funding through the No Child Left Behind Act.	The SOL score results show a need for improvement in mathematics, which will improve with more teachers incorporating technology into their teaching.	Staunton and Augusta County.	Yes
13.	Program for the Exceptionally Gifted (PEG)	This program provides an alternative to high school for academically gifted and talented students.	This alternative to high school helps the public schools to serve a need not otherwise accomplished.	Secondary Schools throughout Virginia and all states in the U.S.A.	No
14.	Math Tutors	MBC provides funding for at least one math major to tutor at Stuart Hall School in Staunton.	Extra individual help from an excellent college student is always helpful as a resource beyond the norm.	Stuart Hall School in Staunton.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Mary Baldwin College
Contact Person: James C. McCrory
Phone No.: (540) 887-7298
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
15.	MBC Environment-Based Learning (EBL) Program	Hundreds of thousands of dollars have been secured by MBC Education Professor of Education, Tamra Willis, to support workshops for MBC Education students and local school teachers to explore how their surroundings can help them develop lesson plans for all subjects.	The MBC Environment-Based Learning Program meets an urgent need for citizens to learn about the environment to improve conditions now and to work toward a greener future.	Staunton and Augusta County.	Yes
16.	Expansion of Mary Baldwin College Historic Commitment to Community Service	MBC employees and students contribute more than 13,000 hours annually in community service, much of which is in the public schools.	The public schools need the help and connection with adults in the community for students to learn from the experience of adults and to benefit from the extra help.	Staunton and Augusta County.	No
17.	Practicum ED 510	This course, Graduate Field Experience, is a MAT course taken prior to supervised student teaching. It is a minimum of 140 clock hours in the classroom over the course of the MAT degree, including observation and involvement activities in the local public schools.	This course is taken prior to supervised student teaching. It is a minimum of 140 clock hours in the classroom over the course of the MAT degree, including observation and involvement activities in the local public schools.	All cities and counties in proximity to MBC regional areas in Virginia: Staunton, Weyers Cave, Charlottesville, Richmond, Roanoke, Hampton, and southside Virginia.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Mary Baldwin College
Contact Person: James C. McCrory
Phone No.: (504) 887-7298
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*French PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Visual Arts PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																
1.	Practica with Methods courses	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Practicum ED 110	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Student Teaching	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	Clinical Faculty	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	Mentoring for the First-Year Teacher	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6.	One Child at a Time (OCAT)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	Career Fair Waynesboro	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Black History Month Oratorical Contest	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	PEARL Program	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.	Black Baby Doll Day	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11.	NETS*T Certification	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12.	Preparing Students to Excel in Mathematics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13.	Program for the Exceptionally Gifted (PEG)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14.	Math Tutors	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15.	MBC Environment-Based Learning (EBL) Program	X	X								X					X		
16.	Expansion of Mary Baldwin College Historic Commitment to Community Service	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
17.	Practicum ED 510	X	X								X					X		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Mary Baldwin College
Contact Person: James C. McCrory
Phone No.: (540) 887-7298
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Marymount University and Arlington County Public Schools Professional Development School Partnership - Internships (PDS)	This partnership places up to eight PK-6 or special education - general curriculum M.Ed. student interns studying PK-6 or special education - general curriculum in Ashlawn, Jamestown, Taylor, and Patrick Henry Elementary Schools, from the beginning of school through the second week of May. Interns serve at two placements through the	This partnership yields highly effective teachers in a county that has vacancies each year. Arlington County has a priority to hire the PDS interns if the county chooses to do so. Also, interns assist, co-teach, and collaborate with trained mentor teachers.	Shelly Haser and Pam Klobukowski, Marymount University; Susan Saber and Vicki Taylor, Arlington County Public Schools.	Yes
2.	Marymount University and Arlington Public Schools Professional Development School Partnership - Mentor Teacher and Clinical Faculty Development	PDS mentor teachers are provided clinical faculty training in PK-6 and special education - general curriculum supervision through a joint collaboration with Fairfax County Public schools (Buzz Aldrin, Dogwood, Herndon HS, Hutchison, Sunrise Valley, and Marymount Faculty).	This partnership yields highly effective teachers who are trained to provide support and mentoring to PK-6 and special education - general curriculum interns.	Shelly Haser and Pam Klobukowski, Marymount University; Shawn Finnerty Fairfax County Public School.	Yes
3.	Marymount University and Fairfax County Public Schools Professional Development School Partnership - Mentor Teacher Clinical Faculty Development	PDS mentor teachers are provided clinical faculty training in PK-6 and special education - general curriculum supervision through a joint collaboration with Fairfax County Public schools (Buzz Aldrin, Dogwood, Herndon HS, Hutchison, Sunrise Valley, and Marymount Faculty).	This partnership yields highly effective teachers who are trained to provide support and mentoring to PK-6 and special education - general curriculum interns.	Shelly Haser and Pam Klobukowski, Marymount University; Shawn Finnerty Fairfax County Public School.	Yes
4.	Marymount University and Fairfax County Public Schools Professional Development School Partnership (PDS) - Internships	Fourteen to 20 interns in PK-6, special education - general curriculum, or special education - general curriculum/PK-6 are placed in high-needs and non-high needs schools from the end of August to mid-May. PDS Fairfax County public schools are: Buzz Aldrin, Dogwood, Glen Forest, Hayfield Secondary, Herndon HS, Hutchison, Newington Forest, Silverbrook, Sunrise Valley, Woodlawn.	This partnership yields highly effective teachers in a county that has many vacancies each year. Fairfax County has priority to hire the PDS interns if the county chooses to do so. Interns assist, co-teach, and collaborate with trained mentor teachers.	Shelly Haser and Pam Klobukowski.	Yes
5.	PK-6 Marymount University and The Potomac School Internship Partner Program	Up to eight PK-6 or secondary student interns are placed at the private independent Potomac schools for the entire school year. Internships may be 1 or 2 years.	This partnership allows the student/teacher ratio to be much lower as interns are mentored and treated as co-teachers.	Usha Rajdev, Marymount University; Nancy Powell, Potomac School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	Fairfax County Public Schools - Experience and Student Teaching ESL, Secondary History and Social Science, Mathematics, Biology, Chemistry, Earth Science, Physics, Visual Arts, PK-6, Special Education - General Curriculum, ESL and Field Experience - Armstrong ES, Belvedere ES, Fairhill ES, Cameron ES, Chesterbrook ES, Freedom Hill ES, Fort Hunt ES, Woodlawn ES, Kent Gardens ES, Bonnie Brae ES, Haycock ES, Floris ES, Groveton ES, Forestville ES, Sangster ES, Annadate ES, Cunningham Park ES, Woodley Hills ES, Springfield Estates ES, Oakview ES, Cedarview ES, Wolftrap ES, White Oaks ES, Cardinal Forest ES, Dranesville ES, Waples Mill Es, Haycock ES, Centre Ridge ES, Spring Hill ES, Kings Park ES, Lane ES	Students participate in field experience and student teaching.	This partnership allows the student/teacher ratio to be lower and gives extra support to teachers.	Shelly Haser and Laura Carlson, Marymount University; Susan Brann Fairfax County Public Schools.	No
7.	Arlington Public Schools - Pk-6, Special Education - General Curriculum, ESL Student Teaching and Field Experience, Arlington Traditional Day, Drew Model School ES, Campbell ES, Patrick Henry ES, Abingdon ES, Nottingham ES, Francis Scott Key ES, Glebe ES, Taylor ES, Yorktown HS, Williamsburg Middle School, Wakefield HS, Kenmore Middle School, Arlington Science Focus, Woodlawn Secondary	Students participate in field experience and student teaching.	This partnership allows the student/teacher ratio to be lower and gives extra support to students and teachers.	Shelly Haser and Laura Carlson, Marymount University, Erin Wales-Smith, APS.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Alexandria City Schools - PK-6, Special Education - General Curriculum, ESL - Student Teaching and Field Experience - Rose Hill ES, George Mason ES, William Ramsay ES	Students participate in field experience and student teaching.	This partnership allows the student/teacher ratio to be lower and gives extra support to students and teachers.	Shelly Haser and Laura Carlson, Marymount University, Audora Aldana Alexandria City Schools.	No
9.	Loudoun County Public Schools - Student Teaching and Field Experience for PK6, ESL, andSpecial Education - General Curriculum - Arcola ES, Mill Run ES, Snaders Corner ES, Horizon ES, Hillside ES, Potomac ES, Forest Grove ES, Chantilly HS, Brookfield ES	Students participate in field experience and student teaching.	This partnership allows the student/teacher ratio to be lower and gives extra support to students and teachers.	Shelly Haser and Laura Carlson, Marymount University, Delores Creech LCPS.	No
10.	Prince William County Public School - Student Teaching PK-6 - Buckland Mills ES; Ashland ES, Kerrydale ES, Yorkshire ES, Springwood ES	Students participate in field experience and student teaching.	Student teachers provide instructional support to classroom teachers for up to 14 weeks.	Dr. Shelly Haser, Ms. Laura Carlson, Marymount University; Elaine Standifer, Prince William County.	No
11.	Student Teaching PK-6 - St. Charles - Arlington Diocese	The site for student teachers.	Student teachers provide instructional support to classroom teachers for up to 14 weeks.	Dr. Shelly Haser, Ms. Laura Carlson, Marymount University; Principal, St. Charles.	No
12.	Student Teaching Secondary English- Our Lady of Good Counsel - Diocese	The site for student teachers.	Student teachers provide instructional support to classroom teachers for up to 14 weeks.	Dr. Shelly Haser, Ms. Laura Carlson, Marymount University; Principal, Our Lady of Good Counsel.	No
13.	Student Teaching PK-6 Holy Spirit School - Arlington Diocese	The site for student teachers.	Student teachers provide instructional support to classroom teachers for up to 14 weeks.	Dr. Shelly Haser, Ms. Laura Carlson, Marymount University; Principal, Holy Spirit School.	No
14.	Student Teaching and Field Experience PK-6 - Browne Academy, Alexandria, VA	The site for student teacher and field experiences.	Student teachers provide instructional support to classroom teachers for up to 14 weeks.	Dr. Shelly Haser, Ms. Laura Carlson, Marymount University; Principal, Browne Academy.	No
15.	School Counseling Practicum - Arlington County Public Schools Jamestown ES, KEY ES, Nottingham ES, Jefferson Middles School, Yorktown HS, Washington and Lee HS	The site for school counseling practicum students. Provided clinical experience, training, and supervision for student.	Practicum student provided counseling services to students under the supervision of the cooperating counselor/on-site supervisor.	Dr. Garofalo, Marymount University; Erin Wales-Smith, APS.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
16.	School Counseling Practicum - Fairfax County Public Schools: Franconia ES, Keene Mill ES, Louise Archer ES, Lake Anne ES, Lemon Road ES, Oakton ES, Spring Hill ES, Vienna ES, Waples Mill ES, Cooper Middle School, Potomac Middle School, Sandburg Middle School, Fairfax HS, Hayfield Secondary, Madison HS, Marshall HS, and West Springfield HS	The site for the school counseling practicum student. Provided clinical experience, training, and supervision for student.	Practicum students provide counseling services to students under the supervision of the cooperating counselor/on-site supervisor.	Dr. Garofalo, Marymount University; Susan Brann, FCPS.	No
17.	School Counseling Practicum - Loudoun County Public Schools Broad Run HS, Loudoun County HS	The site for the school counseling practicum student. Provided clinical experience, training, and supervision for student.	Practicum student provided counseling services to students under the supervision of the cooperating counselor/on-site supervisor.	Dr. Garofalo, Marymount University; Pat Allenson, LCPS.	No
18.	School Counseling Practicum - Stafford County Public Schools Stafford High School	The site for the school counseling practicum student. Provided clinical experience, training, and supervision for student.	Practicum student provided counseling services to students under the supervision of the cooperating counselor/on-site supervisor.	Dr. Garofalo, Marymount University; Susan Briggs, Stafford CPS.	No
19.	School Counseling Practicum - Prince William County Public Schools Garfield High School	The site for the school counseling practicum student. Provided clinical experience, training, and supervision for student.	Practicum student provided counseling services to students under the supervision of the cooperating counselor/on-site supervisor.	Dr. Garofalo, Marymount University; Harriet Rowe, PWPS.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*School Counselor PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.												
1.	Marymount University and Arlington County Public Schools Professional Development School Partnership - Internships	X												X
2.	Marymount University and Arlington Public Schools Professional Development School Partnership - Mentor Teacher and Clinical Faculty Development	X												X
3.	Marymount University and Fairfax County Public Schools Professional Development School Partnership - Mentor Teacher Clinical Faculty Development	X												X
4.	Marymount University and Fairfax County Public Schools Professional Development School Partnership (PDS) - Internships	X												X
5.	PK-6 Marymount University and The Potomac School Internship Partner Program	X												
6.	Fairfax County Public Schools - Experience and Student Teaching ESL, Secondary History and Social Science, Mathematics, Biology, Chemistry, Earth Science, Physics, Visual Arts, PK-6, Special Education - General Curriculum, ESL and Field Experience - Armstrong ES, Belvedere ES, Fairhill ES, Cameron ES, Chesterbrook ES, Freedom Hill ES, Fort Hunt ES, Woodlawn ES, Kent Gardens ES, Bonnie Brae ES, Haycock ES, Floris ES, Groveton ES, Forestville ES, Sangster ES, Annadate ES, Cunningham Park ES, Woodley Hills ES, Springfield Estates ES, Oakview ES, Cedarview ES, Wolftrap ES, White Oaks ES, Cardinal Forest ES, Dranesville ES, Waples Mill Es, Haycock ES, Centre Ridge ES, Spring Hill ES, Kings Park ES, Lane ES	X		X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*School Counselor PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.												
7.	Arlington Public Schools - Pk-6, Special Education - General Curriculum, ESL Student Teaching and Field Experience, Arlington Traditional Day, Drew Model School ES, Campbell ES, Patrick Henry ES, Abingdon ES, Nottingham ES, Francis Scott Key ES, Glebe ES, Taylor ES, Yorktown HS, Williamsburg Middle School, Wakefield HS, Kenmore Middle School, Arlington Science Focus, Woodlawn Secondary	X		X	X	X	X	X	X	X	X	X	X	X
8.	Alexandria City Schools - PK-6, Special Education - General Curriculum, ESL - Student Teaching and Field Experience - Rose Hill ES, George Mason ES, William Ramsay ES	X			X									
9.	Loudoun County Public Schools - Student Teaching and Field Experience for PK6, ESL, andSpecial Education - General Curriculum - Arcola ES, Mill Run ES, Snaders Corner ES, Horizon ES, Hillside ES, Potomac ES, Forest Grove ES, Chantilly HS, Brookfield ES	X			X									X
10.	Prince William County Public School - Student Teaching PK-6 - Buckland Mills ES; Ashland ES, Kerrydale ES, Yorkshire ES, Springwood ES	X												
11.	Student Teaching PK-6 - St. Charles - Arlington Diocese	X												
12.	Student Teaching Secondary English- Our Lady of Good Counsel - Diocese						X							
13.	Student Teaching PK-6 Holy Spirit School - Arlington Diocese	X												
14.	Student Teaching and Field Experience PK-6 - Browne Academy, Alexandria, VA	X												

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*School Counselor PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.												
15.	School Counseling Practicum - Arlington County Public Schools Jamestown ES, KEY ES, Nottingham ES, Jefferson Middles School, Yorktown HS, Washington and Lee HS		X											
16.	School Counseling Practicum -Fairfax County Public Schools: Franconia ES, Keene Mill ES, Louise Archer ES, Lake Anne ES, Lemon Road ES, Oakton ES, Spring Hill ES, Vienna ES, Waples Mill ES, Cooper Middle School, Potomac Middle School, Sandburg Middle School, Fairfax HS, Hayfield Secondary, Madison HS, Marshall HS, and West Springfield HS		X											
17.	School Counseling Practicum - Loudoun County Public Schools Broad Run HS, Loudoun County HS		X											
18.	School Counseling Practicum - Stafford County Public Schools Stafford High School		X											
19.	School Counseling Practicum - Prince William County Public Schools Garfield High School		X											

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Association of Superintendents	An association of superintendents from dioceses in Virginia, Maryland, Delaware, West Virginia, and Washington D.C., and of administrators and university level professors involved in school leadership, that share in a variety of staff development and resource management needs of the schools in these jurisdictions.	The association was created so that the school communities in each of these areas could benefit from shared instructional opportunities, as well as pursue some financial assistance in the acquisition of various instructional resources for the schools, teachers, and students.	Superintendents from the (arch)dioceses of Arlington, Richmond, Washington, Baltimore, Wheeling-Charleston, Wilmington, and University representatives from Marymount and other universities in these areas.	No
2.	Leadership Program - Speakers	Marymount's leadership program works with this national association to provide speakers and expertise especially for their annual national convention.	The contributions of Marymount provide a variety of presentations to assist in leadership as well as in teacher development.	Members of the Chief Administrators of Catholic Education (CACE), and professors and students from Marymount's Leadership Program .	Yes
3.	Open House for Prospective Teachers	The Director of the Catholic School Leadership Program, assisted by students or graduates, provides a series of open house programs to invite prospective teachers for the Arlington diocese to learn more about teaching and the application process and requirements.	Drawing on the expertise of the Marymount faculty, the program assists the school divisions in obtaining qualified teachers for their schools.	Director of the Marymount Catholic School Leadership Program, the Assistant Superintendent of Schools from Arlington, and graduates.	No
4.	Teaching Workshops/Seminars	Members of the Marymount Education faculty regularly present workshops and seminars to administrators and teachers in the neighboring school divisions.	These opportunities allow the Marymount community to share its expertise and assist in the on-going preparation and development of leadership and faculty.	Marymount faculty, principals, and teachers.	No
5.	Local School Accreditation Visiting Teams	Members of the Marymount Education faculty serve by invitation on some of the local school accreditation visiting teams.	These opportunities allow the local school community to benefit from best practices and development in the administration of elementary and secondary schools in the area, as well as from some state universities.	Marymount faculty, school visiting team members, administrators of these schools, and faculty.	No
6.	School Administrator Internship Bishop Denis O'Connell HS	Marymount school leadership interns spend up to 14 weeks in an internship.	Support the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Mr. Richard Martin, Principal; and Sister Patricia Earl, Marymount University.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Marymount University
Contact Person: Shelly Haser
Phone No.: (703) 526-6855
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	School Administrator Internship - Sacred Heart Academy	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Dan Farris, Asst. Superintendent of Schools; and Sister Patricia Earl, Marymount University.	No
8.	School Administrator Internship Roanoke Catholic School	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Susan Thompson, Principal; and Sister Patricia Earl, Marymount University.	No
9.	School Administrator Internship St. Mary School	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Janet Cantwell, Principal; Sister Patricia Earl, Marymount University.	No
10.	School Administrator Internship St. Michael School	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Sr. Karl Ann Homburg, Asst. Superintendent; and Sister Patricia Earl, Marymount University.	No
11.	School Administrator Internship, St. Ambrose School	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Ms. Elizabeth Roach, Asst. Superintendent; and Sister Patricia Earl, Marymount University.	No
12.	School Administrator Internship Our Lady of Victory	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Kelly Branaman, Asst. Superintendent; and Sister Patricia Earl, Marymount University.	No
13.	School Administrator Internship, Holy Spirit School	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Ms. Sarah Schmitt; and Sister Patricia Earl, Marymount University.	No
14.	School Administrator Internship., St. Charles School	Marymount school leadership interns spend up to 14 weeks in an internship.	Supports the principal, faculty, staff, and students in leadership and curriculum under an on-site advisor.	Sr. Karl Ann Homburg, Asst. Superintendent, Diocese of Arlington or his designee; and Sister Patricia Earl, Marymount University.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Norfolk State University
Contact Person: Dr. Jean Braxton
Phone No.: (757) 823-8701
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Norfolk State University and Booker T. Washington (BTW) High School - Norfolk	Partners engage in a variety of collaborative activities, including development of a speaker's bureau with teachers at the high school who address teacher education candidates on specific issues and preparing high school students for postsecondary life. Partners participate in Mobility Training. NSU candidates observe job coaching experiences of BTW students.	High school is a place where young people experiment with growing up, find support, and attempt to accomplish a variety of goals ranging from finding social acceptance to preparing for intellectual challenges.	Mr. Kevin Moore-Principal; Ms. Margie Stallings, Asst. Principal; Ms. Stella Clark-Dept. Chair BTW; Dr. June Harris-NSU; Dr. Judith Connell-NSU; Dr. Sandra Mathis-NSU.	Yes
2.	Field Experiences and Clinical Practices	Teacher candidates and school personnel candidates complete hours in schools with assigned cooperating personnel to meet course requirements for observation, participation, student teaching, or an internship. Teachers and school personnel serve as mentors to the candidates and allow them to practice and improve their skills.	The partnership and collaboration allow the PK-12 community to interact and assist beginning teachers in a way that strengthens their skills and improve teaching dispositions. Knowledge and teaching strategies are shared and new teachers are prepared.	Norfolk, Chesapeake, Virginia Beach, Suffolk, Portsmouth, Hampton, and Newport News Public Schools; All NSU education departments-Dr. Margaret Knight.	Yes
3.	Virginia Beach Public School's Adult Learning Center	The school counseling graduate interns provide academic, career, and personal/social education to the students enrolled in the Adult Basic Education program, GED, and English as a Second Language programs.	The Adult Learning Center does not have a school counselor. School counseling interns are assigned to ensure that students receive assistance with their personal/social concerns and information about educational career opportunities.	Bonie Mizenko, Director and Dr. Norma Brumage/NSU Coordinator.	No
4.	Southside Boys and Girls Club	The partnership provides urban youth programs in character and leadership, education and career, health and life skills, the arts, sports, fitness, recreation, and specialized initiatives.	This partnership involves school counseling interns who provide curricula in all domains recognized in the national programs for the organization. All curricula are aligned with the SOLs for the State of Virginia and Counseling Standards of Virginia.	Greg Shivers/Coordinator, Norma Brumage/NSU Coordinator.	No
5.	Field Mentorships	NSU provides student volunteers to assist the physical educators in the field in Norfolk, Newport News, Hampton, and Chesapeake with instruction and special events in order to improve teaching methods of candidates and to expand their knowledge of exceptional programming and meeting diverse needs.	Assist with class instruction, equipment, skill acquisition, special programs, newsletters, and planning.	Bowling Park, Tidewater Park, Norview Middle, Maury High, Washington High, Chesterfield Academy, Willoughby, Armstrong, Butts Road, Deep Creek Middle- Dr. Delano Tucker.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Norfolk State University
Contact Person: Dr. Jean Braxton
Phone No.: (757) 823-8701
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	Virginia Consortium for Teacher Preparation in Severe Disabilities	Partners engage in integrating the use of distance education technologies, including video-conferencing and other supporting technologies in the delivery of instruction.	The consortium meets the identified need of the PK-12 community by preparing candidates to become highly qualified teachers of children with severe disabilities, enabling them to develop to their fullest academic potential.	George Mason, Virginia Commonwealth, University of Virginia, Lynchburg College, Norfolk State University-June Harris.	Yes
7.	Visual Impairment Consortium	The consortium utilizes video-conferencing among partners to establish real-time, interactive, multipoint conference instruction among the 5 universities for each class taught.	The consortium meets the identified need of the PK-12 community by preparing candidates to become highly qualified teachers of children with visual impairments.	Norfolk State-June Harris, George Mason, Radford, Virginia Commonwealth, James Madison, Old Dominion.	Yes
8.	Clinical Faculty Program	NSU Center for Professional Development collaborates with area school divisions to seek grant funding to provide training for PreK-12 teachers in the areas of mentoring teacher candidates and beginning teachers in their schools. The focus has been on curriculum, instruction, and classroom management.	Training, such as the use of the Eduational Testing Service (ETS) Pathwise Teacher Mentor program, has helped to give more structure to the mentoring process as well as to improve teaching skills of the mentor.	Norfolk, Portsmouth, Virginia Beach, Chesapeake, Suffolk, Surry, and Isle of Wight Public Schools, Norfolk State- Dr. Margaret Knight.	Yes
9.	HPE Activities	NSU health and physical education students will assist in teaching activities to regular as well as adapted physical education students	The collaboration will assists students with preparation an improvement of teaching skills in a real classroom setting.	Norfolk Public Schools, NSU-Dr. Delano Tucker.	No
10.	The Hampton Roads School Counselor Leadership Team (HRSCLT)	The HRSCLT is a collaborative team of School Counseling Professionals whose mission is to promote the school counseling profession and to advocate for the academic, career, and personal/social growth of all students in the Hampton Roads area.	The HRSCLT will provide professional development opportunities to aid counselors in their responsibilities and roles as advocates for the students' total development. This is a collaborative team that integrates university and division planning in order to create a developmental approach to meet federal and state academic standards, while supporting the social and emotional growth of all students.	Hampton, Newport News , Portsmouth City , Norfolk , Chesapeake , Virginia Beach , and Suffolk Public School Systems. NSU-Dr. Melendez Byrd.	No
11.	Region II Staff Development Council (SDC)	The Region II SDC is a professional association committed to ensuring high levels of learning and performance by all students and pre-service and in-service school staff members.	The goal is to connect PreK-12 and university educators with information, strategies, and best practices that demonstrate high expectations and produce positive results for students and staff.	The public school divisions in the Hampton Roads, Western Tidewater, and Eastern Shore, and Universities in the areas collaborate. NSU-Dr. Margaret Knight.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Norfolk State University
Contact Person: Dr. Jean Braxton
Phone No.: (757) 823-8701
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
12.	Chesterfield Academy, Dreamkeepers Academy, and Poplar Halls Elementary Schools	NSU provides student health and physical education majors to assist with health and wellness activities supported by Health and Physical Education Department.	Educating the community is an integral part of the Norfolk Health and Physical Education Department as well as NSU physical education department. Numerous resources are supplied and activities are promoted during the project.	Norfolk Public Schools' Health and Physical Education Department-Dr. Cynthia Burwell.	Yes
13.	Book Buddies: Tanner's Creek Elementary School	To serve as tutors and aides in the first grade Reading Recovery Program.	It is critical to assist and uplift first graders who are having reading problems to improve and recover before entering grade two.	Dr. Matilda Martin and Mrs. Brown (Tanner's Creek contact person).	Yes
14.	YMCA Hampton Roads	Serve on board for YMCA Greenbrier North and place students for volunteer efforts.	Serve as YMCA advocate for children (especially after-school and daycare programs) and also community programs through YMCA HR.	Jennifer Cass (Executive Director, Greenbrier North); Merv Pitchford (VP, YMCA Community Service) Dr. Mona Bryant-Shanklin (NSU).	No
15.	Campostella Elementary School	Placing students for observation/participation and volunteer efforts.	Placing students for observation/ participation and volunteer efforts.	Mrs. Lenthia Willie-Clark Dr. Mona Bryant-Shanklin.	No
16.	NASA Pre-Service Teacher Institute NASA Langley, Hampton, VA	Pre-service students developed and taught a NASA designed Problem Based Learning Space lesson for fifth grade students at Campostella Elementary students around the Bernoulli Principle and its relationship to outer space. They used Distance Learning, the internet, materials and videos. Science Lead Teachers attend a two workshop with NSU college instructors and pre-service teachers prior to the delivery of the lesson.	Campostella is seeking as much STEM support as possible. NSU pre-service teachers who have strong mathematics backgrounds are very helpful to some classroom teachers. They support the teachers in the use of manipulatives in the classroom and story problems.	NASA Langley, Norfolk State University Elementary Pre-Service teachers, and Campostella Elementary School PK-5 Norfolk, VA, Ms. Carrol Rhodes-Nelson.	No
17.	Friday Science Program	STEM presenters from NSU provide special demonstrations, workshops, lessons , and activities for all grades.	Presentations provide informal science experiences and enrichment that is designed to impart excitement for STEM subjects.	Dr. Arthur Bowman (CSET), Ms. Carrol Rhodes-Nelson (SOE), Dr. Laguna Foster (Principal), and NSU students.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Norfolk State University
Contact Person: Dr. Jean Braxton
Phone No.: (757) 823-8701
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*School Counselor PreK-12*	*School Social Worker*	*French PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12* (* Part of a consortium offering an Adapted Curriculum endorsement.)	*Special Ed. - General Curriculum K-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Early Childhood 3-4 Yr Olds (add-on endors.)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																							
1.	Norfolk State University and Booker T. Washington (BTW) High School - Norfolk																			X	X	X			
2.	Field Experiences and Clinical Practices	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Virginia Beach Public School's Adult Learning Center				X																				
4.	Southside Boys and Girls Club				X																				
5.	Field Mentorships										X													X	
6.	Virginia Consortium for Teacher Preparation in Severe Disabilities																				X				
7.	Visual Impairment Consortium																						X		
8.	Clinical Faculty Program		X				X	X	X					X	X	X	X	X	X		X	X			
9.	HPE Activities										X														
10	The Hampton Roads School Counselor Leadership Team (HRSCLT)				X																				
11.	Region II Staff Development Council (SDC)		X						X					X	X	X	X	X	X		X	X			
12.	Chesterfield Academy, Dreamkeepers Academy, and Poplar Halls Elementary Schools										X														
13.	Book Buddies: Tanner's Creek Elementary School	X	X																						
14.	YMCA Hampton Roads	X	X																						X
15.	Campostella Elementary School	X	X																						
16.	NASA Pre-Service Teacher Institute NASA Langley, Hampton, VA	X	X																						
17.	Friday Science Program	X	X																						

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Norfolk State University
Contact Person: Dr. Jean Braxton
Phone No.: (757) 823-8701
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Administration and Supervision Field Experiences and Clinical Practices in Urban Educational Areas	Administration and Supervision school personnel candidates will complete hours in urban schools with assigned cooperating personnel administrators to meet course requirements for observation, participation, or an internship. Administrators, assistant principals and school personnel serve as mentors to the candidates and allow them to participate, practice, and improve their administrative skills.	The partnership and collaboration allow the PK-12 community to interact and assist future administrators and school personnel candidates in a way that also strengthens their skills. Knowledge and administrative strategies are shared.	Norfolk, Chesapeake, Virginia Beach, Suffolk, Portsmouth, Hampton, and Newport News Public Schools; NSU secondary education and school leadership department-Dr. Melendez Byrd.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Field Experiences - Poquoson City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Marilyn Barr and Leigh L. Butler	No
2.	Field Experiences - Virginia Beach City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Tammy Bowyer and Leigh L. Butler	No
3.	Field Experiences - Northampton County Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Susan Bradford and Leigh L. Butler	No
4.	Field Experiences - Fairfax Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Susan Brann and Leigh L. Butler	No
5.	Field Experiences - Suffolk City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Karen Brickey and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	Field Experiences - Hampton City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Carrie Byrd and Leigh L. Butler	No
7.	Field Experiences - Chesapeake City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Michael Clayman and Leigh L. Butler	No
8.	Field Experiences - Franklin City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Walter Clemons and Leigh L. Butler	No
9.	Field Experiences - Loudoun County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Delores Creech and Leigh L. Butler	No
10.	Field Experiences - Prince William County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Darlene Faltz and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
11.	Field Experiences - Fauquier County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Vincent Indelicato and Leigh L. Butler	No
12.	Field Experiences - Stafford County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Trish Jacobs and Leigh L. Butler	No
13.	Field Experiences - Southampton County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Timothy Kelly and Leigh L. Butler	No
14.	Field Experiences - Norfolk City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Lynne Meeks and Leigh L. Butler	No
15.	Field Experiences - York County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Ida Ostrowski and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
16.	Field Experiences - Portsmouth City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Talitha Parker and Leigh L. Butler	No
17.	Field Experiences - Newport News Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	LaTanja Riley-Hedgepeth and Leigh L. Butler	No
18.	Field Experiences - Williamsburg-James City County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Marie St. Claire and Leigh L. Butler	No
19.	Field Experiences - Isle of Wight County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Simone Terry and Leigh L. Butler	No
20.	Field Experiences - Gloucester County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Kara Tyler and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
21.	Field Experiences - Henrico County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Seza Aldridge and Leigh L. Butler	No
22.	Field Experiences - Hopewell City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Melody Bage and Leigh L. Butler	No
23.	Field Experiences - Augusta County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Eric Bond and Leigh L. Butler	No
24.	Field Experiences - Prince George County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Bobby Browder and Leigh L. Butler	No
25.	Field Experiences - Lee County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	James Browder and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
26.	Field Experiences - Colonial Heights Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Jo Bunce and Leigh L. Butler	No
27.	Field Experiences - Tazewell County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Julia Butler and Leigh L. Butler	No
28.	Field Experiences - Alleghany County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Robert Carpenter and Leigh L. Butler	No
29.	Field Experiences - Fredericksburg City Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Marceline Catlett and Leigh L. Butler	No
30.	Field Experiences - Harrisonburg City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Loretta Clark and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
31.	Field Experiences - Dickenson County Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Debbie Colley and Leigh L. Butler	No
32.	Field Experiences - Radford City Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Lorraine Crawford and Leigh L. Butler	No
33.	Field Experiences - Spotsylvania County Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Eric Cunningham and Leigh L. Butler	No
34.	Field Experiences - Rockingham County Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Dixie Davis and Leigh L. Butler	No
35.	Field Experiences - Clarke County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Matthew Eberhardt and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
36.	Field Experiences - Campbell County Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	John Erb and Leigh L. Butler	No
37.	Field Experiences - Botetourt County Public School	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Jill Green and Leigh L. Butler	No
38.	Field Experiences - Rappahannock County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Becky Greer and Leigh L. Butler	No
39.	Field Experiences - Charlotte County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Sharon Hall and Leigh L. Butler	No
40.	Field Experiences - Winchester City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Lynda Hickey and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
41.	Field Experiences - Culpeper County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Lucia Onufrey and Leigh L. Butler	No
42.	Field Experiences - Richmond City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Bernie Johnson and Leigh L. Butler	No
43.	Field Experiences - Scott County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Darryl Johnson and Leigh L. Butler	No
44.	Field Experiences - Frederick County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Lynette Johnson and Leigh L. Butler	No
45.	Field Experiences - Pittsylvania County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Mark Jones and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
46.	Field Experiences - Washington County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Janet Lester and Leigh L. Butler	No
47.	Field Experiences - Shenandoah County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Evelyn Linaburg and Leigh L. Butler	No
48.	Field Experiences - Buckingham County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Thelma Llewellyn and Leigh L. Butler	No
49.	Field Experiences - Warren County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Mel Medved and Leigh L. Butler	No
50.	Field Experiences - Grayson County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Chad Newsom and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
51.	Field Experiences - Covington City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Ellen Nipper and Leigh L. Butler	No
52.	Field Experiences - Middlesex County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Cynthia Pitts and Leigh L. Butler	No
53.	Field Experiences - Falls Church City Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Lisa Richardson and Leigh L. Butler	No
54.	Field Experiences - Montgomery County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Virginia Richardson and Leigh L. Butler	No
55.	Field Experiences - Smyth County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Michael Robinson and Leigh L. Butler	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
56.	Field Experiences - Chesterfield County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Phillip Sword and Leigh L. Butler	No
57.	Field Experiences - Arlington County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Patrick Tien and Leigh L. Butler	No
58.	Field Experiences - Russell County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Lorraine Turner and Leigh L. Butler	No
59.	Field Experiences - Wise County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	James Wardell and Leigh L. Butler	No
60.	Field Experiences - Department of Defense Dependent Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Sylvia Velez and William H. Graves	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
61.	Field Experiences - Washington State Department of Public Instruction	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	WSPI and ODU	No
62.	Field Experiences - Mecklenburg County Public Schools	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Carol Nelson and Leigh L. Butler	No
63.	Field Experiences - Worchester County Public Schools, Maryland	Pre-service students complete early observations; teacher candidates admitted into approved programs are placed in practicum settings to interact with students at various levels; and student teachers who have completed all program components have a culminating experience with a master teacher where they assume full responsibility for the classroom.	Teacher candidates who complete an approved program are qualified to be hired upon graduation. This assists the divisions in meeting teaching vacancy needs with teacher candidates who have knowledge and skill in teaching.	Jon Andres and William H. Graves	No
Mathematics					
1.	J.F. Kennedy Middle School, Suffolk Public Schools	Assisting first year mathematics teachers.	Susanne McKinney works with the first year mathematics teacher to assist them with instruction as to improve their SOL scores in mathematics.	Susanne McKinney	No
Marketing Education					
1.	Old Dominion University Marketing Education Program and Virginia Beach City Public Schools Marketing Education Teachers	Included six teachers in ODU's fashion merchandising trip to the Las Vegas MAGIC Fashion Market for industry update.	The school system gains access for its high school fashion teachers to attend this major merchandise show that otherwise they could not attend without sponsorship by a collegiate fashion program.	Davis Netherton, Michael Kosloski, Sharon Davis, and Tiffany Machado of ODU and Sarah Martin of Virginia Beach City Public Schools (VBCPS)	No
2.	Old Dominion University MS Program for Virginia Beach Career and Technical Education Teachers	Provided a school system based MS program for Career and Technical Education teachers. Courses for certification are also delivered.	School system wanted to enable more of their teachers to become master teachers and to provide licensure courses for teachers entering teaching from other fields.	Graduate faculty from Old Dominion University (Ritz, Reed, Deal, Kosloski, Ndahi) and Linda Spruill, Specialist, VBCPS	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
3.	Say Yes To College	Provide information and experience on transition planning for students with disabilities and their parents for all school systems in Superintendent's Region II.	Allows high schools students with disabilities and their families to experience what it would be like to attend university or colleges.	Special Project Staff Joann Ervin and faculty David Netherton and Sharon Davis and Superintendents' Region II	No
4.	Your Power, Your Choice Community Conference	Provide information updates to students with disabilities on disability services available in the community.	Provides timely information so communities and school divisions can best serve the needs of children and adults	Special Project Staff, Joann Ervin and Norfolk City Public Schools	No
5.	Virginia Beach Career and Technical Education High School Credit Transfer	Articulation agreement between Old Dominion University and Virginia Beach City Public Schools.	Provides for college credit through experiential learning for Virginia Beach Marketing Education students.	Faculty Dave Netherton, John Ritz and Virginia Beach City Public Schools	Yes
6.	Old Dominion University and Fairfax County Public Schools	Provided technical support for the Marketing Education Career and Technical Education student organization competitive events.	Needed assistance in setting up the system to determine event winners.	Faculty Michael Kosloski and the supervisor for Marketing Education Program, Fairfax County Public Schools	No
7.	Promotion Planning	Provided a series of 12 workshops on program planning that spanned a four month period.	School system wanted to enable more of their teacher to develop program plans.	Michael Kosloski and Walter Deal from ODU and Chesapeake Public Schools	No
			Counseling		
1.	Newport News Public Schools Counseling Leadership Development	Empower school counselors to alter their perceptions of school counseling, enhance their leadership development, and become change agents and advocates for students.	Training is conducted with school counseling teams from each Newport News high school and ODU faculty. Experiences from each school site are discussed in sessions.	Vanessa Whittaker	No
2.	CARE NOW	CARE NOW (Character and Resilience Education, Norfolk Public Schools, and Old Dominion University Working together) is a collaborative prevention program at Blair Middle School aimed at promoting the personal/social and academic achievement of 6th graders. The program has adopted a seamless approach to in and after school support services.	The collaboration among ODU, Norfolk Public Schools, and the City of Norfolk's Office of Youth Development is particularly relevant because of Norfolk's high rate of poverty (28 percent based on the 2000 Census) and alarming crime statistics (7.63 percent of crime in Virginia is committed by Norfolk juveniles). The superintendent of Norfolk Public Schools (NPS) selected Blair Middle School (BMS) for the program.	ODU - Dr. Tammi Milliken, Norfolk Public Schools Assistant Principal Ms. Nicole Grefory, Office of Your Development, Mr. Clifton Russell	Yes
			Health and Physical Education		
1.	Fitness Testing	Students from Old Dominion University's Physical Education class HPE 406 (Test and Measurement) assisted the school's physical education staff with fitness testing.	All schools require students to participate in fitness testing usually twice a year. This program gave the schools additional help in fitness testing.	Larchmont Elementary School Norfolk, Virginia	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
2.	Fitness Testing	Students from Old Dominion University's Physical Education class HPE 406 (Test and Measurement) assisted the school's physical education staff with fitness testing.	All schools require students to participate in fitness testing usually twice a year. This program gave the schools additional help in fitness testing.	Kempsville High School Virginia Beach, Virginia	No
3.	Career Day	Students from Old Dominion University's Health and Physical Education teacher preparation program discussed careers in Physical Education and the importance of staying healthy and fit.	Introduce students in elementary schools the various careers in the physical education & fitness fields.	Tanner's Creek Elementary School Norfolk, Virginia	No
4	Larchmont Rat Race	Students from Old Dominion University's Health and Physical Education teacher preparation program assisted in the organization of a one mile run and 5K race.	Local school organized a race to promote fitness and needed volunteers to help in the race.	Larchmont Elementary School Norfolk, Virginia	No
5	Staff Development	Teach staff development classes for the health and physical education teachers.	Teachers are required by the school division to attend staff development activities.	Virginia Beach City Public Schools	Yes
6	Driver Education Training	Students from Old Dominion University used driver education cars and driving range for training purposes.	Need for qualified teachers.	Newport News City Public Schools	No
7	Adapted Physical Education	Norfolk Public Schools transports approximately 50 special needs students to the Old Dominion University's Student Recreation Center. These students are taught physical education in weekly one hour classes by students in PE 404 (Adapted Physical Education).	Teacher candidates participate in a partnership with day time clinic or evening adult programming for disabled adults through the Norfolk Public Schools.	Norfolk Public Schools Office of Adapted Physical Education, Steve Errante, Director	No
8	PEP application Grant	Norfolk Public Schools and ODU - Tim Forebs, the Norfolk PE Senior Coordinator Health/Safety/Physical Education and ODU Assistant Professor are writing a grant proposal for PEP for physical education curriculum.	Test and create evidence based physical education curriculum.	Norfolk Public Schools	No
9	Fitness Performance	Virginia Beach City Public School students from HPE 406 (Tests and Measurement in Physical Education) travel to various middle & high schools in Virginia and assist in fitness testing. In addition, Dr. Xihe Zhue is doing research with fitness testing at Kempsville HS, Larkspur MS, Plaza MS and Kemps Landing Magnet School in Virginia Beach.	Research on cognitive demands and fitness performance.	Virginia Beach Public Schools	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
Special Education					
1.	Training and Technical Assistance Consortium (T/TAC)--ODU	T/TAC at Old Dominion University is designed to improve educational services for children with disabilities in Virginia.	The consortium is responsible for training and technical assistance in the areas of Early Childhood Special Education/Primary DD and individuals with moderate to severe disabilities.	The Virginia Department of Education supports eight regional T/TACs that comprise a statewide system emphasizing collaboration in the planning and provision of services to meet state and local staff development needs. TTAC ODU serves 15 school divisions.	Yes
2.	Effective School-wide Discipline	Effective School-wide Discipline is an initiative designed to support positive academic and behavioral outcomes for all students.	The program is based on extensive research and utilizes a preventative and proactive approach to discipline that reduces the amount of time spent dealing with office referrals, increasing teaching and learning.	Effective School-wide Discipline works in a collaborative partnership with Virginia Department of Education Training and Technical Assistance Centers. Currently, 30 school divisions participate in ESD.	Yes
3.	The Commonwealth Special Education Endorsement Program	The Commonwealth Special Education Endorsement Program: A Distance Learning Approach provides high-quality, site-based course work that effectively addresses the barriers of both distance and expense that confront provisionally licensed special education teachers.	This program addresses the critical teaching shortage area of special education.	CSEEP is a collaboration of school divisions (101 have participated), the Virginia Department of Education, and Old Dominion University.	Yes
4.	The Paraprofessional Preparation for Extraordinary Teaching	The goal of the PPET program is to prepare a diverse group of teacher candidates for the challenges of the special education classroom. The prospective candidates are selected from a pool of paraprofessionals and other non-licensed school personnel who will meet all professional teaching requirements for the special education licensure.	This program addresses the critical teaching shortage area of special education.	PPET is a collaboration of school divisions (28 have participated), the Virginia Department of Education, and Old Dominion University.	Yes
5.	The Virginia Consortium for Teacher Preparation in Vision Impairment	The Virginia Consortium for Teacher Preparation in Visual Impairments program's primary goal is to prepare teachers to be highly skilled at working with students with visual impairment and blindness.	This program addresses the critical teaching shortage area of special education: visual impairments.	The VI consortium is made up of six universities: George Mason University, James Madison University, Norfolk State University, Old Dominion University, Radford University and Virginia Commonwealth University.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	The Virginia Beach Teacher Training Project	The Virginia Beach Teacher Training Project's primary goal is to provide general education teachers the opportunity to earn special education endorsements.	This project is designed to better prepare teachers to meet the ever changing diversity within their classrooms.	The Virginia Beach Teacher Training Project is a collaborative arrangement between Old Dominion University and Virginia Beach City Public Schools.	Yes
7.	A survey of Programs and Services for Students with Emotional Disabilities in Virginia	Teachers of students with emotional disabilities, general educations who instruct students with emotional disabilities, and parents of children and adolescents with emotional disabilities are being surveyed regarding the use of evidence-based practices and satisfaction with programs for students with emotional disabilities in Virginia.	Under the auspices of the Virginia Department of Education, the goal is to gain a better understanding of programs and services for students with emotional disabilities to make informed decisions regarding policies and practices. The study is designed to yield information that is useful to school personnel in general education, special education and supervision and administration.	The emotional disabilities study is a collaborative effort between VDOE, Old Dominion University, and the Social Science Research Center at Old Dominion University.	Yes
Music					
1.	Music Education in the Schools: Elementary and Secondary Performance Study	Full time music professors provide performance practices workshops and clinics in elementary and secondary band, chorus, orchestra, marching band, jazz choir and jazz band for public school students in local and state districts.	Area public school district teachers consistently invite Old Dominion University professor to give clinics and workshops at their schools. They rely on and benefit from the expertise of ODU's nationally recognized performers, conductors, and music educators.	Music departments of: City of Norfolk Public Schools, Chesapeake Public Schools, Virginia Beach Public Schools and music departments from Leesburg, VA; Sterling, VA; Midlothian, VA.	No
2.	Internships and Side By Side Rehearsals and Performances	Old Dominion University performing groups (Band, Brass Choir, Orchestra, Chorus, Jazz Choir) partner with public school performing ensembles across the Tidewater area to study and perform a wide range of literature.	Area public school district teachers consistently invite Old Dominion University professor to give clinics and workshops at their schools. They rely on and benefit from the expertise of ODU's nationally recognized performers, conductors, and music educators.	Old Dominion University performing groups and conductors side by side together with Virginia Beach, Suffolk, Norfolk, and Chesapeake schools.	No
3.	National Association of Teachers of Singing Festival at Old Dominion University	Public school vocal soloists come to ODU for adjudication and competition in this school/university/national organization collaboration.	Individual public school vocalists welcome opportunities to compete and be adjudicated at the local, regional, and national levels through this collaboration.	High school students from the Tidewater region.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
4.	F. Ludwig Diehn Concert Series	This concert series brings artists of international standing to Old Dominion University. Local school districts benefit from the master classes that are open to the public and free of charge.	Students at all levels benefit from observation and interaction with artists of international standing. These interactions involve artists and music from around the world and help satisfy national and state standards for learning about diverse cultures and indigenous music.	Students from Norfolk and Virginia Beach public schools.	No
5.	Graduate Courses for recertification	Graduate courses are created that satisfy recertification requirements for the Commonwealth. Courses are offered at times convenient for the in-service teacher. Teletech courses are also offered to accommodate the needs of these teachers.	Teachers at all levels must periodically become recertified in their area of expertise. Teachers must keep up to date in their field.	Teachers from all of the surrounding public and private schools have taken advantage of our graduate courses that lead to a masters degree in music education or can simply be applied toward recertification.	No
6.	Old Dominion University String Festival	Students from across the Tidewater area come to the ODU campus to participated as soloists and perform in ensembles under the direction and tutelage of expert performers and educators in the field.	Area public schools rely on the resources provided by ODU for intensive study in string literature for solo, ensemble and major organizations.	Public schools from southeastern Virginia, across the state, and from outside the Commonwealth.	No
7.	Governor's School for the Arts	The Governor's School is housed in the music department of ODU. Students from this school receive instruction from ODU professors and selected GSA students participate in ODU performing ensembles.	The needs of advanced high school musicians can be met through high level study provided by university professors and by participation in university performing groups.	All public high schools in the Tidewater area send students to the Governor's School for the Arts at Old Dominion University.	Yes
8.	Tidewater Choral Invitational	ODU professors and choral students provide workshops for area high school choral students. Performances by ODU vocal ensembles are also featured. A massed choir performance featuring all participants ends the two day extravaganza.	Enrichment of skills and concept study in vocal music. Career opportunities are explored and supported by individual presentations and ample literature.	Ten area high schools plus ODU choral students.	No
9.	On-site Clinics	School performing groups from as far away as the New York City area come to the Old Dominion University campus to receive instruction and adjudication in performance practices.	School students seek growth through adjudicated performances and workshops led by university experts in the field.	Madison High School, Madison New Jersey: Band, Chorus, Orchestra.	No
10.	Virginia Music Educators Association Presentations and Workshops	ODU professors and students present workshops that benefit students and teachers from around the state. For example: "Starting a Jazz Choir in Your School" "Educational Leadership in the 21st Century" and " The Job Quest: Painful Pathway or Productive Process."	These workshops satisfy the needs of students and educators attending the annual VMEA conference by providing research-based workshops.	Open to all Virginia music educators and visiting students.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
11.	Practica and Student Teaching	Hands on teaching in the field experiences occur through a formal program of methods coursework and the clinical internship (student teaching).	Local schools need the interaction with pre-service teachers to aid in their growth and to provide their students with the latest in teaching strategies and approaches.	Placement for all practica and student teaching involve elementary and secondary schools from Norfolk, Virginia Beach, Suffolk, and Chesapeake.	Yes
Speech Language Pathology					
1.	Norfolk Public School Practicum in Speech-Language Pathology	School district provides a supervised clinical experience for the training of speech-language pathology students.	Collaboration enhances service delivery by providing additional personnel and future manpower resources in a high-need area.	Norfolk Public Schools and ODU Speech-Language Pathology program	No
2.	Virginia Beach Public Schools Practicum in Speech-Language Pathology	School district provides a supervised clinical experience for the training of speech-language pathology students.	Collaboration enhances service delivery by providing additional personnel and future manpower resources in a high-need area.	Virginia Beach Public Schools and ODU Speech-Language Pathology program	No
3.	Chesapeake Public Schools Practicum in Speech-Language Pathology	School district provides a supervised clinical experience for the training of speech-language pathology students.	Collaboration enhances service delivery by providing additional personnel and future manpower resources in a high-need area.	Chesapeake Public Schools and ODU Speech-Language Pathology program	No
4.	Hampton Public Schools Practicum in Speech-Language Pathology	School district provides a supervised clinical experience for the training of speech-language pathology students.	Collaboration enhances service delivery by providing additional personnel and future manpower resources in a high-need area.	Hampton Public Schools and ODU Speech-Language Pathology program	No
Primary Education PreK-3					
1.	Norfolk Public Schools Early Childhood Strategic Planning Committee	The current purpose of the committee is to provide both much needed professional development in early literacy to PreK teachers as well as to childcare providers and enriched literacy experiences for young children. It is composed of members from the university, the community and Norfolk Public Schools.	To align school district and state literacy building blocks with training programs for pre-kindergarten teachers.	Dr. Gloria Hagans, NPS; Dr. Andreas DeBruin Parecki, ODU, Dr. Katharine Kersey, ODU	Yes
2.	Norfolk Public Schools Early Childhood Professional Development Research	Dr. Katharine Kersey, professor of early childhood education, with Marie Masterson, doctoral candidate, conducts professional training research with 110 NPS Pre-Kindergarten teachers, evaluating a training model for positive teacher interaction techniques that promotes the growth of prosocial skills in 3 and 4-year old at risk preschoolers in NPS classrooms.	To investigate research based training to align school practices with state projected Quality Rating Improvement System using the CLASS evaluation assessment method.	Dr. Gloria Hagans, NPS. Dr. Katharine Kersey, ODU, Marie Masterson, MS.Ed.Ph.D. Candidate	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
3.	Early Reading First Collaborative Grant Writing and Planning	Andrea DeBruin-Parecki, associate professor of early childhood at Old Dominion University, has teamed with Norfolk Public Schools to write pre-application for an Early Reading First grant.	To enhance the literacy environment, enrich literacy experiences for young children, and to provide professional development and coaching for pre-k teachers and teaching assistants.	Dr. Gail Flanigan, NPS, Myrna Simmons, NPS., Dr. Andrea DeBruin Parecki, ODU	Yes
Technology Education					
1.	Promotion Planning	Provided a series of 12 workshops on program planning that spanned over a four month period.	School system wanted to enable more of their teachers to develop program plans.	Michael Kosloski and Walter Deal from ODU and Chesapeake Public Schools	No
2.	Modeling and Simulation Curriculum Development	Developed a model high school curriculum for modeling and simulation.	Developed and pilot tested modeling and simulation curriculum materials. Participated in the development of a modeling and simulation curriculum framework for the VA DOE.	Phillip Reed, Ginger Watson, Opportunity Inc. of Hampton Roads, The Pruden Center for Career and Technical Education, The VDOE CTE Resource Center, and Virginia Beach City Public Schools	No
3.	M.S. and Ph.D. Internships	Provide student graduate internships in Chesapeake, Virginia Beach, Halifax, Fairfax, Cumberland, Suffolk, and Accomack.	Provided real-world experiences for students to develop administrative skills.	Graduate Faculty: Petros Katsioloudis, Phillip Reed, and John Ritz from ODU with agreements from school administrative personnel.	Yes
4.	Fairfax County STEM Program Planning	Discussed and reviewed plans for Fairfax County to develop pre-engineering courses that would integrate mathematics and science skills into instruction.	To better prepare students for career choices in engineering pathways careers.	John Ritz and Philip Reed, Old Dominion University, and Anthony Casipit, Technology Education Specialist, Fairfax County Schools	No
5.	Old Dominion University MS Program for Arlington City Schools Technology Education Teachers	Provided a school system based MS program for Technology Education teachers. Courses for certification are also delivered.	School system wanted to enable more of their teachers to become master teachers and to provide licensure courses for teachers entering teaching from other fields.	Graduate Faculty from Old Dominion University (Ritz, Reed, Deal, Ndahi) and Kris Martini, Specialist, Arlington City Public Schools	Yes
6.	Say Yes To College	Provide information and experience on transition planning for students with disabilities and their parents for all school systems in Superintendent's Region II.	Allows high schools students with disabilities and their families to experience what it would be like to attend university or colleges.	Special Project Staff, Joann Ervin and faculty David Netherton and Sharon Davis and Region II School Systems	No
7.	Your Power, Your Choice Community Conference	Provide information updates to all school systems in Superintendent's Region II on disability services available to handicapped students.	Provides timely information so communities and school systems can serve the needs of children and adults.	Special Project Staff, Joann Ervin and Region II School Systems	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Virginia Beach Career and Technical Education High School Credit Transfer	Formal agreement between Old Dominion University and Virginia Beach City Public Schools.	Allows university credit through experiential learning for Virginia Beach Career and Technical Education students.	Faculty Philip Reed, Dave Netherton, and John Ritz and Virginia Beach City Public Schools	Yes
9.	Virginia Beach Career and Technical Education Advisory Board	Provided university expertise in planning secondary career and technical education programs.	Align high school and university career and technical education career pathways.	Philip Reed and Virginia Beach City Public Schools	Yes
Elementary Curriculum					
1.	ECI 290: Education for the 21st Century	Teachers for Tomorrow is a program developed at the VDOE and implemented in high schools across the state. The essence of the TfT program is equivalent to our ECI 301 course. We have developed ECI 290 as an equivalent course to be used specifically for Dual Enrollment credit.	NPS approached the college requesting Dual Enrollment status for students participating in the TfT program, hoping to encourage more of their students to enroll in teacher education programs and return to teach for NPS.	Norfolk Public Schools and Old Dominion University	Yes
2.	ECI, Graduate Reading Program	ODU has partnerships/cohorts with Suffolk, Chesapeake, Portsmouth, and Norfolk City Schools to prepare Reading Specialists with expertise in elementary and secondary literacy.	The public school divisions in Hampton Roads face a shortage of highly qualified teachers, particularly in the area of reading. ODU/Hampton Roads Schools cohort graduate reading programs work with teachers in local schools to provide advanced reading instruction.	Old Dominion University, Hampton, Portsmouth, Virginia Beach, Norfolk, Suffolk, Chesapeake	Yes
3.	Evaluation of the U.S. Department of Education's Smaller Learning Communities Special Competition: Enhanced Reading Opportunities	ODU delivers evaluation services for four high schools in Norfolk, Virginia. Evaluation activities include weekly high school observations, attending meetings, implementing surveys and conducting school-level focus groups. We prepare monthly progress reports and are responsible for an annual evaluation report submitted to U.S. Department of Education.	ODU is working with NPS to develop a self-assessment plan for SLC. When the grant ends but the SLCs are still in place, NPS will be able to continue to assess their progress towards improving student performance using this evaluation plan.	Old Dominion University and Norfolk Public Schools	YES (on file at ODURF)
4.	Social Studies, ID&T, Northampton County Public Schools - Beyond History	Partnership funded by a Teaching American History grant that was designed to improve the teaching practices of history teachers in the district.	The district did not meet AYP the year prior to the start of the grant. A need for improved teaching practices was identified and funding was obtained to implement the plan.	Old Dominion University and Northampton County Public Schools	Yes (on file at ODURF)
5.	Tidewater Writing Project	The Tidewater Writing Project helps teachers in Chesapeake, Virginia Beach, Norfolk, Suffolk, Portsmouth, Franklin, Southampton County and Isle of Wight County improve student writing in all school subjects.	ODU works with local teachers to provide training to help improve student writing in all school subjects.	Chesapeake, Virginia Beach, Norfolk, Suffolk, Portsmouth, Franklin, Southampton County, Isle of Wight County and ODU	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	School Library Media - Norfolk GROW Our Own Program for School Librarians	The Norfolk Grow Our Own Program is a partnership between the school library program at Old Dominion University and Norfolk Public Schools to educate licensed Norfolk teachers to become school library media specialists.	The Norfolk Public School Division is facing a shortage of licensed school library media specialists. Since the late 1990s, this program has provided between 5 and 8 fully licensed school librarians for Norfolk Public Schools each year.	Old Dominion University Norfolk Public Schools.	Yes
7	School Library Media - Chesapeake Public Schools	A program between Chesapeake Public Schools and ODU has been established to education classroom teacher to become certified school library media specialists.	Chesapeake Public Schools is anticipating a need for certified school media specialists over the next several years due to retirement eligibility. This program will provide a pool of qualified licensed media specialists.	ODU'S Darden College of Education and Chesapeake Public Schools	Yes
8.	First Steps: A collaborative partnership among Hampton City Schools, Thomas Nelson Community College and Old Dominion University	Twenty seven HCS employees were accepted into the TNCC/ODU teacher education program in the spring of 2008 and began taking courses at TNCC in August 2008 The students will complete their first two years at TNCC in the fall semester of 2010 and will seamlessly transfer to ODU.	This in effect is a grow your own program that benefits both the students in the K-12 schools and the current employees of the school system to provide well trained teachers for the students within these schools.	Old Dominion University, Thomas Nelson Community College and Hampton City Schools	No
9.	ODU/Virginia Beach Schools Practicum Partnerships	Teacher candidates take a practicum in classroom management and instruction during the final semester of the undergraduate program. They spend 70 hours divided between two placements in partner schools to observe and to develop and implement small group and tutoring.	Candidates receive mentoring from classroom teachers in local schools that benefits both the candidates and the students within those schools through the tutoring and small group instruction they provide.	ODU and Virginia Beach Public Schools - Birdneck Elementary and Glenwood Elementary	No
10.	Family Math Night	In partnership with Tidewater Park Elementary, the SNCT organized a family math night for the school.	The Mathematics Partnership (Norfolk Public Schools) also focuses on increasing the mathematics achievement levels of PK-5 students who currently struggle with mathematics.	Old Dominion University and Norfolk Public Schools	No
11.	School Library Media Henrico Public Schools	A program between Henrico Public Schools and ODU has been established to educate classroom teachers to become certified school library media specialists.	Henrico Public Schools is anticipating a need for certified school media specialists over the next several years due to retirement eligibility. This program will provide a pool of qualified licensed media specialists.	Old Dominion University and Henrico Public Schools	Yes
12.	African American Read-In Chain	Annual event during Black History Month; community comes together to read aloud works written by African Americans; inaugurated by Dr. Taylor and assisted by undergraduate and graduate students.	Norfolk Public Schools and ODU realize the need to motivate local, urban students; motivating reluctant readers through culturally responsive children's literature.	Norfolk Public Schools and Darden College of Education	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
13.	Literacy contract courses for public schools	The graduate reading program in ECI offers special contract courses for teachers in school divisions to improve the teaching of reading in public schools.	These reading courses improve the skills of teachers in K-12 classrooms in public school divisions in Virginia.	ODU and the following school divisions: Newport News, Wythe County, Virginia Beach, Hampton, Chesapeake, Portsmouth, Suffolk	Yes
14.	Elementary Science Methods Practicum Partnership	Elementary science methods students complete part of their practicum in a science magnet school.	The partnership meets students' needs by providing additional support for the classroom teacher in providing effective science instruction.	Old Dominion University Victory Elementary School – Portsmouth	No
15.	Secondary Science Methods Practicum Partnership	Secondary science methods students complete their practicum in a science magnet school.	The partnership meets students' needs by providing additional support for the classroom teacher in providing effective science instruction.	Old Dominion University Churchland Middle School – Portsmouth	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Marketing Education*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																	
1.	Field Experiences - Poquoson City Public Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Field Experiences - Virginia Beach City Public Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Field Experiences - Northampton County Public School		X	X	X	X	X	X	X	X	X	X	X	X		X	X		X		X	X	X	X	X	X	X		X	X		X	X		X
4.	Field Experiences - Fairfax Public Schools		X	X	X	X					X	X				X	X				X	X	X	X	X	X	X		X	X			X		
5.	Field Experiences - Suffolk City Public Schools	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6.	Field Experiences - Hampton City Public Schools	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	Field Experiences - Chesapeake City Public Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Field Experiences - Franklin City Public Schools	X	X		X	X	X				X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	Field Experiences - Loudoun County Public Schools		X													X	X				X	X	X	X	X	X	X	X	X	X	X	X	X		
10.	Field Experiences - Prince William County Public Schools		X													X	X				X	X	X	X	X	X	X			X			X		
11.	Field Experiences - Fauquier County Public Schools		X													X	X				X	X	X	X	X	X	X			X			X		
12.	Field Experiences - Stafford County Public Schools		X														X				X	X	X	X	X	X	X			X					
13.	Field Experiences - Southampton County Public Schools		X														X					X	X	X	X	X	X			X					
14.	Field Experiences - Norfolk City Public Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15.	Field Experiences - York County Public Schools	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16.	Field Experiences - Portsmouth City Public Schools	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17.	Field Experiences - Newport News Public Schools	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18.	Field Experiences - Williamsburg-James City County Public Schools	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19.	Field Experiences - Isle of Wight County Public Schools	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20.	Field Experiences - Gloucester County Public Schools	X	X								X	X	X			X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21.	Field Experiences - Henrico County Public Schools	X	X													X					X	X	X	X	X	X		X	X	X	X	X	X		
22.	Field Experiences - Hopewell City Public Schools		X																											X					
23.	Field Experiences - Augusta County Public Schools		X																				X							X					
24.	Field Experiences - Prince George County Public Schools		X																											X					
25.	Field Experiences - Lee County Public Schools		X																											X					
26.	Field Experiences - Colonial Heights Public School		X																											X					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Marketing Education*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*		*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																	
27.	Field Experiences - Tazewell County Public Schools		X																										X						
28.	Field Experiences - Alleghany County Public Schools		X																										X						
29.	Field Experiences - Fredericksburg City Public School		X																										X						
30.	Field Experiences - Harrisonburg City Public Schools		X																										X						
31.	Field Experiences - Dickenson County Public School		X																										X						
32.	Field Experiences - Radford City Public School		X																										X						
33.	Field Experiences - Spotsylvania County Public School		X																										X						
34.	Field Experiences - Rockingham County Public School		X																										X						
35.	Field Experiences - Clarke County Public Schools		X																										X						
36.	Field Experiences - Campbell County Public School		X																										X						
37.	Field Experiences - Botetourt County Public School		X																										X						
38.	Field Experiences - Rappahannock County Public Schools		X																										X						
39.	Field Experiences - Charlotte County Public Schools		X																										X						
40.	Field Experiences - Winchester City Public Schools		X																										X						
41.	Field Experiences - Culpeper County Public Schools		X																										X						
42.	Field Experiences - Richmond City Public Schools		X																										X						
43.	Field Experiences - Scott County Public Schools		X																										X						
44.	Field Experiences - Frederick County Public Schools		X																										X						
45.	Field Experiences - Pittsylvania County Public Schools		X																										X						
46.	Field Experiences - Washington County Public Schools		X																										X						
47.	Field Experiences - Shenandoah County Public Schools		X																										X						
48.	Field Experiences - Buckingham County Public Schools		X																										X						
49.	Field Experiences - Warren County Public Schools		X																										X						
50.	Field Experiences - Grayson County Public Schools		X																										X						
51.	Field Experiences - Covington City Public Schools		X																										X						
52.	Field Experiences - Middlesex County Public Schools		X																										X						
53.	Field Experiences - Falls Church City Public Schools		X																										X						

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Marketing Education*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																
54.	Field Experiences - Montgomery County Public Schools		X																										X					
55.	Field Experiences - Smyth County Public Schools		X																										X					
56.	Field Experiences - Chesterfield County Public Schools		X																										X					
57.	Field Experiences - Arlington County Public Schools		X																		X	X	X	X	X	X	X		X			X		
58.	Field Experiences - Russell County Public Schools		X																										X					
59.	Field Experiences - Wise County Public Schools		X																										X					
60.	Field Experiences - Department of Defense Dependent Schools	X	X																		X								X					
61.	Field Experiences - Washington State Department of Public Instruction		X																		X	X	X						X					
62.	Field Experiences - Mecklenburg County Public Schools		X																										X					
63.	Field Experiences - Worchester County Public Schools, Maryland		X																										X					
	Mathematics																																	
1.	J.F. Kennedy Middle School, Suffolk Public Schools			X																			X											
	Marketing Education																																	
1.	Old Dominion University Marketing Education Program and Virginia Beach City Public Schools Marketing Education Teachers									X																								
2.	Old Dominion University MS Program for Virginia Beach Career and Technical Education Teachers									X																								
3.	Say Yes To College									X																								
4.	Your Power, Your Choice Community Conference									X																								
5.	Virginia Beach Career and Technical Education High School Credit Transfer									X																								
6.	Old Dominion University and Fairfax County Public Schools									X																								
7.	Promotion Planning									X																								
	Counseling																																	
1.	Newport News Public Schools Counseling Leadership Development						X																											

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Marketing Education*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																	
2.	CARE NOW						X																												
Health and Physical Education																																			
1.	Fitness Testing															X																			
2.	Fitness Testing															X																			
3.	Career Day															X																			
4.	Larchmont Rat Race															X																			
5.	Staff Development															X																			
6.	Driver Education Training															X																			
7.	Adapted Physical Education															X																			
8.	PEP application Grant															X																			
9.	Fitness Performance															X																			
Special Education																																			
1.	Training and Technical Assistance Consortium (T/TAC)--ODU																												X						
2.	Effective School-wide Discipline																												X						
3.	The Commonwealth Special Education Endorsement Program																												X						
4.	The Paraprofessional Preparation for Extraordinary Teaching																												X						
5.	The Virginia Consortium for Teacher Preparation in Vision Impairment																														X				
6.	The Virginia Beach Teacher Training Project																												X						
7.	A survey of Programs and Services for Students with Emotional Disabilities in Virginia																												X						
Music																																			
1.	Music Education in the Schools: Elementary and Secondary Performance Study																	X																	
2.	Internships and Side By Side Rehearsals and Performances																	X	X																
3.	National Association of Teachers of Singing Festival at Old Dominion University																		X																

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Marketing Education*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																	
4.	F. Ludwig Diehn Concert Series																	X	X																
5.	Graduate Courses for recertification																	X	X																
6.	Old Dominion University String Festival																	X																	
7.	Governor's School for the Arts																	X	X																
8.	Tidewater Choral Invitational																		X																
9.	On-site Clinics																	X	X																
10.	Virginia Music Educators Association Presentations and Workshops																	X	X																
11.	Practica and Student Teaching																	X	X																
	Speech Language Pathology																																		
1.	Norfolk Public School Practicum in Speech-Language Pathology																													X					
2.	Virginia Beach Public Schools Practicum in Speech-Language Pathology																													X					
3.	Chesapeake Public Schools Practicum in Speech-Language Pathology																													X					
4.	Hampton Public Schools Practicum in Speech-Language Pathology																													X					
	Primary Education PreK-3																																		
1.	Norfolk Public Schools Early Childhood Strategic Planning Committee	X																																	
2.	Norfolk Public Schools Early Childhood Professional Development Research	X																																	
3.	Early Reading First Collaborative Grant Writing and Planning	X																																	
	Technology Education																																		
1.	Promotion Planning											X																							
2.	Modeling and Simulation Curriculum Development											X																							
3.	M.S. and Ph.D. Internships											X																							
4.	Fairfax County STEM Program Planning											X																							

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Marketing Education*	*Technology Education*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																																	
5.	Old Dominion University MS Program for Arlington City Schools Technology Education Teachers											X																							
6.	Say Yes To College											X																							
7.	Your Power, Your Choice Community Conference											X																							
8.	Virginia Beach Career and Technical Education High School Credit Transfer											X																							
9.	Virginia Beach Career and Technical Education Advisory Board											X																							
Elementary Curriculum																																			
1.	ECI 290: Education for the 21st Century		X																																
2.	ECI, Graduate Reading Program		X																																
3.	Evaluation of the U.S. Department of Education's Smaller Learning Communities Special Competition: Enhanced Reading Opportunities		X																																
4.	Social Studies, ID&T, Northampton County Public Schools - Beyond History		X																																
5.	Tidewater Writing Project		X																																
6.	School Library Media - Norfolk GROW Our Own Program for School Librarians		X																																
7.	School Library Media - Chesapeake Public Schools		X																																
8.	First Steps: A collaborative partnership among Hampton City Schools, Thomas Nelson Community College and Old Dominion University		X																																
9.	ODU/Virginia Beach Schools Practicum Partnerships		X																																
10.	Family Math Night		X																																
11.	School Library Media Henrico Public Schools		X																																
12.	African American Read-In Chain		X																																
13.	Literacy contract courses for public schools		X																																
14.	Elementary Science Methods Practicum Partnership		X																																
15.	Secondary Science Methods Practicum Partnership		X																																

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Old Dominion University
Contact Person: Leigh L. Butler
Phone No.: (757) 683-6448
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Suffolk Public Schools Leadership Cohort Program	These partnerships are designed to meet demand of preparing highly-qualified school leaders through the use of research, case study analysis, and field-based experiences.	Cohort instructors represent the district's central office and school-based administrators. Course content focuses on the needs, culture and experiences of each school district.	Dr. Milton Liverman, Mr. Barry Smith, Dr. Dana Burnett, Dr. Bill Owings	Yes
2	Eastern Shore/Northampton County Public Schools Leadership Cohort Program	See above.	See above.	Dr. Rick Bowmaster, Dr. Karen Crum, Dr. Steve Myran	Yes
3	Chesapeake Public Schools Leadership Cohort Program	See above.	See above.	Dr. Theresa Mizzell, Mr. Barry Smith, Dr. Dana Burnett, Dr. Bill Owings	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	On-Campus Transition Program	A collaborative partnership between the College of Education and Human Development at Radford University (RU) and Montgomery County Public Schools, whose mission is to provide education and transition support for students with disabilities.	The program serves students aged 18 to 21, whose class has graduated from high school, and who need special education and transition services.	Montgomery County Public Schools (Johnna Elliott, Director, jelliott25@radford.edu).	Yes
2.	Appalachian Arts and Studies in the Schools	Serves public schools in the immediate service region of the university by establishing and sustaining meaningful connections between high school students who are “college-able but not college-bound” and AASIS scholars from Radford University.	The partnership includes 160 students from 8 high schools in rural Southwest Virginia. Through a combination of face-to-face interactions and other methods such as e-mail and correspondence, the partnership is intended to increase the presence of Radford University and its Appalachian Studies program in public schools.	Patrick County High School; Floyd County High School; Craig County High School; Rocky Gap High School; Chiswell High School; Grayson County High School; Rural Retreat High School; and Eastern Montgomery High School.	Yes
3.	Southwest Virginia Professional Education Consortium (SWVA PEC)	The consortium was developed in 1998 to formalize the collaborations between PK-12 schools in the New River and Roanoke Valleys and regional institutions of higher education. Its primary purpose is to enhance teacher preparation and support continuing teacher education. The project is funded by the Virginia Department of Education and serves Botetourt, Carroll, Floyd, Giles, Montgomery, Pulaski, Salem, Wythe, and Roanoke Counties as well as cities of Radford and Roanoke.	The partnership is intended to strengthen the connections between and among institutions of higher education in the region and increase the efficiency and timeliness of their response to the current and emerging needs of K-12 education.	Dalton Intermediate School; Pulaski Elementary School; Radford High School; Dublin Elementary School; Belle Heth Elementary School; Riverlawn Elementary School; Christiansburg Elementary School; McHarg Elementary School; Critzer Elementary School; Riverlawn Elementary School; Radford High School; Dublin Middle School; Belle Heth Elementary School; Riverlawn Elementary School; Kipps Elementary School; Auburn Elementary School; Pulaski County High School; Belview Elementary School; Huff Lane MicroVillage; Round Hill Elementary School; and Dublin Middle School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
4.	The Training and Technical Assistance Center (T/TAC)	T/TAC was established in 1996 to increase the capacity of schools, service providers, and families to improve educational opportunities for, meet the needs of, and contribute to the success of children and youth with disabilities from birth to age 22.	The partnership provides long-term technical assistance that brings about systemic change in the way schools serve youth and children.	Lee County Schs; Wise County Schs; Franklin County Schs; Patrick County Schs; Botetourt County Schs; Galax City Schs; Smyth County Schs; Bristol City Schs; Grayson City Schs; Roanoke City Schs; Craig County Schs; Floyd County Schs; Pittsylvania County Schs; Dickenson County Schs; Pulaski County Schs; Montgomery County Schs; Carroll County Schs; Bland County Schs; Alleghany County Schs; Wythe County Schs; Buchanan County Schs; Roanoke County Schs; Norton City Schs; Washington County Schs; Scott County Schs; Salem City Schs; Martinsville City Schs; Tazewell County Schs; Danville City Schs; Giles City Schs; Henry County Schs; and Covington City Schs.	Yes
5.	Roanoke Higher Education Center and the Southwest Virginia Higher Education Center in Abingdon	Graduate courses and degree programs are offered in Educational Leadership, School Counseling, Elementary Education, Reading Specialist, and Special Education.	The College of Education and Human Development provides programs based upon an assessment of needs of local school divisions.	Roanoke Higher Education Center and Southwestern Virginia Higher Education Center.	Yes
6.	CEHD graduate degree cohorts developed in response to requests from school districts.	New College Institute in Martinsville Earth Science Teaching Cohort , Roanoke County (2 cohorts), Montgomery County (2 cohorts) (Educational Leadership), Fairfax County, and 3 other state-wide sites (Library Media Cohort).	The purpose of the cohort programs is to respond directly to school divisions' requests for preparing school personnel who are in high demand and to expand the knowledge and skills of current teachers and school personnel.	Roanoke County (Educational Leadership), Montgomery County (Educational Leadership); Fairfax County (Library Media Cohort); and 3 Distance Educ (Library Media Cohorts).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	CEHD - Individual courses for schools.	Carroll County (Reading Courses, English Language Learners, and Assessment).	RU provides individual courses as needed/requested by the school divisions.	Carroll County TAG Grant (Reading offered as distance site, TAG grant pays tuition for distance or on-campus courses); and Henry and Pittsylvania Counties (physical science course).	Yes
8.	Teacher Education Articulation Agreement	Virginia Community College System and 11 Virginia institutions with teacher preparation programs.	The purpose of the VCCS "TEAC," Teacher Education Articulation Council is to: (1) develop state-wide articulation agreements for community college students interested in entering teacher preparation programs; and, (2) to create communication channels that will facilitate transfer admissions. Transfer agreement outlines curriculum and processes for transfer and advising for several teacher preparation programs.	Virginia Community College System and 11 Virginia institutions with teacher preparation programs.	Yes
10.	CEHD Professional Development Center	VA Department of Education; Several school divisions; Western Virginia Public Education Consortium; VA Training and Technical Assistance Center; Appalachian Educational Laboratory ("Edvantia") are working together to support professional development of teachers and educational leaders.	This partnerships is supporting several initiatives: 1. Collaborating for Student Success: Inclusion Works; 2. Virginia Association of School Superintendents' Executive Coaching Service; 3. DOE Drive In Conferences; 4. Special Education High Quality Training Institute Grant (12 regional school divisions); 5. Technical support for the NASSP Assessment Centers; 6. Principal Education Preparation grant: alternative route for preparing principals; 7. Mentor/Coaching Program for New Principals; 8. Regional Content Leaders Program; and 9. National Symposium for Counselors.	VA Department of Education; Several school divisions; Western Virginia Public Education Consortium; VA Training and Technical Assistance Center; and Appalachian Educational Laboratory ("Edvantia").	Yes
11.	School of Teacher Education and Leadership (STEL) Early Childhood Special Education	Distance Learning with Lynchburg College.	Provide preparation in early childhood special education via distance learning in southwest Virginia.	Lynchburg College.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
12.	STEL Middle School: Partner Schools	Provide services for Dublin, Auburn, Christiansburg and Pulaski Middle Schools.	RU middle school candidates provide services to support an after-school program for middle school students. The schools work with RU faculty in designing, implementing, and evaluating the middle school program.	Dublin, Pulaski, Auburn, and Christiansburg Middle Schools.	Yes
13.	STEL Severe Disabilities Consortium	On-line preparation (statewide).	Through the efforts of Dr. Liz Altieri, RU has become a major player in the on-line preparation of teachers working with students with severe disabilities.	State-wide (Radford University, George Mason University, Norfolk State University, University of Virginia, and Virginia Commonwealth University.)	Yes
14.	STEL Visual Impairment	Provide training for teachers of visually impaired state-wide.	Dr. Liz Altieri is leading the initiative for RU to develop a state-wide consortium to provide training for teachers in visual impairment.	State-wide (Radford University, George Mason University, Norfolk State University, University of Virginia, and Virginia Commonwealth University.)	Yes
15.	STEL Deaf and Hard of Hearing	Provide training for teachers working with deaf and hard of hearing state-wide.	Dr. Sharon Gilbert is coordinating the grant RU has received to provide state-wide preparation in working with deaf and hard of hearing students.	RU is the sole provider and is establishing distance sites.	Yes
16.	STEL High Quality Professional Development	Enhancing content knowledge and content pedagogical knowledge of middle and high school teachers.	Dr. Robert McCracken and others have marshaled the expertise of RU arts and science and education faculty to provide content area pedagogy training for middle school and high school teachers.	State-wide.	Yes
17.	Community Counseling Centers (Department of Counseling and Human Development)	Pulaski County Schools and Montgomery County Schools.	The Department of Counselor Education has worked with the school divisions to establish community counseling centers which serve children, adults, and families.	Pulaski County Schools and Montgomery County Schools.	Yes
18.	"Learning to Move and Moving to Learn" project (Department of Exercise, Sport, and Health Education)	Radford City Schools.	Susan Miller and Jon Poole are working with school divisions to provide programs for children in physical development which have been shown to enhance brain development and influence children's ability to read.	Radford City Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
19.	Teacher Preparation Internship Agreements	Regions 6 and 7.	Candidates in programs contribute to students' learning and well-being through internships and practica.	Regions 6 and 7.	Yes
20.	Preparation for Other School Personnel Internship Agreements	Regions 6 and 7.	Candidates in programs preparing other school personnel contribute to student learning and well-being and to the positive development of schools through internships and practica.	Regions 6 and 7.	Yes
21.	School psychology practicum placement	Public schools in Montgomery, Pulaski, Roanoke, Carroll and Bedford Counties, and Roanoke City.	Second-year school psychology graduate students provide psychological services at participating schools.	Roanoke City.	Yes
22.	National Science Foundation Grant: Radford Outdoor Augmented Reality (ROAR) Project	A collaborative partnership between the College of Education and Human Development at Radford University and Radford City Public Schools, whose mission is to explore how mobile augmented reality learning can be used to enhance middle school science learning.	The NSF grant serves middle school students.	Radford City Public Schools.	Yes
23.	Virginia Department of Education iLearn Grant Project	With support from the Governor 's Productivity Investment Fund and the Virginia Department of Education, Radford University and participating schools in southwestern Virginia are exploring how the iPod Touch can be used to enhance effective teaching and learning.	The last several years have seen an explosion in the amount of young people playing video games as well as the number of children and adolescents using mobile handheld technologies, such as portable music players, gaming platforms, and smart phones. As school systems struggle with how best to deal with this cultural and technological shift, it is highly likely that the technology will continue to progress towards more powerful, wireless handheld computers that can deliver high quality, multimedia, computer processing power. Viewing this phenomenon as neither a panacea nor a plague, the iLearn team is exploring if and how these technologies can be leveraged for enhanced learning.	Radford City Public Schools and Pulaski County Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Hearing Impairments PreK-12*	*Special Ed. - Adapted Curriculum K-12* (* Part of a consortium offering an Adapted Curriculum endorsement.)	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* (* Part of a consortium offering a VI endorsement.)	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																									
1.	On-Campus Transition Program																				X	X	X				
2.	Appalachian Arts and Studies in the Schools												X														
3.	Southwest Virginia Professional Education Consortium (SWVA PEC)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
4.	The Training and Technical Assistance Center (T/TAC)	X	X	X										X	X	X	X	X	X	X			X		X		
5.	Roanoke Higher Education Center and the Southwest Virginia Higher Education Center in Abingdon		X		X	X																X	X				
6.	CEHD graduate degree cohorts developed in response to requests from school districts.				X	X												X									
7.	CEHD - Individual courses for schools.		X	X	X				X						X						X	X	X		X	X	
8.	Teacher Education Articulation Agreement	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
10.	CEHD Professional Development Center	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
11.	School of Teacher Education and Leadership (STEL) Early Childhood Special Education																			X							
12.	STEL Middle School: Partner Schools			X																							
13.	STEL Severe Disabilities Consortium																					X					
14.	STEL Visual Impairment																								X		
15.	STEL Deaf and Hard of Hearing																				X						
16.	STEL High Quality Professional Development		X											X	X	X	X	X	X	X							
17.	Community Counseling Centers (Department of Counseling and Human Development)					X																					
18.	"Learning to Move and Moving to Learn" project (Department of Exercise, Sport, and Health Education)									X																	
19.	Teacher Preparation Internship Agreements	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Hearing Impairments PreK-12*	*Special Ed. - Adapted Curriculum K-12* *(* Part of a consortium offering an Adapted Curriculum endorsement.)*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Special Ed. - Visual Impairments PreK-12* *(* Part of a consortium offering a VI endorsement.)*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																									
20.	Preparation for Other School Personnel Internship Agreements				X	X	X	X																	X		
21.	School psychology practicum placement						X																				
22.	National Science Foundation Grant: Radford Outdoor Augmented Reality (ROAR) Project		X	X																							
23.	Virginia Department of Education iLearn Grant Project		X	X																							

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	The Leadership Training Partnership	The Leadership Training Partnership Program is intended to increase the number of highly qualified administrators among the participating school divisions through a non-traditional alternative educational leadership preparation program, which is aligned with Virginia, national, and professional standards in the field of educational leadership.	This Program is delivered through non-traditional modalities which include, but are not limited to, the following: distance learning seminars; on-line interactive instructional tools such as WebCT, Blackboard, etc., as available in participating school districts; workshops, field placement activities, and mentoring interventions. College course work as perceived in a traditional pathway to an administrative endorsement in Virginia will not be a component of this project.	Giles County Public Schools; Radford City Public Schools; Culpeper County Public Schools; Warren County Public Schools; Shenandoah County Public Schools; Clarke County Public Schools; Carroll County Public Schools; and Pulaski County Public Schools.	Yes
2.	The Western Virginia Public Education Consortium	The consortium operates in partnership with public schools and local universities to provide staff development for administrators, and many other professional opportunities to participating school divisions.	The consortium works closely with Radford University and Virginia Tech to support the needs of school divisions. It was organized to provide opportunities for often underserved public school divisions to have greater purchasing power, grant seeking strength, as well as opportunities to develop joint staff development efforts and work collaboratively to solve educational issues in Southwestern Virginia.	Western Virginia Public School Consortium.	Yes
3.	Key Instructional Leaders	The partnership consists of public school division-level instructional personnel from each school division in the state to establish and maintain regular contact with school divisions.	Regularly scheduled regional meetings are held to maintain regular contact with school divisions and meet the instructional and administrative needs of each division individually as well as to work in cooperative arrangements within regions to meet training needs.	Franklin County Public Schools; Carroll County Public Schools; and Pulaski County Public Schools,	Yes
4.	Franklin County Leadership Training	The partnership is intended to provide and facilitate the training of future educational leaders and enhance professional development in public schools.	The partnership serves the needs public schools in the service region by providing timely on-demand training for current and future educational leaders. The professional development opportunities serve to increase the overall effectiveness of K12 institutions and increase student learning.	Roanoke City Public Schools and Franklin County Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Radford University
Contact Person: Dr. Alona Smolova
Phone No.: (540) 831-7168
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
5.	Montgomery County Leadership Training	The partnership is intended to provide and facilitate the training of future educational leaders and enhance professional development in public schools.	The partnership serves the needs of public schools in the service region by providing timely on-demand training for current and future educational leaders. The professional development opportunities serve to increase the overall effectiveness of K12 institutions and increase student learning.	Montgomery County Public Schools.	Yes
6.	Superintendents' Breakfasts	The partnership engages superintendents from 23 school divisions, Radford University, Virginia Tech, and associated agencies serving PK-12 schooling in SWVA.	Superintendents' Breakfasts provide a monthly open forum for superintendents in Southwest Virginia to come together to discuss common challenges and initiatives, to coordinate school improvement efforts, and to partner with Radford University and Virginia Tech in improving the preparation and continuing development of teachers and school personnel.	Montgomery County, Floyd County, Wythe County, Bristol City, Roanoke City, Radford City, Bedford City/County, Botetourt County, Norton City, Pulaski County, Dickenson County, Galax City, Danville City, Henry County, Covington City, Alleghany County, Bland County, Buchanan County, Wise County, Martinsville City, Franklin County, Roanoke County, Tazewell County, Washington County, Lee County, Pittsylvania County, Patrick County, Smyth County, Craig County, Scott County, Salem City, Carroll County, Bath County, Pulaski County, Grayson County, and Russell County.	No
7	National Science Foundation Grant: Radford Outdoor Augmented Reality (ROAR) Project	A collaborative partnership between the College of Education and Human Development at Radford University and Radford City Public Schools, whose mission is to explore how mobile augmented reality learning can be used to enhance middle school science learning.	The NSF grant serves middle school students.	Radford City Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Randolph College
Contact Person: Dr. Peggy Schimmoeller
Phone No.: (434) 947-8505
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Dunbar Middle School Math Mentoring Partnership	Candidates enrolled in EDUC 314P Interdisciplinary Practicum teach a class of sixth-grade students in the Lynchburg City School Division twice a week for seven weeks.	Improve mathematics SOL tests scores.	Prof. Consuella Woods, Principal Brian Wray, and Dr. Peggy Schimmoeller.	Yes
2.	Jubilee Family Development Center SOL Achievement Partnership	Teacher science content institutes are coupled with summer science camps for area children from low income families. Lessons are inquiry and are based on the SOLs. Students participate in a study to measure attitude and achievement in science.	Increase interest and persistence in the sciences during middle school and high school.	Mr. Sterling Wilder, Dr. Peggy Schimmoeller, and Dr. Peter Sheldon.	Yes
3.	Boonsboro Elementary School Reading Partnership	Teacher candidates who are taking reading courses work with teachers and students in this PreK-5 elementary school in Bedford County. Teacher candidates work with students one-on-one, in small groups, and conduct whole class lessons.	Increase reading achievement in kindergarten and first grade.	Principal Nancy Sale and Dr. Gail Brown.	No
4.	New Vistas School Special Education Partnership	Candidates work with teachers to help students with a learning disability or attention deficit disorder to gain the necessary skills to become independent learners.	Implement scientifically based instructional practices for students with learning disabilities. Provide teachers assistance in working with students on an individualized basis.	School Head Charlotte Morgan and Dr. Peggy Schimmoeller.	Yes
5.	Middle School Learning Center:	The Middle School Learning Center is an alternative program in the Lynchburg City school division. Teacher candidates are taking EDUC 230P Practicum in Literacy in the Secondary Schools.	Assist students in meeting reading SOL testing requirements.	Principal Kathy Viar and Dr. Gail Brown.	No
6.	Paul Munro Elementary School	Teacher candidates who are taking reading and mathematics methods courses work for this PreK-5 elementary school in the Lynchburg division. Teacher candidates work with students one-on-one, in small groups, and conduct whole class lessons. College faculty conduct workshops for teachers as part of this partnership.	Need for scientifically based reading and mathematics instructional practices to increase achievement in students struggling to meet benchmark and SOL test requirements.	Principal Donna Baer, Dr. Gail Brown, and Dr. Peggy Schimmoeller.	Yes
7.	Randolph Macon Nursery School	Teacher candidates observe and teach in this private school, housed on the college campus, when they are studying child development and language development and effective preschools in EDUC 108 Educational Psychology and EDUC 207/207P, Language and Reading Development.	Need for updated teaching practices aligned NAEYC and National Reading Studies.	Director Holly Layne, Dr. Peggy Schimmoeller, and Dr. Gail Brown.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Randolph College
Contact Person: Dr. Peggy Schimmoeller
Phone No.: (434) 947-8505
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Tri-College Consortium	Randolph College, Lynchburg College, and Sweet Briar College have a formal agreement that allows undergraduates to take courses at any institution during the regular academic session for no additional cost. This allows students more options in education offerings.	Need for breadth of course work to increase teacher quality.	College Presidents at each institution.	Yes
9.	Dunbar Middle School Afterschool Mathematics Achievement Academy	Dunbar 6th through 8th grade students work with Randolph College student volunteers during a full academic session to increase mathematics achievement and to develop a love for learning and applying mathematics to daily living.	Need for increased achievement in Dunbar SOL mathematics scores.	Prof. Conseulla Woods, Principal Brian Wray, and Dr. Peggy Schimmoeller.	Yes
10.	Monelison Middle School Subject Specialty Collaborative	Teacher candidates enrolled in EDUC 315 and seeking licensure in one of the 6-12 or PreK-12 areas work with teachers at the middle school level focused on content in the subject area.	Focus on SOL testing success in all subject areas.	Prof. Consuella Woods.	No
11.	Holy Cross Catholic School	Teacher candidates work with veteran teachers to provide individual and group lessons in a variety of subject areas. This practicum provides students experience in a private school setting.	Focus on meeting individual needs.	Prof. Consuella Woods and School Head John Jones.	No
12.	Lynchburg City Schools, Nelson County Schools, Appomattox County Schools	Intern teachers are placed in elementary, middle, and high school in these school divisions for the student teaching experience.	Teacher candidates teach with a master teacher in the required licensure area for over 500 total contact hours.	Peggy Schimmoeller, Consuella Woods, and Gail Brown.	No
13.	Bedford County Schools, Campbell County Schools, Amherst County Schools	Intern teachers are placed in elementary, middle, and high school in these school divisions for the student teaching experience.	Teacher candidates teach with a master teacher in the required licensure area for over 500 total contact hours.	Peggy Schimmoeller, Consuella Woods, and Gail Brown.	No
14.	Madison Heights Elementary School, Amherst County Public Schools	Graduate and undergraduate teachers work in the afterschool program in a variety of subject areas. In addition, graduate students will work with teachers in classrooms for internships.	Twenty-first Century grant initiative to improve reading and mathematics scores.	Peggy Schimmoeller and Charlotte Gilbar.	Yes
15.	Heritage Elementary School, Lynchburg City Schools	Graduate and undergraduate students will help with SOL improvement.	Teacher candidates work with k-5 students.	Peggy Schimmoeller, Gail Brown, and Consuella Woods.	No
16.	Dearington Elementary School, Lynchburg City Schools	Provide science education program for K-5 teachers.	Undergraduates enrolled in EDUC 312 will work with science specialists.	Peggy Schimmoeller.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Randolph College
Contact Person: Dr. Peggy Schimmoeller
Phone No.: (434) 947-8505
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																		
1.	Dunbar Middle School Math Mentoring Partnership	X						X											X	
2.	Jubilee Family Development Center SOL Achievement Partnership	X					X		Y				X		X	X	X	X	X	X
3.	Boonsboro Elementary School Reading Partnership	X						X											X	
4.	New Vistas School Special Education Partnership	X											X			X	X	X	X	
5.	Middle School Learning Center:			X			X		X				X	X	X	X			X	
6.	Paul Munro Elementary School	X						X											X	
7.	Randolph Macon Nursery School	X	X	X	X	X	X		X	X	X	X							X	
8.	Tri-College Consortium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	Dunbar Middle School Afterschool Mathematics Achievement Academy	X		X			X		X				X							
10.	Monelison Middle School Subject Specialty Collaborative		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
11.	Holy Cross Catholic School		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12.	Lynchburg City Schools, Nelson County Schools, Appomattox County Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13.	Bedford County Schools, Campbell County Schools, Amherst County Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14.	Madison Heights Elementary School, Amherst County Public Schools	X								X									X	
15.	Heritage Elementary School, Lynchburg City Schools	X						X											X	
16.	Dearington Elementary School, Lynchburg City Schools	X																		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Randolph College
Contact Person: Dr. Peggy Schimmoeller
Phone No.: (434) 947-8505
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Randolph-Macon College
Contact Person: Brenda M. Davis, Ph.D. Chair of Education
Phone No.: (804) 752-3149
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Reading Olympics-REAL	Henry Clay Elementary and college students met twice weekly for Reading Olympic practice with topics for literacy focus selected by reading specialist at the school. Included education students and members of the college's Washington Literary Society.	Reading needs based on assessment is below expectations. Wide range of SES factors among students in the schools. Effort to improve literacy skills in this K-2 school setting.	Education students and faculty member as well as college students in Washington Literary Society.	Yes
2.	Student Teaching and Field Work Placements in Hanover Schools	R-MC has a long-standing, written partnership with Hanover County schools. The partnership involves college faculty and students who serve the schools in varied ways. Hanover County schools provide practicum and student teaching placements as well as workshops to develop future teachers.	The partnership meets the needs of PreK-12 students because students provide tutorial services in the classrooms during field placements; provide enrichment activities; and ongoing special activities at the college campus for local students. College faculty serve on school and county advisory committees and offer teacher workshops and resources to local schools and teachers.	Over 100 practicum and student teaching placements annually at elementary, middle and high schools throughout the county. Pre-service teachers provide tutoring and instruction under supervision of classroom teachers.	Yes
3.	Science Labs and Field Lessons at Tuckahoe Elementary	Demo marine geophysical survey methods (grades K-5); present "Geology in Everyday Life" for all 5th grade; and provide field lesson on watershed, water resources for all 4th grade.	SOL enrichment (ex. SOL 4.8 Clean Water as Resource)	Science professor in physics and environmental studies.	No
4.	Reading - Henry Clay Elementary and John Gandy Elementary	Students work with teachers and reading specialists to assess reading and spelling development and to promote improvement under teachers and specialists' supervision.	Reading needs based on assessment is below expectations. Wide range of SES factors among students in the schools. Effort to improve and assist with development of balanced literacy program.	Education students, faculty, school -based teachers, and specialists.	Yes
5.	Chinese Language Classes - Louisa County High School Students	Native Chinese high school students with LEP attended Chinese language classes on college campus for contact with Chinese speakers.	Chinese high school students had limited English proficiency and school system requested opportunities for students to interact with native Chinese professor with proficiency in English and Chinese.	College faculty, Louisa County guidance counselors, and LEP students.	No
6.	Musical Performances for Elementary Students in Metro Richmond Area	1100 Elementary students (1,100) from metro Richmond area schools attended musical performances over a three-day period at Theatre IV.	Musical enrichment for elementary students by professional performers.	College faculty; select elementary schools in Richmond, Henrico, Chesterfield, and Hanover.	No
7.	Metro Richmond Science Fair	Judging of middle and high school students' science fair entries for 536 students from Chesterfield, Colonial Heights, Hanover, Henrico, Powhatan, and Richmond schools.	Promote science inquiry for students and support SOLs in science at various middle and high school levels.	College faculty, science teachers, and students from area county and city schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Randolph-Macon College
Contact Person: Brenda M. Davis, Ph.D. Chair of Education
Phone No.: (804) 752-3149
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Macon A Difference Day - Earth Day Events	Gardening and clean-up projects in the Ashland area and on campus.	Engage elementary students from Henry Clay Elementary School with the college community and with relevant environmental responsibility. Also included students from private PreK-8 school in area, Hanover Academy.	College faculty, students, and elementary school students in area.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Randolph-Macon College
Contact Person: Brenda M. Davis, Ph.D. Chair of Education
Phone No.: (804) 752-3149
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.												
1.	Reading Olympics-REAL	X		X										
2.	Student Teaching and Field Work Placements in Hanover Schools	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Science Labs and Field Lessons at Tuckahoe Elementary	X										X	X	X
4.	Reading - Henry Clay Elementary and John Gandy Elementary	X												
5.	Chinese Language Classes - Louisa County High School Students									X				
6.	Musical Performances for Elementary Students in Metro Richmond Area	X					X	X						
7.	Metro Richmond Science Fair											X	X	X
8.	Macon A Difference Day - Earth Day Events	X										X		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Randolph-Macon College
Contact Person: Brenda M. Davis, Ph.D. Chair of Education
Phone No.: (804) 752-3149
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	New Castle Elementary School/Regent University Partnership - IDS	Regent University partnered with New Castle Elementary to place students enrolled in UIS 220 (Classroom Observation), a place to observe an elementary teacher in the classroom. A Regent adjunct professor who also works at this school coordinated twenty hours of observation for each student. The adjunct met with the Regent students for five classroom hours as well.	This partnership met the needs of the PreK-12 community in two ways. First, Regent students will be able to help the classroom teacher work with small groups and assist with clerical tasks. Second, the partnership is providing the school system with well-trained future teachers.	New Castle Elementary School Virginia Beach, VA.	Yes
2.	Kempsville Elementary School/Regent University Partnership - IDS	Regent University partnered with Kempsville Elementary to place students enrolled in UIS 220 (Classroom Observation), a place to observe an elementary teacher in the classroom. A Regent adjunct professor who also works at this school coordinated twenty hours of observation for each student. The adjunct met with the Regent students for five classroom hours as well.	This partnership met the needs of the PreK-12 community in two ways. First, Regent students will be able to help the classroom teacher work with small groups and assist with clerical tasks. Second, the partnership is providing the school system with well-trained future teachers.	Kempsville Elementary School Virginia Beach, VA.	No
3.	New Castle Elementary Partnership, Virginia Beach Public Schools - Elem Ed	The Elementary school will: provide faculty members to serve on Regent Advisory Boards with appropriate administrative and parental permission; serve as a resource for university projects involving elementary education; and advertise university course and continuing education opportunities to New Castle faculty members. Regent University will: provide speakers to enhance faculty staff development and or/parent education; display student art work in university facilities; serve as a field trip destination allowing students to observe professional and technical career education opportunities at the university level; and offer grants and or scholarships to New Castle faculty for continuing education.	Enhance student achievement and staff development through access to the university faculty, resources, and facilities.	New Castle Public School Representatives: Paul Metzger, and Jannet Duff (administrator); Regent University Representatives: Joan Hoskins, Carla Bergdoll.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
4.	University Practicum /Placement Experiences - Elem Ed	Field experiences represent the heart of Regent University's certification programs in education at the undergraduate and graduate levels. Through carefully structured placements, teacher candidates apply theoretical constructs and research-based practices in authentic settings. Performance tasks completed in clinical settings promote reflective thinking about these practices. Practica (field experiences) are divided into two levels: Tier I (observation) and Tier II (practica). Placement Cooperating Teachers benefit from the opportunity to give back to the profession and enhance their own professional development.	a) Practicum teachers have the opportunity to reflect upon their own pedagogy in a constructive way; b) Increase communication with teacher preparation institution; c) Experience renewed enthusiasm for the profession.	1) Atlantic Shores Christian Elementary School, Va. Beach Va, 2) Word of Life Christian Academy, Springfield VA, 3) Alexandria Public Schools, 4) Arlington Public School, 5) Fairfax Public Schools, 6) Loudon Public Schools, 7) Prince William Public Schools, 8) Norfolk Public Schools, 9) Va. Beach Public Schools, 10)Chesapeake Public Schools, 11) Portsmouth Public School, and 12) Newport News.	No
5.	University Internship - Elem Ed	Teacher Candidates are supervised by an experienced, licensed, cooperating teacher for one semester (approximately 75 days, 6 hours per day). Specifically, the internship consists of 16 weeks, a minimum of 500 hours divided between 2 placements (upper and lower grade level).	a) Recruit teacher candidates; b) Contribute to the education of future teachers; c) Increase communication with teacher preparation institutions; d) Observe firsthand the capabilities and attitudes of prospective employees; e) Offer their staff the opportunity for personal and professional development through a positive relationship with a future professional; f) Recruit teaching graduates.	1) Atlantic Shores Christian Elementary School, Va. Beach Va, 2) Word of Life Christian Academy, Springfield VA, 3) Alexandria Public Schools, 4) Arlington Public School, 5) Fairfax Public Schools, 6) Loudon Public Schools, 7) Prince William Public Schools, 8) Norfolk Public Schools, 9) Va. Beach Public Schools, 10)Chesapeake Public Schools, 11) Portsmouth Public Schools, and 12) Newport News	No
6.	Virginia Beach City Public Schools (VBCPS) -TESOL	Regent University has an agreement with VBCPS to provide coursework leading to a Virginia ESL endorsement for currently licensed teachers employed by the division. VBCPS provides funds for 20 participants to take one graduate TESOL course per semester. Regent offers a discounted tuition rate to the division.	The division has a need for more ESL-endorsed teachers/administrators to more effectively serve a significant LEP population. Through the Regent partnership, teachers and administrators can earn an ESL endorsement while continuing to serve in their current positions. The district often hires teachers from within the cohort for ESL positions.	Virginia Beach City Public Schools and Regent University School of Education	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	Newport News Public Schools (NNPS) - Sedgefield Elementary School cohort - TESOL	Regent University has an agreement with NNPS to provide coursework leading to a Virginia ESL endorsement for currently licensed teachers employed by the division. NNPS provides funds for 20 participants to take one graduate TESOL course per semester. Regent offers a discounted tuition rate to the division.	The division has a need for more ESL-endorsed teachers/administrators to more effectively serve a growing LEP population at Sedgefield Elementary School. Through the Regent partnership, teachers and administrators can earn an ESL endorsement while continuing to serve in their current positions.	Newport News Public Schools and Regent University School of Education.	Yes
8.	Newport News Public Schools (NNPS) Nelson Elementary School cohort - TESOL	Regent University has an agreement with NNPS to provide coursework leading to a Virginia ESL endorsement for currently licensed teachers employed by the division. NNPS provides funds for 15-20 participants to take one graduate TESOL course per semester. Regent offers a discounted tuition rate to the division.	The division has a need for more ESL-endorsed teachers/administrators to more effectively serve a growing LEP population at Sedgefield Elementary School. Through the Regent partnership, teachers and administrators can earn an ESL endorsement while continuing to serve in their current positions.	Newport News Public Schools and Regent University School of Education.	Yes
9.	Chesapeake City Public Schools (CCPS) - TESOL	Regent University has an agreement with CCPS to provide coursework leading to a Virginia ESL endorsement for currently licensed teachers employed by the division. CCPS provides funds for 15 participants to take one graduate TESOL course per semester. Regent offers a discounted tuition rate to the division.	The division has a need for more ESL-endorsed teachers/administrators to more effectively serve a growing LEP population at Sedgefield Elementary School. Through the Regent partnership, teachers and administrators can earn an ESL endorsement while continuing to serve in their current positions.	Chesapeake City Public Schools and Regent University School of Education.	Yes
10.	Special Education Internships and Field Study	The partnerships are in the form of internship and field study arrangements that we have with several school divisions.	Our field and internship students supply a potential pool of applicants for positions in the school system or strengthens the skills and knowledge of those on provisional licenses. The pre-K-12 schools need qualified special education teachers and reading specialists to meet this high demand area.	Virginia Beach Public Schools, Norfolk Public Schools, Chesapeake Public School, Newport News Public Schools, Suffolk Public Schools, Hampton Public Schools, Portsmouth Public Schools, Prince William Public Schools, Richmond Public Schools, Spotsylvania Public Schools, Fairfax Public Schools and several other schools outside of the region.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
11.	Reading Specialist Internships and Field Study	The partnerships are in the form of internship and field study arrangements that we have with several school divisions.	Our field and internship students supply a potential pool of applicants for positions in the school division or strengthens the skills and knowledge of those on provisional licenses. The pre-K-12 schools need qualified special education teachers and reading specialists to meet this high demand area.	Virginia Beach Public Schools, Norfolk Public Schools, Chesapeake Public School, Newport News Public Schools, Suffolk Public Schools, Hampton Public Schools, Portsmouth Public Schools, Prince William Public Schools, Richmond Public Schools, Spotsylvania Public Schools, Fairfax Public Schools and several other schools outside of the region.	No
12.	Hampton Roads School Counselor Leadership Team	Partnership with directors of counseling at local school divisions (Hampton City Schools, Newport City Schools , Norfolk Public Schools, Portsmouth City Schools Virginia Beach City Schools, Chesapeake Public Schools) and Counselor Educators from local Universities (Regent University, Old Dominion University, Norfolk State University, Hampton University, and the College of William and Mary.	These unique partnerships of school division leadership and local university leadership in counselor education (specifically school counseling) provide ongoing leadership meetings between counselor educators (universities) and counseling supervisors (school divisions) in an effort to transform school counseling and close the achievement gap. This is a national initiative promoted by the American School Counseling Association, Education Trust and No Child Left Behind. This is the first time that school divisions and universities have worked together on fulfilling a national mission. Workshops are provided for veteran and new counselors on an annual basis. Recognition of outstanding school counseling practice is also part of this initiative.	Dr. Rosemary A. Thompson, Assoc. Professor, Regent University; Dr. Norma Brumage, Professor, Norfolk State University; Dr. Tim Grothause,Asst. Professor Old Dominion University, Dr. Spencer Baker,Professor Hampton University, Dr. Vanessa Whitaker, Supervisor Newport News Schools, Dr. Penny Peterson, Supervisor Hampton City Schools, Joyce Beamon, Supervisor Norfolk Public Schools, Virginia Folston, Portsmouth Public Schools, and Janet Domazos, Chesapeake Public Schools.	Yes
13.	Chesapeake Public Schools, Deep Creek Middle School	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Chesapeake Public Schools, Deep Creek Middle School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
14.	Chesapeake Public Schools, Grassfield High School	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Chesapeake Public Schools, Grassfield High School.	Yes
15.	Chesapeake Public Schools, Hugo Owens Middle School	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Chesapeake Public Schools, Hugo Owens Middle School.	Yes
16.	Virginia Beach City Public Schools, Lynnhaven Middle School	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Virginia Beach City Public Schools, Lynnhaven Middle School.	Yes
17.	Virginia Beach City Public Schools, Larkspur Middle School	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Virginia Beach City Public Schools, Larkspur Middle School.	Yes
18.	Virginia Beach City Public Schools, Landstown Elementary School	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Virginia Beach City Public Schools, Landstown Elementary School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
19.	Virginia Beach City Public Schools, Princess Anne Middle School	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Virginia Beach City Public Schools, Princess Anne Middle School.	Yes
20.	Safe Schools/Norfolk Public Schools	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Safe Schools/Norfolk Public Schools.	Yes
21.	Northside Middle School, Norfolk	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Northside Middle School, Norfolk.	Yes
22.	Lynnhaven Middle School, Virginia Beach, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Lynnhaven Middle School, Virginia Beach, Virginia.	Yes
23.	Corporate Landing Middle School, Virginia Beach, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Corporate Landing Middle School, Virginia Beach, Virginia.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
24.	Larkspur Middle School, Virginia Beach, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Larkspur Middle School, Virginia Beach, Virginia.	Yes
25.	Larkspur Middle School, Virginia Beach, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Larkspur Middle School, Virginia Beach, Virginia.	Yes
26.	Deep Creek Middle School, Chesapeake, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Deep Creek Middle School, Chesapeake, Virginia.	Yes
27.	Crestwood Middle School, Chesapeake, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Crestwood Middle School, Chesapeake, Virginia.	Yes
28.	Hickory Middle School, Chesapeake, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Hickory Middle School, Chesapeake, Virginia.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
29.	Ruffner Academy, Norfolk, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Ruffner Academy, Norfolk, Virginia.	Yes
30.	Safe Schools/ Norfolk Public Schools, Norfolk, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Safe Schools/ Norfolk Public Schools, Norfolk, Virginia.	Yes
31.	LaFayette Winona Middle School, Norfolk, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	LaFayette Winona Middle School, Norfolk, Virginia.	Yes
32.	Oscar Smith Middle School, Chesapeake, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Oscar Smith Middle School, Chesapeake, Virginia.	Yes
33.	Landstown Middle School, Virginia Beach, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Landstown Middle School, Virginia Beach, Virginia.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
34.	Hugo Owens Middle School, Chesapeake, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Hugo Owens Middle School, Chesapeake, Virginia.	Yes
35.	Greenbrier Middle School, Chesapeake, Virginia	The school counseling internship is a planned, field-based clinical experience where a student works with clients under supervision. During the experience, the intern learns to apply the theories and techniques learned in an academic setting to a professional setting.	Under supervision, the intern provides individual and group counseling and classroom guidance to promote the academic, career and personal/social development of all K-12 students. He or she helps design and implement prevention and intervention plans.	Greenbrier Middle School, Chesapeake, Virginia.	Yes
36.	Virginia Beach City Public Schools	Our partnership is to train Math Specialists at the elementary school level. About 20 of the former students are now Math Specialists in the VBCPS System.	The supervisor reports that Math Specialist are true leaders in the schools and contribute greatly to the strong math scores in the school division. Since inception we have trained about 35 students.	VBCPS Elementary School Mathematics Coordinator; Dr. Alan Arroyo, Dean of Regent's School of Education.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*English as a Second Language PreK-12*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.					
1.	New Castle Elementary School/Regent University Partnership - IDS	X					
2.	Kempsville Elementary School/Regent University Partnership - IDS	X					
3.	New Castle Elementary Partnership, Virginia Beach Public Schools - Elem Ed	X					
4.	University Practicum /Placement Experiences - Elem Ed	X					
5.	University Internship - Elem Ed	X					
6.	Virginia Beach City Public Schools (VBCPS) -TESOL					X	
7.	Newport News Public Schools (NNPS) - Sedgefield Elementary School cohort - TESOL					X	
8.	Newport News Public Schools (NNPS) Nelson Elementary School cohort - TESOL					X	
9.	Chesapeake City Public Schools (CCPS) - TESOL					X	
10.	Special Education Internships and Field Study						X
11.	Reading Specialist Internships and Field Study			X			
12.	Hampton Roads School Counselor Leadership Team				X		
13.	Chesapeake Public Schools, Deep Creek Middle School				X		
14.	Chesapeake Public Schools, Grassfield High School				X		
15.	Chesapeake Public Schools, Hugo Owens Middle School				X		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*English as a Second Language PreK-12*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.					
16.	Virginia Beach City Public Schools, Lynnhaven Middle School				X		
17.	Virginia Beach City Public Schools, Larkspur Middle School				X		
18.	Virginia Beach City Public Schools, Landstown Elementary School				X		
19.	Virginia Beach City Public Schools, Princess Anne Middle School				X		
20.	Safe Schools/Norfolk Public Schools				X		
21.	Northside Middle School, Norfolk				X		
22.	Lynnhaven Middle School, Virginia Beach, Virginia				X		
23.	Corporate Landing Middle School, Virginia Beach, Virginia				X		
24.	Larkspur Middle School, Virginia Beach, Virginia				X		
25.	Larkspur Middle School, Virginia Beach, Virginia				X		
26.	Deep Creek Middle School, Chesapeake, Virginia				X		
27.	Crestwood Middle School, Chesapeake, Virginia				X		
28.	Hickory Middle School, Chesapeake, Virginia				X		
29.	Ruffner Academy, Norfolk, Virginia				X		
30.	Safe Schools/ Norfolk Public Schools, Norfolk, Virginia				X		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*English as a Second Language PreK-12*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.					
31.	LaFayette Winona Middle School, Norfolk, Virginia				X		
32.	Oscar Smith Middle School, Chesapeake, Virginia				X		
33.	Landstown Middle School, Virginia Beach, Virginia				X		
34.	Hugo Owens Middle School, Chesapeake, Virginia				X		
35.	Greenbrier Middle School, Chesapeake, Virginia				X		
36.	Virginia Beach City Public Schools		X				

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Regent University School of Education, Educational Leadership Program Partnership with The Leadership and Learning Center	The Educational Leadership Master's Degree Program and Dr. Douglas Reeves' Leadership and Learning Center (LLC), previously the Center and Performance Assessment, formed a partnership in 2006. Qualified associates (doctorate level) from the LLC team teach with Regent Professors in certain courses in the program. This partnership is a major component of the Educational Leadership Program's third goal, to "partner the Educational Leadership Program with other institutions".	Dr. Doug Reeves is internationally recognized for his many contributions to the field in education and has developed long-term relationships with school divisions helping educators and school leaders to improve student achievement through practical and constructive approaches to standards, assessment, and accountability. Dr. Reeves has been on campus and has personally taught in a Regent Educational Leadership class. The LLC associates, who team teach effectively, integrate Dr. Reeves' philosophy in their teachings and assessments.	Dr. Alan Arroyo, Dean, School of Education-Regent University; Dr. Glenn Koonce, Chair, Educational Leadership Program-Regent University; Dr. Anne Fenske-Leadership and Learning Center; Donna Davis-Leadership and Learning Center; and Dr. Douglas Reeves-Leadership and Learning Center.	No
2.	Regent University Education Doctorate Program and Virginia Beach Public Schools Cohort I	Administration and supervision K-12 program in Virginia Beach schools.	This doctoral degree program in Administration and Supervision K-12 was implemented as a hybrid program, meaning instructional delivery involved both face-to-face class sessions and online course experiences delivered through computer technology, and a summer residency.	Dr. Alan Arroyo, Dean, School of Education-Regent University and Owen Herring, Past Director of Educational Leadership-Virginia Beach City Public Schools.	No
3.	Regent University Education Doctorate Program and Virginia Beach Public Schools Cohort II	Administration and supervision K-12 program in Virginia Beach schools.	This doctoral degree program in Administration and Supervision K-12 was implemented as a hybrid program, meaning instructional delivery involved both face-to-face class sessions and online course experiences delivered through computer technology, and a summer residency.	Dr. Alan Arroyo, Dean, School of Education-Regent University and Owen Herring, Past Director of Educational Leadership-Virginia Beach City Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Regent University
Contact Person: Michael D. Kelly, Ed.D.
Phone No.: (757) 352-4143
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
4.	Regent University Educational Leadership Program, Educational Specialist Program, and Educational Doctorate Program in K-12 Leadership Internship I and Internship II collaborative agreements with school and school divisions to partner together for field based (internship) experiences	Regent University enters into partnership agreements with school divisions across the state and across the nation to place interns into schools and central offices in order to complete the university requirements for completion of the principal internships course (aligned with VDOE regulations).	The internship field experience should establish a bond between theory and practice (learning experiences and application) while providing opportunities for independent and guided practice, feedback, coaching and reflection. Ultimately the internship is designed to engage prospective administrators in active learning experiences and to provide participating school mentors and university coaches opportunities for continued professional growth.	Dr. Glenn Koonce, Chair, Educational Leadership Program-Regent University and over 16 participating school divisions throughout the Commonwealth.	Yes
5.	Regent University School of Education, Educational Leadership Program Partnership with K-12 Teachers Alliance (KTA).	Regent University School of Education, the Educational Leadership Program and the K-12 Teachers Alliance formed a partnership in 2009. KTA markets and sets up cohorts of students in a variety of school divisions across the Commonwealth of Virginia desiring to gain licensure in Educational Leadership. The RU Leadership Program then provides classes and instruction to these students at locations local to their places of residence. The cohorts work through the program on a two-year cycle, culminating with the completion of their graduate degrees in Educational Leadership.	This partnership provides a service to teachers by supplying a program in graduate studies that is conveniently located near their place of work/residence. The program also meets the needs of working adults by holding classes once a week in the evening, thereby allowing teachers the opportunity to complete their studies while still being gainfully employed.	Dr. Alan Arroyo, Dean, School of Education-Regent University; Dr. Glenn Koonce, Chair, Educational Leadership Program-Regent University; and Bruce Ranney, Chief Operating Officer, K-12 teachers Alliance.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Roanoke College
Contact Person: Maria Stallions
Phone No.: (540) 378-5167
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Partner Schools: Elementary	Roanoke College and its K-12 partner schools share a commitment to the preparation and continual education of quality teachers. The college and its partner schools impact their shared educational community through joint efforts to strengthen the educational experience of K-12 students and to enhance the preparation of pre-service teachers.	The Roanoke College Education Department offers to its partner schools: 1) Pre-service teacher volunteers to serve as tutors and mentors for K-12 students 2) Access to education experts by providing consultation opportunities with Education Department faculty members 3) Professional development opportunities through attendance and participation in the Margaret Sue Copenhaver Institute (MSCI) 4) Support of partner school-based teaching and learning initiatives, and 5) Exploration of grant and research opportunities that support shared partnership goals.	G.W. Carver Elementary (City of Salem).	Yes
2.	Partner Schools: Middle School	Roanoke College and its K-12 partner schools share a commitment to the preparation and continual education of quality teachers. The college and its partner schools impact their shared educational community through joint efforts to strengthen the educational experience of K-12 students and to enhance the preparation of pre-service teachers.	The Roanoke College Education Department offers to its partner schools: 1) Pre-service teacher volunteers to serve as tutors and mentors for K-12 students 2) Access to education experts by providing consultation opportunities with Education Department faculty members 3) Professional development opportunities through attendance and participation in the Margaret Sue Copenhaver Institute (MSCI) 4) Support of partner school-based teaching and learning initiatives, and 5) Exploration of grant and research opportunities that support shared partnership goals.	Andrew Lewis Middle School (City of Salem), Breckinridge Middle School (Roanoke City), and Woodrow Wilson Middle School (Roanoke City).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Roanoke College
Contact Person: Maria Stallions
Phone No.: (540) 378-5167
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
3.	Partner Schools: High School	Roanoke College and its K-12 partner schools share a commitment to the preparation and continual education of quality teachers. The college and its partner schools impact their shared educational community through joint efforts to strengthen the educational experience of K-12 students and to enhance the preparation of pre-service teachers.	The Roanoke College Education Department offers to its partner schools: 1) Pre-service teacher volunteers to serve as tutors and mentors for K-12 students 2) Access to education experts by providing consultation opportunities with Education Department faculty members 3) Professional development opportunities through attendance and participation in the Margaret Sue Copenhaver Institute (MSCI) 4) Support of partner school-based teaching and learning initiatives, and 5) Exploration of grant and research opportunities that support shared partnership goals.	Hidden Valley High School (Roanoke County).	Yes
4.	Southwest Virginia Professional Education Consortium	The Southwest VA Professional Education Consortium (SWVAPEC) provides consistent and on-going communication and collaboration between regional PK-12 local education agencies and regional institutions of higher education.	SWVAPEC serves the PK-12 community by: 1) providing clinical faculty training, 2) preparing interns and student teachers, 3) coordinating VA DOE grant funding for programs that support clinical faculty professional development, and 4) supporting mentoring programs for new teachers.	Four institutions of higher education (IHEs): VA Tech, Radford, Hollins and Roanoke College; eight K-12 Divisions: Botetourt County, Craig County, Giles County, Montgomery County, Pulaski County, Radford City, Roanoke City, Roanoke County, and Salem City.	Yes
5.	Margaret Sue Copenhaver Institute for Teaching and Learning	The Margaret Sue Copenhaver Institute (MSCI) is a three-day professional development institute for teachers and administrators offered each summer by the Roanoke College Education Department.	The MSCI staff is advised by a steering committee of approximately 15 teachers and administrators. This group informs the annual themes, speakers and programs of MSCI, in an effort to provide cutting-edge professional development that meets real K-12 needs.	100 participants attended MSCI 2010. These individuals reflected 5 Virginia public school divisions and 8 Virginia independent schools, and also included 9 out-of-state participants.	Yes
6.	Professional Licensure Program (PLP) for "Licensure Only" Students	This program was established in 2007 to meet the needs of individuals with college degrees who desire to pursue Virginia teacher licensure. This "licensure only" route allows these individuals to complete program requirements for a teacher's license without requiring pursuit of an additional degree program at Roanoke College.	This program meets K-12 needs by producing highly qualified, licensed teachers in a timely fashion. The program serves all teacher licensure areas offered by Roanoke College.	Four individuals are currently enrolled in PLP: PK-6 Elementary, PK-12 French, and PK-12 ESL.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Roanoke College
Contact Person: Maria Stallions
Phone No.: (540) 378-5167
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	McGlothlin Award for Excellence in Teaching Judging Panel	The McGlothlin Awards acknowledge regional excellence in teaching. One Roanoke College faculty member has served as a final judge for this $25,000 award since the inception of the award. Judges visit classrooms of the three finalists, interview parents, children and colleagues of the finalists and observe real-time teaching.	The McGlothlin Awards encourage excellence and innovation in regional teaching by acknowledging and awarding teaching finalists. The annual award recipient utilizes the $25,000 award, in part, to pursue travel abroad that supports their work and interests as an educator.	All PK-12 public school divisions in Southwestern Virginia.	Yes
8.	Teacher Education Consulting Committee	This committee of local education alumni (both teachers and administrators) was formed in order to facilitate alignment between Roanoke College Education Department offerings and current needs in local K-12 schools. The committee meets twice per year.	The purpose of committee meetings is two-fold: 1) to invite input from members regarding current challenges and needs in K-12 settings and 2) to solicit their advisement regarding the direction of departmental programs.	Members of the TECC represent the following school divisions: Roanoke City Schools, Roanoke County Schools, Botetourt County Schools, and City of Salem Schools.	No
9.	Mentoring "High Risk" Students	Roanoke College pre-service teachers in the EDUC 210 and EDUC 335 courses have partnered with local schools and a local private agency for children living in poverty as one-on-one mentors/tutors for high risk students.	The college students worked specifically with students identified as "high risk" for school failure in three areas schools.	Students in the following schools: Andrew Lewis Middle, Salem Alternative, and G.W. Carver Elementary (City of Salem). Breckenridge Middle School (Roanoke City), and Presbyterian Community Center (Private).	No
10.	Partner Schools: International	Roanoke College and its K-12 partner schools share a commitment to the preparation and continual education of quality teachers. The college and its partner schools impact their shared educational community through joint efforts to strengthen the educational experience of K-12 students and to enhance the preparation of pre-service teachers.	The Roanoke College Education Department offers to international schools: 1) student field placement and 2) professional development for teachers through the Margaret Sue Copenhaver Institute for Teaching and Learning.	Munich International School (MIS), Starnberg, Germany; US Department of Defense Dependent Schools (DoDDS) - Vilseck Elementary School, Vilseck High School, Grafenwohr Elementary School, Grafenwohr Middle School, Aviano Elementary School, Aviano Middle School, Aviano High School, and Qatar International Academy.	Yes - DoDDS No - OIS

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Roanoke College
Contact Person: Maria Stallions
Phone No.: (540) 378-5167
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*	*Speech Communication (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																		
1.	Partner Schools: Elementary	X																		
2.	Partner Schools: Middle School				X	X		X	X			X	X	X					X	
3.	Partner Schools: High School		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	Southwest Virginia Professional Education Consortium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	Margaret Sue Copenhaver Institute for Teaching and Learning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6.	Professional Licensure Program (PLP) for "Licensure Only" Students	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	McGlothlin Award for Excellence in Teaching Judging Panel	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Teacher Education Consulting Committee	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	Mentoring "High Risk" Students	X			X	X	X	X	X			X	X	X					X	
10.	Partner Schools: International	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Roanoke College
Contact Person: Maria Stallions
Phone No.: (540) 378-5167
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Saint Paul's College
Contact Person: Dr. Raymond Holmes
Phone No.: (434) 848-3111
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Field placement for students enrolled in Foundations of Education and Human Growth and Development	Students enrolled in these two courses are required to obtain 20 clock hours of field placement in each course. Students are located in a wide variety of settings to enable them to have experiences with an array of students with a range of performance levels.	Students in PreK-12 being taught by students enrolled in Saint Paul's College Department of Teacher Education will have the advantage of exposure to teachers with a wide range of experience in working with a variety of students from a variety of settings.	Local school divisions and Saint Paul's College.	Yes
2.	Student Teaching of our endorsement candidates is operated by the Department of Teacher Education covering PreK-12 and general curriculum stream. An array of school divisions are involved in this activity. Cooperating teachers are selected by Saint Paul's College and the school divisions.	Students seeking endorsement from the Department of Teacher Education are required to obtain 300 clock hours under the supervision of a cooperating teacher from a school district and the director of field experience from the Department of Teacher Education.	The student teaching experience is one way for endorsement candidates to develop skills which will help them to become effective educators within a variety of settings and an array of diverse students.	Local school divisions and Saint Paul's College.	Yes
3.	Partnership and collaboration between Longwood University and Saint Paul's College establishing a chapter of the Call Me Mister Program on both colleges	The Call Me Mister Program is an effort to prepare black men to take on leadership roles in the field of education. It is a program that places emphasis upon character building and values clarification for black men wishing to become leaders in the field of education.	Men in the Call Me Mister Program are being prepared to teach and or hold leadership positions in elementary or high schools. They will then be role models for students and other faculty in those school settings.	Local school divisions and Saint Paul's College.	Yes
4.	Brunswick Literacy Council	Helping people learn to read.	To help all students (PreK-6) to become better readers.	Mrs. Emma Staples and local school divisions.	Yes
5.	Rebate Program	Collaboration between the Department of Business Administration and Department of Teacher Education to celebrate the accomplishment of college students.	Encouraging junior and senior high school students to seek scholarly endeavors and to honor public school cooperating teachers and administration for their work with the student teachers.	Mrs. LaVerne Summiel and Dr. Jacqueline Moore and local school divisions.	Yes
6.	Dominion Leadership Program	Program to develop leadership skills students.	Engineering the environment and studies for students aspiring to be leaders.	Dr. Jennifer Palmgren , Dominion Virginia Power.	Yes
7.	Students In Free Enterprise (SIFE)	Teaching students to utilize capitalism and apply it to everyday life.	Helping junior and senior high school students become aware of free enterprise through SIFE presentations.	Mr. Chestley Talley, local school divisions and Department of Business Administration.	Yes
8.	Upward Bound Program	Preparing junior and senior high school students for college in general and specifically at Saint Paul's Teacher Education Program.	Curriculum of Upward Bound covers all of the core programs and activities needed by the middle through high school student to be successful in the college community.	Mrs. Constance Kelly-Rice and the local school divisions.	Yes
9.	Dr. Ralph Bunch and the Phelps Stokes Fund	The purpose of this project is to address the need for greater undergraduate minority involvement in the international arena.	Students involved in the program will serve as mentors to local high school students.	Ralph Bunche Society, Saint Paul's College, and Emma Staples.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Saint Paul's College
Contact Person: Dr. Raymond Holmes
Phone No.: (434) 848-3111
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
10.	i3 Innovative Funding (Grant approval is pending)	After school tutoring and mentoring at the local schools spearheaded by the Upward Bound Directors, and involving the Trio Community (13 Programs)	After school tutoring program for second graders through twelfth grade students to improve English, reading, math, science, and technology skills.	Brunswick County School Division, Saint Paul's College, and Upward Bound.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Saint Paul's College
Contact Person: Dr. Raymond Holmes
Phone No.: (434) 848-3111
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Business and Information Technology*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.						
1.	Field placement for students enrolled in Foundations of Education and Human Growth and Development	X	X	X	X	X	X	X
2.	Student Teaching of our endorsement candidates is operated by the Department of Teacher Education covering PreK-12 and general curriculum stream. An array of school divisions are involved in this activity. Cooperating teachers are selected by Saint Paul's College and the school divisions.	X	X	X	X	X	X	X
3.	Partnership and collaboration between Longwood University and Saint Paul's College establishing a chapter of the Call Me Mister Program on both colleges	X						
4.	Brunswick Literacy Council	X		X				
5.	Rebate Program	X	X	X	X	X	X	X
6.	Dominion Leadership Program	X	X	X	X	X	X	X
7.	Students In Free Enterprise (SIFE)		X					
8.	Upward Bound Program		X	X		X		
9.	Dr. Ralph Bunch and the Phelps Stokes Fund		X		X			
10.	i3 Innovative Funding (Grant approval is pending)	X	X	X		X	X	

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Saint Paul's College
Contact Person: Dr. Raymond Holmes
Phone No.: (434) 848-3111
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Shenandoah University
Contact Person: Mary Bowser, EdD
Phone No.: (540) 545-7277
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Clinical Faculty Training	Shenandoah Universoty (SU) has partnered with Frederick, Winchester, Clarke, Warren, Rappahannock, and Loudoun counties to provide clinical faculty and mentor training.	Based on mutually identified needs, SU needed cooperating teachers trained to work with new teachers and with our student teachers.	Frederick, Warren, Winchester, Clarke, Loudoun, and Rappahannock.	Yes
2.	Student Teacher Placements	School divisions accept our student teachers for internships.	School divisions are able to get additional support in the classroom, and teachers are able to team teach with newly trained teachers who are adept with technology and trained based on more recent research.	Frederick, Warren, Winchester, Clarke, Loudoun, Rappahannock, Fairfax, Prince William, Manassas, Manassas City, Fauquier, and Maryland.	Yes
3.	Reading Clinic	Teachers at schools in the partnership area identify children needing assistance in reading, and refer them to the Graduate Reading Program at SU.	Teachers in school divisions are able to get additional support for children in their classrooms who need help with reading problems.	Frederick, Warren, Winchester, and Clarke.	Yes
4.	Shenandoah University/Virginia Avenue Charlotte DeHart Elementary School Partnership (VACDES)	EDU 324-Language Arts Methods, EDU 424-The Teaching of Diagnostic Reading, and EDU 337-Reasoning Skills II Mathematics hold class meetings at VACDES. Teachers and administrators from the school are often guest lecturers, and university students spend 30 hours per class tutoring, teaching, and observing in classrooms at VACDES.	Approximately 1,000 hours tutoring and classroom assistance has been provided for children at VACDES. The university professors who teach the classes and their teacher education candidates provide activities and support to improve student literacy through small group instruction and one to one tutoring.	VACDES faculty, students and administrators.	Yes
5.	Field Experiences	School divisions accept our candidates for field placements/practica.	School divisions are able to get additional support in the classroom, and teachers are able to team teach with newly trained teachers who are adept with technology and trained based on more recent research.	Frederick, Warren, Winchester, Clarke, Loudoun, Rappahannock, Fairfax, Prince William, Manassas, Manassas City, Fauquier, and Maryland.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Shenandoah University
Contact Person: Mary Bowser, EdD
Phone No.: (540) 545-7277
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*Spanish PreK-12*	*Business and Information Technology*	*Dance Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																	
1.	Clinical Faculty Training	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Student Teacher Placements	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Reading Clinic			X															
4.	Shenandoah University/Virginia Avenue Charlotte DeHart Elementary School Partnership (VACDES)	X	X																
5.	Field Experiences	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Shenandoah University
Contact Person: Mary Bowser, EdD
Phone No.: (540) 545-7277
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Administrative Practica and Internship	School division personnel provide administrative experiences for teachers in the SU MSED and Certificate Programs.	School divisions get over 340 clock hours of administrative assistance and our students receive a supervised clinical experience in administration.	Augusta, Clarke, Culpeper, Fairfax, Frederick, Harrisonburg, Loudoun, Prince William, Rappahannock, Rockbridge, Rockingham, Shenandoah, Staunton, Warren Washington, Winchester, and Waynesboro.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Sweet Briar College
Contact Person: Holly Gould
Phone No.: (434) 381-6546
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Transition to Work	Special needs high school students participate in "on the job" internships at Sweet Briar College, coached by students in the EDUC 410 course. Successful completion of the course earns high school students recognition at the end-of-year awards assembly at the high school.	Coaching from pre-service special education students helps high school special needs students build skills in applying for jobs, interviewing, developing confidence and self-determination.	Amherst County Public Schools, Amherst County High School, and Sweet Briar College Education Department.	No
2.	Web-based Lesson Plan for History and Social Sciences SOLs	Sweet Briar College's Director of Tusculum Institute worked with a Charlottesville teacher to create a lesson plan for teachers in grades 1-2, 4-5, and 9-11 to use with History and Social Sciences SOLs. http://www.tusculum.sbc.edu/Teaching/sbplantation/index.shtml.	The 50 teachers who attended the 2009 "Teaching with Historic Places" conference had an illustrated lesson plan with powerpoint slides and ready-made historic resources to use in classroom instruction.	Prof. Lynn Rainville (Sweet Briar College) and Charlottesville City Schools Teacher.	No
3.	Web-based Lesson Plan for Studying American Cemeteries	Sweet Briar College's Director of Tusculum Institute worked with a graduate student at UVA's Curry School to develop teaching materials for History and Social Sciences SOLs in K-5. http://www2.vcdh.virginia.edu/cem/CemSearch_LessonPlan.shtml.	K-5 teachers have Web-based student handouts, teacher guides, powerpoints and transparencies available for teaching History/ and Social Sciences SOLs.	Prof. Lynn Rainville (Sweet Briar College) and John Broome of UVA's Curry School.	No
4.	YWCA Girls Camp Visit	A one-day event (may become annual) that brought high school females to Sweet Briar for an Environmental Awareness Program led by Sweet Briar's Outdoor Programs Office and student Master Naturalists.	Demonstrated importance of studying environmental science to high school females, demonstrated how it can be done at the college level, and underscored benefits of a college education.	Robyn Sanderson, Paula Ledbetter, and Laura Staman (Sweet Briar College) and Terri Miller (YWCA).	No
5.	Web-based Lesson Plan for History and Social Science SOLs	Sweet Briar College's Director of Tusculum Institute worked with a retired teacher to create a lesson plan for teachers in grades 4-5 to use with Virginia History and Social Sciences SOLs. http://www2.vcdh.virginia.edu/schools/lessonplan.html.	Eleventh-grade and fourth- and fifth-grade Virginia teachers have lesson plans and materials for teaching about Rosewald Schools (segregated African American schools, circa 1910's to 1930's).	Prof. Lynn Rainville (Sweet Briar College) and Retired Teacher.	No
6.	Tye River Elementary Nelson Middle School Partnership	Sweet Briar students enrolled in the introductory education class (EDUC 103) travel to Tye River Elementary School or Nelson Middle School once per week to tutor students and to put human development theories into context.	SBC students provide tutoring and help small groups of students who are struggling with the content that the teachers are teaching.	Nelson County Public Schools (Jonna Clarkson) and Sweet Briar College.	No
7.	Tye River Big Sister Partnership	Sweet Briar students, either in EDUC 103 or not, travel to Tye River Elementary School to spend time with an individual student or students who need some extra emotional or academic support. Sometimes this partnership carries on throughout the Sweet Briar student's college career.	Several students at Tye River have difficult home lives or issues that pose problems for the children. SBC students provide support, academically and/or emotionally, for these students who are struggling.	Tye River Elementary School (Jonna Clarkson) and Sweet Briar College (Holly Gould).	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Sweet Briar College
Contact Person: Holly Gould
Phone No.: (434) 381-6546
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Amherst County Public Schools/Sweet Briar Partnership	Sweet Briar College entered into a signed, formal agreement with Amherst County Public Schools in the mid-90's that was formally renewed in 2006. In this agreement, the school division and the college pledge to work together to improve teaching and learning in the greater Amherst County community.	This partnership broadly recognizes that students in PK-12 need a range of support in order to be successful, and that this support can be enhanced by collaborative programs between the school division and the college community.	Amherst County Public Schools (Dr. Brian Ratliff, Superintendent) and Sweet Briar College (Dr. Elizabeth Muhlenfield, President).	Yes
9.	Differentiation Study Group	Clinical Faculty/Mentor Teachers who will supervise Sweet Briar student teachers in the spring semester participate in a Differentiation Study Group that meets monthly during the fall semester as part of EDUC 633, Instructional Strategies for the Differentiated Classroom.	Sweet Briar student teachers are assigned to classrooms across PK-12. They meet with their Clinical Faculty supervisors during the fall study group to design SOL-based, differentiated instruction that they help to implement as a field experience one hour per week.	Amherst County Public Schools (Gloria Preston) and Sweet Briar College (Dr. Holly Gould).	No
10.	Clinical Faculty, Mentors, Pre-service and Arts & Sciences: A Continuing Partnership for Quality Teaching and Learning	This is a block grant from the VDOE supporting a partnership focused on Clinical Faculty/Mentor Teacher/Pre-service training. The partnership consists of Lynchburg, Randolph, and Sweet Briar Colleges, and the school divisions of Amherst, Appomattox, Bedford, Campbell, and Nelson Counties, and Lynchburg City.	Based on needs assessments provided by each school division's participants, this partnership focuses on in-service and pre-service teacher staff development aimed at increasing teacher effectiveness, retention, and student learning in PK-12.	Education Department Faculty from each of the three colleges and central office administrators from each of the six school divisions (names available on request as there is not room enough here to list).	Yes
11.	Henry County Public Schools Differentiation Project	Henry County Public Schools has a five-year grant from the Harvest Foundation to provide professional development to PK-12 teachers on differentiation. Sweet Briar College faculty provide instruction and coaching on differentiation and Henry County teachers are given a reduced tuition rate on graduate courses on differentiation.	PK-12 students in Henry County perform on varied readiness levels and demonstrate a range of learning styles, interests, and special needs. Sweet Briar faculty with expertise in differentiation provide instruction, resources, and planning assistance for this project.	Henry County Public Schools (Dewitt House) and Sweet Briar College (Dr. Kay Brimijoin).	No
12.	Frederick County Public Schools Differentiation Project	Frederick County Public Schools is in its second year of a professional development initiative focused on building expertise in differentiation. Sweet Briar College faculty provide instruction and coaching on differentiation and Frederick County teachers have been offered a reduced tuition rate on graduate courses on differentiation.	PK-12 students in Frederick County perform on varied readiness levels and demonstrate a range of learning styles, interests, and special needs. Sweet Briar faculty with expertise in differentiation provide instruction, resources, and planning assistance for this project.	Frederick County Public Schools (Angela White) and Sweet Briar College (Dr. Kay Brimijoin).	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Sweet Briar College
Contact Person: Holly Gould
Phone No.: (434) 381-6546
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
13.	Tutoring for PK-12 Students in the Local Community	Sweet Briar College students, through the college's Academic Resource Center (ARC) and the Student Virginia Education Association (SVEA) on campus, provide tutoring services. Schools and parents contact the ARC and their trained tutors and education students in SVEA are assigned.	Assessment data in local schools indicates some students would profit from individual tutoring outside of school. The ARC and the SVEA try to match Sweet Briar students with appropriate content background or education courses in reading with individual student needs.	Sweet Briar's Academic Resource Center (Mary Jo Upchurch) and Sweet Briar's SVEA (Dr. Kay Brimijoin).	No
14.	Sweet Briar High School Scholars Program	Amherst County High School juniors and seniors with at least a 3.0 grade point average may take Sweet Briar College courses for college credit at a reduced tuition rate.	In a rural area such as Amherst County, the options for dual enrollment credit for college-bound and gifted students are limited. This partnership provides this option within a five minute drive (or bike ride) from the high school.	Sweet Briar College (Deborah Powell) and Amherst County High School (Ernest Guill).	No
15.	Sweet Briar College/Amherst County Public Schools Cultural Arts Day	Amherst County Public Schools fifth graders spend a day at Sweet Briar College, visiting special museum and art exhibits related to the Virginia Standards of Learning and social studies content, have lunch in the dining hall, and tour the campus to get a flavor of college life.	Only 13.1 percent of Amherst County adults hold bachelor's degrees. This partnership meets PK-12 needs on two levels: it provides resources and hands-on learning experiences related to the SOLs and gives students an authentic and engaging introduction to college education.	Sweet Briar College (Rebecca Massie Lane) and Amherst County Schools (Evelyn Woodruff).	No
16.	Tri-College Consortium	Lynchburg College, Randolph College, and Sweet Briar College have been part of a tri-college consortium for many years. This consortium offers a range of collaborative initiatives and opportunities for the local communities and the campuses.	The three colleges work together to provide a range of programs for PK-12 students, parents, and the community on topics and issues related to local needs. For example, Lynchburg College brought Beverly Tatum to speak this spring on issues related to diversity.	Presidents of the 3 colleges: Lynchburg College - Ken Garren; Randolph College - John Klein; Sweet Briar College - Elizabeth Muhlenfeld.	Yes
17.	Tri-College Colloquium	Each spring, Lynchburg, Randolph, and Sweet Briar Colleges sponsor a Colloquium for pre-service teachers who are in their last year of preparation or who are student teaching. Students hear a speaker and attend breakout sessions focused on topics identified as critical need areas in local schools.	Local school divisions have identified data analysis, differentiation, and classroom management as PK-12 areas of need. The Colloquium brings in teachers from local schools to provide professional development for pre-service teachers on these topics.	Lynchburg College (Dr. Jan Stennete), Randolph College (Dr. Gail Brown), and Sweet Briar College (Dr. James Alouf).	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Sweet Briar College
Contact Person: Holly Gould
Phone No.: (434) 381-6546
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
18.	Science and Math by Inquiry	A grant from SCHEV provides opportunities for teachers in grades 3-8 to take inquiry-based courses and workshops with SBC science and math faculty, implement inquiry activities in their classrooms, and share the results with their peers.	The program focuses on science and math content geared specifically to the Virginia SOL' s for local teachers. Modeling, coaching, and resources on inquiry-based instruction build confidence in using strategies for teaching science and math that invite all students to be successful.	Central Office contacts in the school divisions of Amherst, Appomattox, Bedford, Buckingham, Campbell, and Nelson Counties and the cities of Charlottesville, Lynchburg, and Bedford and Sweet Briar College (Dr. Jill Granger).	No
19.	Sweet Briar Saturday Enrichment Program	For over 10 years, Sweet Briar College and Amherst County Public Schools have partnered to offer workshops taught by Sweet Briar students for fourth and fifth graders, who are bussed to Sweet Briar's campus for a morning program four Saturdays in the spring.	Originally intended to serve gifted students, this program is now open to all 4th and 5th graders. Sweet Briar students with a passion for a particular subject teach hands-on workshops in everything from art to the electron microscope. Elementary students can explore areas of interest while working with college students on campus.	Amherst County Public Schools (Dr. Brian Ratliff) and Sweet Briar College (Mary Jo Upchurch).	No
20.	Web-based Architectural Treasure Hunt	An archaeology professor at Sweet Briar College has developed an on-line treasure hunt on Charlottesville's historic downtown mall.	This website teaches elementary students about architectural styles. It provides engaging access to social studies content and allows students who cannot visit the mall to take a virtual field trip. Please see: www.sequent.org/lynn/Mall_home.html.	Sweet Briar College (Dr. Lynn Rainville).	No
21.	Web-based Treasure Hunt of Charlottesville's Court Square	An archaeology professor at Sweet Briar College has developed an online treasure hunt to support a program with the Albemarle County Historical Society to take school groups on guided tours.	This on-line resource provides support for fourth and fifth graders' tours of the Court Square area in Charlottesville. Please see: www.locohistory.org/Albemarle/kids_tour1.shtml.	Albemarle County Schools (Mr. Rossini), Albemarle/ Charlottesville Historical Society, and Sweet Briar College (Dr. Lynn Rainville).	No
22.	Sweet Briar Kids in College (KIC) Program	The Kids in College program is an invigorating array of classes that are an exploration into the exciting world of the arts and sciences. Led by expert instructors, KIC classes provide an in-depth, fun-filled summer educational experience.	The KIC program offers third through eighth graders an in-depth study into a subject area that is often not offered in the public school curriculum. This allows students to explore an area of interest that they may find exciting and rewarding, offering them a look into that subject with new eyes.	Amherst County Public Schools (Dr. Brian Ratliff), Gifted Coordinator in Nelson County Schools, Local Private Schools: Holy Cross, Lynchburg Christian Academy, James River Day School and Sweet Briar College (Pam Simpson).	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Sweet Briar College
Contact Person: Holly Gould
Phone No.: (434) 381-6546
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																
1.	Transition to Work																X	
2.	Web-based Lesson Plan for History and Social Sciences SOLs	X										X						
3.	Web-based Lesson Plan for Studying American Cemeteries	X																
4.	YWCA Girls Camp Visit													X				
5.	Web-based Lesson Plan for History and Social Science SOLs	X										X						
6.	Tye River Elementary Nelson Middle School Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	Tye River Big Sister Partnership	X															X	X
8.	Amherst County Public Schools/Sweet Briar Partnership	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	Differentiation Study Group	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.	Clinical Faculty, Mentors, Pre-service and Arts & Sciences: A Continuing Partnership for Quality Teaching and Learning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11.	Henry County Public Schools Differentiation Project	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12.	Frederick County Public Schools Differentiation Project	X															X	X
13.	Tutoring for PK-12 Students in the Local Community	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14.	Sweet Briar High School Scholars Program		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
15.	Sweet Briar College/Amherst County Public Schools Cultural Arts Day	X															X	X
16.	Tri-College Consortium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17.	Tri-College Colloquium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Sweet Briar College
Contact Person: Holly Gould
Phone No.: (434) 381-6546
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																
18.	Science and Math by Inquiry	X											X	X	X	X	X	X
19.	Sweet Briar Saturday Enrichment Program	X															X	X
20.	Web-based Architectural Treasure Hunt	X															X	X
21.	Web-based Treasure Hunt of Charlottesville's Court Square	X															X	X
22.	Sweet Briar Kids in College (KIC) Program	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Sweet Briar College
Contact Person: Holly Gould
Phone No.: (434) 381-6546
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Clinical Practice	Practicum, student teaching, and internship placements are made with the PreK-12 schools to ensure that prospective teachers for specific endorsements, through support, supervision, and evaluation, can demonstrate and apply the competencies enumerated in the Virginia Licensure Regulations and demonstrated by skillful teachers.	Field mentorship experiences are designed to assist the candidate with performance of the required program standards and competencies which must be demonstrated for a specific endorsement. Identified needs of the PreK-12 community are met through well-prepared and highly qualified teachers for their classrooms. PreK-12 schools mentor these individuals for the betterment of teaching and possible employment in their divisions.	Spotsylvania County, Stafford County, Fredericksburg City, Fauquier County, Prince William County, King George County, Caroline County, and Culpeper County.	No
2.	Clinical Faculty Program	Education faculty continue to work with area K-12 teachers we have trained as mentors for practicum students, student teachers and student interns. Additional training and professional development is provided on a periodic basis.	Providing instruction and resources in mentoring skills to veteran teachers enable them to help new teachers maximize their professional growth.	Spotsylvania County, Stafford County, and Fredericksburg City.	No
3.	School Outreach	Faculty from across the university give presentations, participate in school programs and events, serve on district and school-based committees, integrate school-based projects in their courses, and work with students in area schools in a variety of areas.	This outreach serves to meet particular needs of the K-12 community and enrich the schools' curricula and special programs.	Spotsylvania County, Stafford County, and Fredericksburg City.	No
4.	Partnerships with other colleges and universities to develop courses and programs for K-12 teachers	Faculty from both the education and the arts and sciences departments work with faculty at other institutions of higher education and representatives from K-12 education to develop courses or programs for teachers in the Commonwealth. Often this involves grant work.	Courses and programs are collaboratively designed to meet the content and pedagogy needs for K-12 teachers across Virginia. Funding from grants helps offset the costs of implementation and tuition.	University of Virginia, Virginia Commonwealth University, Spotsylvania County, and Stafford County.	Yes
5.	Professional Consultation of K-12 and UMW Faculty	Faculty from UMW frequently consult with K-12 faculty and present workshops on a variety of professional issues, e.g. legal issues, multicultural and diverse student learning, content specific areas, etc. Conversely, K-12 teachers are often asked to speak to students in UMW education classes on areas of their expertise.	This consultation serves to enhance the learning of both future and current teachers to better enable them to be successful teachers.	Spotsylvania County, Stafford County, Fredericksburg City, and Catholic Diocese of Arlington.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	Professional Development Courses	Faculty develop and offer courses and workshops to assist educators in the local divisions to meet their licensure renewal requirements and professional learning needs.	Course participants and district representatives provide input for needed courses.	Field of Influence: Fredericksburg City, Culpeper County, Stafford County, Caroline County, Spotsylvania County, Prince William County, Fauquier County, and King George County school divisions.	No
7.	Annual Superintendents' Breakfast	A yearly meeting with school division leaders to discuss educational issues and professional learning needs in the region.	This event offers an opportunity to discuss current programs offered by UMW as well as the continuing needs of local school divisions and ways that UMW can address those needs. The meeting serves as a springboard for collaboration between the university and school divisions to meet the needs of pre-service and in-service teachers as well as school children.	Region 3 and neighboring counties.	No
8.	Rappahannock Partnership for Professional Learning	The purpose of the partnership, sponsored by UMW, is to create a community of PreK-20 educators who work together to achieve mutual goals based on targeted needs across school division lines. It exists as a "Community of Practice" to develop and provide professional learning through collaboration and problem solving aligned to the National Staff Development Council standards.	The RPPL serves as a conduit for discussion and collaboration on professional learning needs across school division lines. The PreK-12 community wishes to address shared needs in a collaborative way that increases communication, disseminates best practices, and efficiently utilizes funds.	Field of Influence: Fredericksburg City, Culpeper County, Stafford County, Caroline County, Orange County, Fauquier County, Spotsylvania County, Prince William County, and King George County school divisions with the UMW College of Education.	No
9.	Ghana Project	In collaboration with the Virginia State Reading Association, this project was established for two reasons: 1) to bring state-wide reading teachers and students together to offer teacher and student training in the area of reading, and 2) to provide state-wide reading teachers the opportunity for a study abroad learning experience in a diverse environment.	UMW College of Education faculty direct a program during the summer in collaboration with the University of Education Winneba. Teachers from Virginia schools and UMW students traveled to Ghana to participate in workshops and training for K-12 teachers in Winneba, Ghana, and participated in the workshops. The program also places the participants in schools to work with school age children.	University of Education Winneba, Virginia State Reading Association, and University of Mary Washington - College of Education	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
10.	Secondary Mathematics Cohort	The secondary mathematics core of the Track II M.Ed, offered in a cohort format, was developed by education and mathematics faculty in cooperation in response to a need for enhancing the content knowledge for licensed middle and high school mathematics teachers.	The program is designed to strengthen the content and pedagogical knowledge of teachers and to better prepare them to teach Advanced Placement and International Baccalaureate courses and the dual enrollment courses offered at high schools in cooperation with community colleges.	This program was developed through an MSP grant for UMW in collaboration with JMU and the mathematics coordinators from local school divisions.	No
11.	Stafford County Instructional Design and Technology Cohort	The Stafford County Cohort was launched as a collaboration between Stafford County Schools and UMW to offer the M.Ed. in Instructional Design and Technology on-site to Stafford County teachers.	The program addresses the need to support teachers to expand the use of technology in the classroom. Embedded throughout the program is instruction in using specific technologies available to teachers in Stafford County.	Stafford County Schools and UMW Instructional Design and Technology Program.	Yes
12.	Spotsylvania Special Education Cohort	The graduate special education program provided the coursework for a cohort defined by Spotsylvania County to ensure teacher eligibility for a license in special education. Courses were taught by both UMW faculty and Spotsylvania County administrators. The partnership concluded in 2010.	This partnership enabled Spotsylvania to offer incentives to prospective teachers to become licensed in special education and ensure that the county would have the needed trained teachers.	Spotsylvania County Schools in collaboration with the graduate Special Education Program.	Yes
13.	TESL 532 Differentiated Instruction for English Language Learners Across the Curriculum	The Education program provides professional development in differentiated instruction for content area teachers working with English language learners (ELLs) by offering TESL 532. Research suggests that differentiated instruction across the curriculum is one way for teachers to make the content accessible and comprehensible to ELLs.	The course assists the PreK-12 classroom teachers in understanding how to scaffold and differentiate lessons to meet instructional standards for English Language Learners. The course is offered in school divisions across the Commonwealth as requested.	Virginia Department of Education, Office of English as a Second Language Supervision and the UMW College of Education.	Yes
14.	Special Education Teacher Support Project	This is a regional training program for provisionally licensed special education teachers (general curriculum).	This grant funding provides tuition assistance and coursework that is part of College of Education state-approved program in Special Education. Courses are offered in a blended format. An interactive website supports teachers in the field and a mentoring program is being planned for the participating teachers.	Virginia Department of Education Special Education grant, UMW College of Education, and Region 3 school divisions.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
15.	Gifted Education and Mountain Vista Governor's School	Gifted endorsement courses are customized and taught on site for counties participating in the Governor's school.	The specifically developed courses meet the requirements for the gifted education add-on endorsement. By providing the courses on site, the specific needs of the teachers and learners of the school are addressed.	Frederick, Fauquier, Rappahannock, Culpeper, Warren, Clarke Counties and Winchester City, and the UMW College of Education.	No
16.	History Grant	This federal grant, entitled "Forging Democracy: Change, Conflict, and Continuity," allows for the design and implementation of a graduate course for teachers in the area of U.S. History and numerous enrichment travel experiences.	This three-year program (to conclude in September 2010) was developed in collaboration with school division history coordinators, UMW History Department faculty, and College of Education faculty. The project has included travel for the participants for the study of history and the development of teaching materials for the classroom.	Caroline, Spotsylvania and Stafford Counties and the UMW History Department and the College of Education.	Yes
17.	Play Lab	The UMW Autism Clinic and Play Lab was developed in response to Autism Focus Groups, which consisted of local autism agencies and the local school divisions.	The UMW Autism Clinic and Play Lab trains pre-service and beginning teachers and those on provisional licenses how to work with children with special needs and provides support to teachers and families.	Stafford County Public Schools, Spotsylvania County Public Schools, Fredericksburg City Schools, Quantico Schools, Prince William County, Fauquier County Schools, Caroline County Schools, Helping Hands Pediatric OT, Rappahannock Area Community Services Board, Interagency Council for Early Childhood, the local Child Development Center and the UMW College of Education.	No
18.	Daybreak Respite Program	A weekend respite program for children with disabilities is directed by Special Education faculty and staffed by UMW students and practicing teachers in the region.	UMW works closely with public school and community agencies to assess respite needs and with the local school divisions provides outreach services to attract local families to participate.	Stafford County Public Schools, Fredericksburg City Public Schools, Prince William County Public Schools, Spotsylvania County Public Schools, Caroline County Public Schools, Rappahannock Interagency Council for Early Childhood Education and the UMW College of Education.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
19.	SINE Science in the Environment	Provide K-12 teachers with content and inquiry activities that support the Physical Sciences, Interrelationships in Earth/Space Systems, Earth Patterns, Cycles, and Change and Resources strands of the Virginia Standards of Learning.	The university and school partners have worked collaboratively to insure the success of the participating K-5 teachers and are committed to providing robust experiences that will enhance scientific education at the elementary school level. • assist educators in making connections between science and their students' lives; • help teachers recognize the interdependence of physical, chemical and biological components of an ecosystem so they can abstract the concepts and apply them to their own grade level teaching; • increase the teachers' comfort in presenting inquiry-based and hands-on lessons; and • provide hands-on training for technology and how to teach these topics in an inclusive classroom.	• Four local school divisions (Stafford County, Spotsylvania County, Caroline County, and Fredericksburg City). • Friends of the Rappahannock. • Science Museum of Virginia.	Yes
20.	Head Start Collaboration	The Head Start Program and the College of Education collaborate so that pre-service elementary teachers are placed in Head Start classrooms to both assist the classroom teacher and perform instructional assignments in conjunction with education courses they are taking.	Students in the Head Start program benefit from more individual attention from adults in the classroom.	Head Start Program.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Business and Information Technology*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*	*Speech Communication (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																										
1.	Clinical Practice	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
2.	Clinical Faculty Program	X	X		X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X				X	X	X
3.	School Outreach	X			X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X				X	X	X
4.	Partnerships with other colleges and universities to develop courses and programs for K-12 teachers																	X									X	
5.	Professional Consultation of K-12 and UMW Faculty	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6.	Professional Development Courses	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	Annual Superintendents' Breakfast	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Rappahannock Partnership for Professional Learning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	Ghana Project	X	X	X							X					X								X				
10.	Secondary Mathematics Cohort																	X										
11.	Stafford County Instructional Design and Technology Cohort	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12.	Spotsylvania Special Education Cohort																						X	X				
13.	TESL 532 Differentiated Instruction for English Language Learners Across the Curriculum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14.	Special Education Teacher Support Project																							X				
15.	Gifted Education and Mountain Vista Governor's School																								X			
16.	History Grant	X	X														X											
17.	Play Lab																						X	X				
18.	Daybreak Respite Program																						X	X				
19.	SINE Science in the Environment	X																										

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*Reading Specialist*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Business and Information Technology*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*Theatre Arts PreK-12*	*Computer Science*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Adapted Curriculum K-12*	*Special Ed. - General Curriculum K-12*	*Gifted Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*	*Speech Communication (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																										
20.	Head Start Collaboration	X																										

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: University of Mary Washington
Contact Person: Dr. Marie Sheckels/Dr. Jane Huffman
Phone No.: (540) 654-1334 / (540) 288-8117
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Field Internship	Internship placements are made with the PreK-12 schools to ensure that prospective school administrators, through support, supervision, and evaluation, can demonstrate and apply the competencies enumerated in the Virginia Licensure Regulations and demonstrated by skillful school leaders.	Field internship experiences are designed to assist the candidate with performance of the required program standards and competencies which must be demonstrated for the administration and supervision endorsement. Identified needs of the PreK-12 community are met through well-prepared and highly qualified principals and central office administrators. PreK-12 schools mentor these individuals for the betterment of student learning and possible employment as school leaders in their divisions.	Field of influence: Spotsylvania County, Stafford County, Fredericksburg City, Prince William County, King George County, Fauquier County, Caroline County, Orange County, and Alexandria City school divisions in collaboration with the Educational Leadership Program.	No
2.	Prince William Cohort	The Prince William Cohort offered in cooperation with Prince William County Schools addresses the specific leadership needs of the school division.	The cohort program, offered in Prince William County, is designed to develop a strong school leadership team to meet the growing needs of the division. The cohort is offered on-site in the county for Prince William teachers interested in pursuing a career in school administration.	Prince William County Schools in collaboration with the Educational Leadership Program.	Yes
3.	Spotsylvania Collaboration on Internship	To strengthen communication and the working relationship between the UMW Educational Leadership Program and Spotsylvania County, the faculty works closely with the Assistant Superintendent for Human Resources to define appropriate experiences for Spotsylvania County Leadership interns.	This is an ongoing dialogue with Spotsylvania County Schools on what interns should be doing to meet school division needs while fulfilling embedded-experience and specific-placement internship requirements.	Spotsylvania County Schools in collaboration with the Educational Leadership Program.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Richmond
Contact Person: Patricia Stohr-Hunt
Phone No.: (804) 289-8432
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Student Teaching Partnerships	Partnership with local schools divisions to place student teachers in accredited public schools.	Our candidates are not only in the schools to learn to be effective teachers, but they also are there to serve the students and help full-time teachers deliver the curriculum.	Chesterfield County, Hanover County, Henrico County, Goochland County, Powhatan, County, and Richmond City Public Schools.	Yes
2.	Middle and High School Practicum Partnerships	Partnership with local schools divisions to place candidates in classrooms with experienced teachers, who mentor them on a weekly basis.	During the practicum experience, our candidates directly serve the needs of the teacher and students by working with individual students and with small groups.	Chesterfield County, Hanover County, and Henrico County.	Yes
3.	Book Buddies	Partnership where pre-service teachers tutor students in 1st and 2nd grade, scoring low on PALS.	A local school division asked us for help in providing one-on-one instruction for students in the area of reading.	Henrico County.	Yes
4.	General Elementary Practicum	Partnership with local schools divisions to place candidates in classrooms with experienced teachers, who mentor them on a weekly basis.	During the practicum experience, our candidates directly serve the needs of the teacher and students by working with individual students and with small groups.	Henrico County.	Yes
5.	Mentor Teacher Institute	Partnership with local school divisions to train teachers to mentor student teachers and first year teachers.	All teachers participating come from hard-to-staff schools. The schools have asked for training specifically for these teachers in an effort to better mentor candidates and help retain new teachers in challenging positions.	Chesterfield County, Hanover County, and Henrico County.	Yes
6.	Gifted Program Partnerships	Partnership with local school divisions to train continuing contract teachers in methods for gifted education.	Local school divisions have asked that we provide practical experiences to teachers intending to add a gifted endorsement.	Chesterfield County, Hanover County, Henrico County, and Richmond City Public Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: University of Richmond
Contact Person: Patricia Stohr-Hunt
Phone No.: (804) 289-8432
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Visual Arts PreK-12*	*Dance Arts PreK-12*	*Theatre Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Gifted Education (add-on endorsement)*	*Journalism (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*	*Speech Communication (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																	
1.	Student Teaching Partnerships	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X
2.	Middle and High School Practicum Partnerships		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X
3.	Book Buddies	X																	
4.	General Elementary Practicum	X																	
5.	Mentor Teacher Institute	X																	
6.	Gifted Program Partnerships															X			

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: University of Richmond
Contact Person: Patricia Stohr-Hunt
Phone No.: (804) 289-8432
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Henrico County Public Schools	Representatives from the school division have agreed to help support the MEd and Certificate program in Educational Leadership and Policy Studies through marketing and word of mouth. Division representatives will meet with the UR Director once a month through the EduLead partnership to discuss the degree and other initiatives in leadership development.	The school division has had 30 principal vacancies over the past two years. The average age of the principals is lower than the other counties at 46. We have talked with county representatives and they agree that these vacancies and trends show a need for a quality leadership program to help fill this pipeline of school leaders.	Dr. Chris Corrallo, Director of Staff Development.	No
2.	Chesterfield County Public Schools	Representatives from the school division have agreed to help support the MEd and Certificate program in Educational Leadership and Policy Studies through marketing and word of mouth. Division representatives will meet with the UR Director once a month through the EduLead partnership to discuss the degree and other initiatives in leadership development.	The school division has a demand for new school leaders. Over the past two years there have been 21 principal openings. Out of 62 principals, 37 are eligible to retire next year. We have talked with county and they agree that these vacancies and trends show a need for a quality leadership program to help fill this pipeline of school leaders.	Mr. Harold Saunders, Assistant Director of Leadership.	Yes
3.	Hanover County Public Schools	Representatives from the school division have agreed to help support the MEd and Certificate programs in Educational Leadership and Policy Studies through marketing and word of mouth. Division representatives will meet with the UR Director once a month through the EduLead partnership to discuss the degree and other initiatives in leadership development.	The school division has had 11 principal vacancies over the past two years. Out of 25 principals, 11 are over the age of 50. We have talked with division personnel and they agree that these vacancies and trends show a need for a quality leadership program to help fill this pipeline of school leaders.	Dr. Wade A. Valentino, Associate Superintendent of Policy and Administration.	Yes
4.	City of Richmond Public Schools	Representatives from the school division have agreed to instruct their staff development team to support the MEd and Certificate programs in Educational Leadership and Policy Studies through marketing and word of mouth. Division representatives will meet with the UR Director once a month through the EduLead partnership to discuss the degree and other initiatives in leadership development.	The school division has a demand for new school leaders. Over the past two years there have been 13 principal vacancies. Out of 50 principals in Richmond, 32 are over the age of 50. We have talked with the division personnel and they agree that these vacancies and trends show a need for a quality leadership program to help fill this pipeline of school leaders.	Dr. Yvonne W. Brandon, Superintendent.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: University of Richmond
Contact Person: Patricia Stohr-Hunt
Phone No.: (804) 289-8432
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
5.	Powhatan County Public Schools	Representatives from the school division have agreed to help support the MEd and Certificate programs in Educational Leadership and Policy Studies through marketing and word of mouth. Division representatives will meet with the UR Director once a month through the EduLead partnership to discuss the degree and other initiatives in leadership development.	The school division, although not as large as the other participating divisions, is facing several retirements in the next three to five years.	Mr. Bill Craig, Assistant Superintendent of Technology and Elementary Education.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Teaching Associateship	Full time semester-long (16 weeks) student teaching experience, supervised by university faculty/personnel. Teaching associates work closely with clinical instructors to further the educational goals of the school/classroom and to achieve the Virginia SOLS.	The collaborative effort of the student teachers and the classroom teachers allows for increased instructional differentiation to cover a range of student groups in addressing the SOLs.	Curry School of Education, Albemarle County Schools, Charlottesville City Schools, Louisa County Schools, Fluvanna County Schools, and Green County Schools.	No
2.	Clinical Instructor Training Program	Annual training session's focus on advancing clinical instructors' coaching/mentoring skills when working with UVA teaching associates. Each year a topic of educational relevance (e.g., working with ELL students) is also part of the training.	Provides clinical instructors with relevant professional development and enhances their ability to monitor their own instructional capabilities.	Curry School of Education, Albemarle County Schools, Charlottesville City Schools, Louisa County Schools, Fluvanna County Schools, and Greene County Schools.	No
3.	Tutoring Program	Curry teacher education students enrolled in a semester-long course tutor students who are at-risk for academic failure and need individual attention in reading (elementary) and in content area reading comprehension (secondary).	Enhances the schools' ability to address the diverse needs of at-risk students from K-12 and to increase academic success.	Curry School of Education, Albemarle County Schools, and Charlottesville City Schools.	No
4.	Math, Men, Mission (M3)	Two-week summer camps for fifth-, sixth-, and seventh-grade boys to provide instruction in advanced math experiences. Tutoring is provided throughout the school year by mentors from 100 Black Men of Central Virginia.	Access to advanced math courses in middle school often determines the curriculum trajectory in high school and the selection of college majors in fields of science, math and engineering.	Curry School of Education and Albemarle County Schools.	No
5.	PALS Assessment	After Curry Elementary Education students learn to administer PALS PreK and PALS 1-3 they assist local elementary schools with PALS testing.	Enables schools to focus attention on interpretation of results and delivery of instruction.	Curry School of Education, Albemarle County Schools, and Charlottesville City Schools.	No
6.	Smart Technologies Equipment Grant	Smart Technologies has provided the secondary Mathematics and Science TED programs with 24 Smart Boards for use in pedagogy courses on grounds and for student teachers to use during their placements.	Curry has worked with local schools to identify strong clinical instructors and to place Smart Boards in their classrooms to be used with student teaches in developing new ways to use technology in math and science classes.	Curry School of Education, Smart Technologies, Albemarle County Schools, and Charlottesville City Schools.	Yes
7.	US Department of Education FIPSE Program	FIPSE has provided the secondary Mathematics and Science TED programs with funding to develop and assess technology preparation for mathematics and science teachers in local schools.	Working with local school partners, Curry is developing ways to use technology to enhance the teaching and learning. This funding has allowed us to research the effectiveness of technology preparation models.	Curry School of Education, Albemarle County Schools, Charlottesville City Schools, and US-DOE.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	After-School Buddies	Some students in some schools will need a tutor, some will need someone who spends a little time with them regularly. Our Essential Skills and Practicum students will be providing one-on-one interactions where requested.	Outside home adult interaction (especially in rural areas, where there is not enough Big Bro/Big Sis involvement).	Curry School of Education, Albemarle City Schools, Charlottesville City Schools, and Fluvanna MS.	No
9.	Saturday Enrichment Program	The Saturday Enrichment Program is an enrichment opportunity for gifted and/or high ability students in kindergarten through 5th grade.	The program offerings are distributed to students across the Commonwealth. Additional sites in Warrenton and Culpepper have been added in response to school division request.	Curry School of Education (Gifted Ed.) and Commonwealth school divisions.	No
10.	Summer Enrichment Program	This residential summer program for gifted and talented students has a 29-year history at the University of Virginia. Students who are currently enrolled in grades 4-10 may apply to attend a two-week program session where curriculum emphasis is on extending a student's capabilities in problem-solving, creativity and critical examination, and evaluation of content-rich fields of study.	The program offerings extend that which is offered within the context of K-12 settings meeting a specific demand for enrichment services for talented and gifted students in the Virginia School divisions.	Curry School of Education (Gifted Ed.) and Commonwealth school divisions.	No
11.	McGuffey Reading Center's Diagnostic Service	Partnership and collaboration with other faculty from other program areas in the Curry School (Speech and Hearing, Clinical Psychology) and their graduate students to address the needs of at-risk readers through structured reading assessments.	Serves students in PreK-12 schools throughout the Commonwealth who have struggled to learn to read. We serve 75-100 PreK-12 students each year with coordinated instructional services to their home school.	Curry School of Education (Reading) and Central Virginia school divisions: Albemarle, Charlottesville, Fluvanna, Louisa, Nelson, Greene and others on request.	No
12.	McGuffey Reading Center's Remedial Services (academic year tutorial)	Partnership and collaboration with other faculty from other program areas in the Curry School (Speech and Hearing, Clinical Psychology) and their graduate students to address the needs of at-risk readers through structured reading tutoring programs.	Serves students in PreK-12 students throughout the Commonwealth who have struggled to learn to read. We serve approximately 30 PreK-12 students each year and provide service to the classroom teachers.	Curry School of Education (Comm. Dis., Sped, Elem., Eng. Education, and Counseling) and central Virginia school divisions.	No
13.	Project Build: Bridges of Understanding to Inclusive Literacy Development	This partnership involves a bi-weekly faculty workshop focused on reading, writing, and research strategies, combined with art and technology, to improve K-5 literacy competencies. Teachers implement strategies, share results, discuss and analyze student work, and document successes in a school wide literacy manual.	The partnership has resulted in a rich interdisciplinary curriculum focused primarily on nonfiction text, with an emphasis on writing to make sense of such texts using daily writing practice. SOL writing scores are consistently 97-100 percent since implementation.	Curry School of Education (English Education) and Stony Point Elementary School-Albemarle County school system.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
14.	VA SD Consortium (SDC)	The practicum experience is designed via the consortium to allow students the opportunity to work closely with their supervisors to increase performances of students with severe disabilities .	All teachers in the SDC are supervised in practicum experiences as they apply course work in classroom settings. This allows classroom teachers to provide more appropriate and targeted instruction to children and to increase inclusionary practices when appropriate.	Curry School of Education (Clinical and School Psych), Albemarle City public schools, Charlottesville City public schools, Culpeper public schools, Rockbridge public schools, VA School for the Deaf and Blind.	No
15.	Training in Threat Assessment and Prevention of Bullying	Training sessions provided for principals, school psychologists, and counselors by Curry faculty, with resources and follow-up provided.	School divisions wish to strengthen their ability to detect and deter serious student threats and bullying.	Curry School of Education (Clinical and School Psychology) with multiple school divisions throughout Commonwealth.	No
16.	Institutes on Academic Diversity	Faculty provide annual professional development to educators from the Commonwealth of Virginia and beyond on topics related to meeting a broad range of learners' needs in general education classrooms. The institutes occur throughout the school year and summer (July 2-week institute; March topical "Best Practices Institute" and the "Getting Started" Fall Symposium).	Annual surveys to school division personnel determine the topics presented at each institute. With this PreK-12 data in hand, the faculty are able to tailor the content of the professional development to meet educators' specific needs.	Curry School of Education (faculty members Dr. Carol Tomlinson, Dr. Catherine Brighton, Dr. Holly Hertberg Davis, Dr. Tonya Moon) and PreK-12 School Divisions (available upon request) .	No
17.	Differentiated Instruction Projects	Faculty and graduate students in the Educational Psychology program provide professional development and coaching for the administrators and teachers of Henry County. This includes direct professional development for educators and individual coaching of teachers (including classroom observations with constructive feedback and development of differentiated curricular materials).	Division leaders have identified the need for increased awareness of the needs of all learners, including those with high ability within the context of the mixed-ability general education classroom. This partnership was initiated by the school division and has been in place for five academic years.	Curry School of Education, Henry County Schools and Hempfield County Schools (PA).	No
18.	Phonological Awareness Literacy Screening (PALS)	Partnership and collaboration with the Virginia Department of Education and the General Assembly to assess the emerging reading ability of PreK-3 students.	Approximately a quarter million PreK-3 students are screened for literacy development annually. Diagnosed needs are revealed to the classroom teacher and the Commonwealth's Early Intervention Reading Initiative (EIRI) meets these needs by providing additional instruction.	Curry School of Education (Reading), VADOE, and the Commonwealth of Virginia's 132 school divisions.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
19.	Speech-Language Pathology Practica	An ASHA certified and state licensed Speech-Language Pathologist in the school system agrees to provide clinical supervision for a masters student providing services to children under the primary care of that Speech-Language Pathologist. It is not unlike student teaching, except that the graduate student is providing clinical services.	Working with speech-language pathologist, Curry graduate students help to provide services as described in the IEP for each student, extending the service provisions to a greater number of the school clientele. Training and supervision are prescribed by the Council on Academic Accreditation of the American Speech Language Hearing Association.	Curry School of Education (Comm. Dis.), Albemarle County, Charlottesville City, Chesapeake, Chesterfield, , Greene, Fluvanna, Fairfax, Richmond City, Goochland County, and Madison County Schools.	Yes
20.	Virginia Math-Science Coalition	To prepare classroom teachers for the math specialist endorsement or to complete a masters of education with a concentration in the math specialist field.	Participants work with classroom teachers to increase math content knowledge, assist administrators and teachers in identifying math weaknesses among students, develop programs addressing these needs resulting in increased math SOL scores, and provide math leadership in the schools.	Curry School of Education (Math, Science) and Virginia Math-Science Coalition School Division members.	No
21.	NSP TCP Project: Research and Training Project	In this five-year $5M project, three Virginia universities and the University of Maryland are partnering with five school divisions in a scientifically designed research project to document the impact of highly trained and well supported K-5 mathematics specialists on student SOL scores.	Nation wide schools need to understand the potential impact of mathematics on student mathematics performance. This research project is the nations only research project that is scientifically addressing these issues.	Norfolk State Univ., Univ. of Maryland, Univ. of Virginia, Virginia Commonwealth Univ., Portsmouth PS, Richmond PS, Spotsylvania PS, Stafford PS, and VA Beach PS.	No
22.	Young Women Leaders Program	One faculty member (Winx Lawrence) and 10 graduate students developed and are implementing a mentoring program for at risk middle school girls who are nominated by their teachers as showing promise. They are paired with 80 UVA undergraduate students who work with them throughout the year using a structured curriculum.	Data indicated that participants make substantial gains over matched peers on social, academic, and emotional (e.g., self-concept) measures.	Curry School of Education, Charlottesville City Schools, Albemarle County Schools, Fredericksburg County Schools, Alexandria City Schools, and Lynchburg City Schools.	No
23.	Practicum and Internships in School Psychology	Doctoral students spend 1-2 days per week in local school divisions working with school psychologists.	Provide counseling and other services to students at risk for emotional and academic problems.	Curry School of Education, Charlottesville City, Albemarle County and Fluvanna County.	Yes
24.	ELL Assessment and Planning Practicum Teacher Aides	Students in the ELL Assessment and Planning Practicum course (EDIS457) work as teacher aides with ESL teachers for three hours per week for five to eight weeks. They prepare materials and work with individual students and small groups.	The University students add to the interaction options for ELL students and support the work of the regular ELL teacher, benefiting the non-native English speaking students by offering one-on-one instruction.	Curry School of Education (CISE Dept.), Charlottesville City Schools ESL program, and Albemarle County ESL program.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
25.	Foreign Language Professional Development in SW Virginia	Curry faculty demonstrate technology-based instruction in foreign languages through a web-based "Cine Con Clase."	In response to request for strengthening instructional skills in foreign language.	Curry School of Education, Wise County, Dickenson County and Russell County.	No
26.	Southwest Virginia Early Learning and Literacy Project (SWELL)	Intervention in literacy approaches with very young children to promote language development.	Early and sustained intervention in communication and reading have been demonstrated to increase reading readiness and language development that is critical in low income families.	Curry School of Education, the University of Virginia at Wise, Wise County, and Early Head Start.	No
27.	McGuffey Reading Center's Summer Reading Program	Partnership and collaboration with local schools to identify and serve students with remedial reading needs through a summer tutorial program.	We serve approximately 95 struggling readers from local schools every summer. Clinicians are primarily part-time graduate students who are also full-time teachers in local schools. Their experiences in the summer clinic results in more effective instruction in their home school.	Curry School of Education (CISE Dept.) and Albemarle County Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12* (* *Part of a consortium offering an Adapted Curriculum endorsement.)*	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																							
1.	Teaching Associateship	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			X
2.	Clinical Instructor Training Program	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X
3.	Tutoring Program	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			
4.	Math, Men, Mission (M3)														X										X
5.	PALS Assessment	X																							
6.	Smart Technologies Equipment Grant	X													X	X	X	X	X						
7.	US Department of Education FIPSE Program														X	X	X	X	X						X
8.	After-School Buddies	X					X	X	X	X	X	X	X	X	X	X	X	X	X			X			
9.	Saturday Enrichment Program																							X	
10.	Summer Enrichment Program																							X	
11.	McGuffey Reading Center's Diagnostic Service			X																					
12.	McGuffey Reading Center's Remedial Services (academic year tutorial)	X		X																					
13.	Project Build: Bridges of Understanding to Inclusive Literacy Development	X											X												
14.	VA SD Consortium (SDC)																				X				
15.	Training in Threat Assessment and Prevention of Bullying				X	X																			
16.	Institutes on Academic Diversity																							X	
17.	Differentiated Instruction Projects																							X	
18.	Phonological Awareness Literacy Screening (PALS)	X		X																					
19.	Speech-Language Pathology Practica																						X		

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12* (* Part of a consortium offering an Adapted Curriculum endorsement.)	*Special Ed. - General Curriculum K-12*	*Special Ed. - Speech-Lang. Pathologist PreK-12*	*Gifted Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																							
20.	Virginia Math-Science Coalition														X	X	X	X	X						
21.	NSP TCP Project: Research and Training Project		X																						
22.	Young Women Leaders Program	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	
23.	Practicum and Internships in School Psychology					X																			
24.	ELL Assessment and Planning Practicum Teacher Aides	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X		X			
25.	Foreign Language Professional Development in SW Virginia						X	X	X																
26.	Southwest Virginia Early Learning and Literacy Project (SWELL)																					X			
27.	McGuffey Reading Center's Summer Reading Program	X		X																					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: University of Virginia
Contact Person: Sandra B. Cohen
Phone No.: (434) 924-0769
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	The Virginia School University Partnership (VSUP)	VSUP links UVA with 26 central and northern Virginia school divisions to provide quality professional development for school administrators and teachers, better access to university resources and services, and increased opportunities for university faculty to conduct research related to school administrative needs.	VSUP provides for its school division members' leadership needs through a school leader preparation program which addresses administrative shortages in member divisions and a summer leadership institute that focuses on current issues in school administration.	Curry School of Education and VSUP Board of Directors (Andy Stamp), and 26 Central and Northern VA School divisions.	Yes
2.	Project SW LEAD (degree program and SCOPE)	Project SW LEAD implements a defined leadership development program addressing the standards established for such preparation by the VBOE. The partnership works with school divisions to integrate relevant clinical practice.	The SW LEAD program serves 24 students from regional divisions with administrator shortages. The administrator degree program is part of a larger plan which incorporates professional development for seated building level administrators, thereby increasing school effectiveness and student achievement.	Curry School of Education, Bristol City, Buchanan Cty, Dickenson Cty, Galax Cty, Grayson Cty, Lee Cty, Norton City, Russell Cty, Scott Cty, Tazewell Cty, Washington Cty, and Wise Cty.	Yes
3.	SCOPE	A cohort program designed to assist school personnel to achieve endorsement in administration. The program includes nine classes plus an internship in the Fairfax County School Division.	Fairfax County is experiencing rapid turnover in administrative staff. They anticipate losing 40 percent of their administrators in the next five years. This necessitates an aggressive training program in order to fill these coming vacancies without negatively impacting school operations and student achievement.	Curry School of Education and Fairfax County (Andrew Cole).	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia's College at Wise
Contact Person: G. Jewell Askins
Phone No.: (276) 328-0163
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Partners in Education	The Education Department at UVA-Wise collaborates with the eight public school systems in Southwest Virginia through the Southwest Virginia Education Consortium and the Partners in Education. The eight public school systems in the coalfield counties of Southwest Virginia, including Dickenson, Wise, Russell, Tazewell, Buchanan, Scott, Lee, and the City of Norton, comprise this partnership.	The UVA-Wise Education Department and the College's Center for Teaching Excellence (CTE) assist these eight school systems by providing coursework for provisionally-licensed teachers, professional development workshops and courses to improve instruction, and technology, grant writing, and other resources for administrator.	Dickenson County Public Schools, Wise County Public Schools, Russell County Public Schools, Tazewell County Public Schools, Buchanan County Public Schools, Scott County Public Schools, Lee County Public Schools, and Norton City Schools.	Yes
2.	Southwest Virginia Public Education Consortium (SVPEC)	The Education Department and the Center for Teacher Excellence at UVA-Wise collaborate with the Southwest Virginia Public Education Consortium. The Consortium is comprised of the schools identified in the Partners in Education (coalfield county school systems) as well as most of the remaining public school systems in Region Seven (Interstate 81 corridor school systems).	The UVA-Wise Education Department collaborates with the Consortium and the CTE in providing professional development programs, workshops, and academies for teaching and school leadership for sixteen school systems in Southwest Virginia. The SVPEC serves to bring these organizations together for the betterment of the educational system in Southwest Virginia.	The SVPEC provides assistance to the public school divisions of Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe Counties and the cities of Bristol, Galax, and Norton.	Yes
3.	Buchanan County Schools	The UVa-Wise Education Department collaborates with Buchanan County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Buchanan County Schools.	No
4.	Lee County Schools	The UVa-Wise Education Department collaborates with Lee County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Lee County Schools.	No
5.	Russell County Schools	The UVa-Wise Education Department collaborates with Russell County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Russell County Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia's College at Wise
Contact Person: G. Jewell Askins
Phone No.: (276) 328-0163
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	Scott County Schools	The UVa-Wise Education Department collaborates with Scott County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Scott County Schools.	No
7.	Dickenson County Schools	The UVa-Wise Education Department collaborates with Dickenson County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Dickenson County Schools.	No
8.	Tazewell County Schools	The UVa-Wise Education Department collaborates with Tazewell County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Tazewell County Schools.	No
9.	Wise County Schools	The UVa-Wise Education Department collaborates with Wise County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Wise County Schools.	No
10.	Norton City Schools	The UVa-Wise Education Department collaborates with Norton City Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Norton City Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia's College at Wise
Contact Person: G. Jewell Askins
Phone No.: (276) 328-0163
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
11.	Smyth County Schools	The UVa-Wise Education Department collaborates with Smyth County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Smyth County Schools.	No
12.	Washington County Schools	The UVa-Wise Education Department collaborates with Washington County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Washington County Schools.	No
13.	Bristol City (VA) Schools	The UVa-Wise Education Department collaborates with Bristol City (VA) Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Bristol City (VA) Schools.	No
14.	Jenkins Independent Schools (Jenkins, KY)	The UVa-Wise Education Department collaborates with Jenkins (KY) Independent Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school system provides early field and intern experiences for pre-service teachers.	Jenkins Independent Schools (Jenkins, KY).	No
15.	Loudon County Schools	The UVa-Wise Education Department collaborates with Loudon County Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Loudon County Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia's College at Wise
Contact Person: G. Jewell Askins
Phone No.: (276) 328-0163
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
16.	Bristol City (TN) Schools	The UVa-Wise Education Department collaborates with Bristol City (TN) Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school system provides early field and intern experiences for pre-service teachers.	Bristol City (TN) Schools.	No
17.	Pike County (KY) Schools	The UVa-Wise Education Department collaborates with Pike County (KY) Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school system provides early field and intern experiences for pre-service teachers.	Pike County (KY) Schools.	No
18.	Kingsport (TN) Schools	The UVa-Wise Education Department collaborates with Kingsport City (TN) Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school system provides early field and intern experiences for pre-service teachers.	Kingsport (TN) Schools.	No
19.	Roanoke City Schools	The UVa-Wise Education Department collaborates with Roanoke City Schools to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas. The school division provides early field and intern experiences for pre-service teachers.	Roanoke City Schools.	No
20.	Partnerships for Teacher Excellence/ Preparing Teachers as Transformative Leaders	The Education Department at UVA-Wise, funded by a grant from the Virginia Department of Education, has established a training and partnership program with the area schools and school divisions in which we place pre-service teachers for field experiences. UVa-Wise provides initial and ongoing training for clinical faculty and mentors for first year teachers.	UVA-Wise provides training for teachers who serve as clinical faculty and who may serve as mentor teachers for first year teachers. These teachers provide quality field experiences for pre-service teachers.	Dickenson County Public Schools, Wise County Public Schools, Russell County Public Schools, Tazewell County Public Schools, Buchanan County Public Schools, Scott County Public Schools, Lee County Public Schools, Norton City Schools, and Washington County Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: University of Virginia's College at Wise
Contact Person: G. Jewell Askins
Phone No.: (276) 328-0163
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*French PreK-12*	*Spanish PreK-12*	*Business and Information Technology*	*Health and Physical Education PreK-12*	*Library Media PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Special Ed. - General Curriculum K-12*	*Driver Education (add-on endorsement)*	*Mathematics - Algebra I (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																
1.	Partners in Education	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Southwest Virginia Public Education Consortium (SVPEC)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Buchanan County Schools	X			X	X	X			X	X	X	X	X	X	X	X	X
4.	Lee County Schools	X			X	X	X			X	X	X	X	X	X	X	X	X
5.	Russell County Schools	X			X	X	X			X	X	X	X	X	X	X	X	X
6.	Scott County Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.	Dickenson County Schools	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.	Tazewell County Schools	X			X	X	X			X	X	X	X	X	X	X	X	X
9.	Wise County Schools	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.	Norton City Schools	X		X	X	X	X			X	X	X	X	X	X	X	X	X
11.	Smyth County Schools	X			X	X	X			X	X	X	X	X	X	X	X	X
12.	Washington County Schools	X			X	X	X			X	X	X	X	X	X	X	X	X
13.	Bristol City (VA) Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X
14.	Jenkins Independent Schools (Jenkins, KY)	X			X	X	X			X	X	X	X	X	X		X	X
15.	Loudon County Schools	X														X		X
16.	Bristol City (TN) Schools	X			X	X	X			X	X	X	X	X	X		X	X
17.	Pike County (KY) Schools	X			X	X	X			X	X	X	X	X	X		X	X
18.	Kingsport (TN) Schools	X			X	X	X			X	X	X	X	X	X		X	X
19.	Roanoke City Schools	X			X	X	X			X	X	X	X	X	X	X	X	X
20.	Partnerships for Teacher Excellence/ Preparing Teachers as Transformative Leaders	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: University of Virginia's College at Wise
Contact Person: G. Jewell Askins
Phone No.: (276) 328-0163
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Commonwealth University
Contact Person: Dr. Diane Simon
Phone No.: (804) 828-3382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Mary Munford Micro Teaching Partnership	A collaborative effort designed to give undergraduate health and physical education students the opportunity to teach elementary students under the supervision of a university faculty member and site professional.	Undergraduate students, with the university professor, assist the site professional with daily instruction while acquiring pedagogical experience.	Dr. Robert Davis: University Professor, Mr. Greg Muzik: School Principal, Mr. Cordel Watkins: Site Teaching Professional.	No
2.	Crestwood Micro Teaching Partnership	A collaborative effort designed to give undergraduate health and physical education students the opportunity to teach elementary students under the supervision of a site professional.	Undergraduate students assist the site teaching professional with daily instruction, while acquiring pedagogical experience.	Ms. Vicki Miller: University Instructor, Ms. Marsha Carter: School Principal, Mr. Henry Castelvecchi: Site Teaching Professional.	No
3.	Metropolitan Health and Physical Education Masters Degree Cohort	A formal agreement with Richmond City, Henrico County, Chesterfield County, and Hanover County offering a masters degree to health and physical education teaching professionals.	This cohort offers advanced educational opportunities to over 25 health and physical education professionals.	Dr. Edmund Acevedo: University Administrator and Advisor, Ms. Bonnie Connor Gray: Henrico County Representative, Ms. Lynne Bennett: Chesterfield County Representative, Mr. John Trott: Hanover County Representative, Mr. William James: Richmond City.	Yes
4.	Athletci Trainers (ATs) In Public Schools	Athletic Trainers are provided for five Richmond high schools.	Graduate Students serve as ATs in programs that would otherwise not have ATs.	Dr. Brent Arnold and Armstrong, Huguenot, Jefferson, Marshall, and Wythe High Schools.	Yes
5.	ACT-ESL	Five-year federally funded ESL training grant in collaboration with Chesterfield County.	The number of ESL students is rapidly increasing in Chesterfield County and this project provides content area teachers with the skills necessary to utilize ESL pedagogy in their classes.	Virginia Commonwealth University (VCU) School of Education and Chesterfield County Public Schools.	Yes
6.	eLEARN Virginia	University funded community engagement project designed to develop an online GED program for at-risk students at the Richmond City Public Schools (RCPS) ACDC site.	Students at ACDC are in danger of dropping out of school and the on-line GED provides another opportunity to keep them connected.	VCU School of Education, the Literacy Institute at VCU and RCPS.	Yes
7.	Richmond Early Reading First (RERF)	Five-year federally funded project to improve the early literacy skills of young children. The VCU School of Education and the Literacy Institute at VCU provide literacy instruction for children and professional development for teachers in at-risk RCPS schools.	Children with low literacy skills are at-risk for school success.	VCU School of Education, the Literacy Institute at VCU and RCPS.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Commonwealth University
Contact Person: Dr. Diane Simon
Phone No.: (804) 828-3382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Urban Educator Certificate Program	Professional Development designed to provide urban teachers with new approaches to use in reaching at-risk students. The VCU School of Education and J. Sargeant Reynolds Community College offer a summer institute and the possibility of earning a 15-credit Post-Baccalaureate Certificate in Urban Education.	There is an identified set of instructional skills and understandings that have been found to make a difference in the success of urban children.	VCU School of Education and J. Sargeant Reynolds Community College.	Yes
9.	Metropolitan Educational Research Consortium (MERC)	MERC is a partnership of VCU and Richmond Area school divisions working together to provide systematic, disciplined inquiry into public education.	The school divisions identified the need to study practice-based issues that seemed to be influencing student success.	VCU School of Education, MERC, Chesterfield, Colonial Heights, Henrico, Hanover, Hopewell, Powhatan, Richmond City.	Yes
10.	Metropolitan Educational Training Alliance (META)	META exists to enhance the professional development and training of teachers, administrators and other educational personnel in the respective school divisions.	META is an opportunity for the four school divisions to best use their resources to meet professional development needs.	Chesterfield, Hanover, Henrico, Richmond City and VCU.	Yes
11.	The Virginia Center for Teaching International Studies	The purpose is to enhance the teaching of international studies in Virginia's middle and high schools.	Globalization has increased the need for middle and high schools to refine their curricula and instructional practices related to international studies.	VCU School of Education and the World Affairs Council of Greater Richmond.	Yes
12.	VCU Project COVE	The partnership established an on-line licensure program for special educators in Superintendent's Regions I and VIII. The program provides full professional licensure in special education general curriculum.	There continue to be many individuals teaching under provisional licenses.	The partnership includes system administrators and teachers with VCU faculty.	No (only with VDOE)
13.	Region I Superintendents Autism Education Professional Development Consortium	The partnership is developing a comprehensive personnel development program for teachers and staff members providing educational services to students with Autism Spectrum Disorders in Superintendent's Region I.	There are over 1,200 students with Autism Spectrum Disorders served in the 15 school divisions in Region I.	The partnership includes Superintendents, special education directors, and principals and teachers with VCU faculty.	Yes
14.	SEDP Paraprofessional Licensure Program	Coordinated through META, the partnership allows paraprofessionals in Richmond, Henrico, Chesterfield and Hanover to pursue licensure and Masters degrees in special education. The program was expanded to surrounding counties in 2009.	The partnership allows paraprofessionals with Bachelors degrees to pursue licensure and Masters degrees through special scheduling and faculty mentoring relationships.	The partnership includes system administrators and paraprofessionals with VCU faculty.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Commonwealth University
Contact Person: Dr. Diane Simon
Phone No.: (804) 828-3382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
15.	Post-Baccalaureate Autism Certificate Program	The partnership is implementing 12 credit hour post-baccalaureate certificate cohorts with Richmond, Chesterfield, Henrico, Eastern Shore, and Isle of Wight school divisions.	The number of students with Autism Spectrum Disorders is increasing rapidly throughout the Commonwealth. School divisions are requesting assistance from the Department of Special Education and Disability Policy in implementing their professional development programs.	The partnership includes system administrators and teachers with VCU faculty.	Yes
16.	Peter Paul Development Center Collaborative	The partnership involves SEDP faculty and graduate students working with children and staff at the Peter Paul Development Center in screening, assessment, and tutoring activities.	SEDP faculty and graduate students, led by Dr. Kevin Sutherland, are providing direct service, training, technical assistance, and materials to staff at the Center.	The partnership is led by Dr. Kevin Sutherland and involves VCU Special Education faculty and staff, Peter Paul Development Center student and staff.	Yes
17.	Clinical Counseling Partnership	The partnership is designed to coordinate clinical placements for the Counselor Education Department.	The initiative ensures that an expert counselor educator plan and implement appropriate placement and supervision for counselor education students.	Dr. Jennifer Burruss, Wmsburg-James City, Hanover, Henrico, Chesterfield, Stafford, Richmond, Powhatan, Goochland School divisions and VCU.	Yes
18.	Clinical Faculty Program	A collaborative initiative with local school divisions to train clinical faculty who are prepared to guide, evaluate, and mentor candidates in our teacher preparation programs.	To prepare teachers for service in the local school divisions.	Dr. Terry Dozier and Human Resource contacts in Chesterfield, Hanover, Henrico and Richmond and VCU.	Yes
19.	Field Instruction Placement Initiative	Collaborative initiative for placement for School of Social Work students. Supervised by licensed school social workers.	Interns (under supervision) perform all school social worker tasks to support the school.	Dr. Elizabeth Dungee-Anderson and Dr. Timothy Davey and the school social worker supervisor at VCU.	No
20.	Project Metro Ready	The purpose of the project is to increase the quantity, quality, and diversity of early childhood special educators who are prepared to teach in the metropolitan area. Community based learning experiences are provided in collaboration with public schools and community agencies.	The program meets the need for new and fully credentialed early childhood special educators by providing tuition support for graduate students and conditionally licensed teachers (50 in total).	Dr. Evelyn Reed and Belinda Hooper at VCU collaborate with state and local ECSE personnel.	Yes
21.	VCU Noyce Initiative	NSF funded project to recruit and train minority secondary science teachers for high needs schools. Completion of the program results in an M.T. degree in the area of biology, chemistry, earth science and physics.	Many schools have high numbers of provisionally certified science teachers.	School divisions of Chesterfield County, Hopewell City, Richmond City, and Henrico County and VCU.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Commonwealth University
Contact Person: Dr. Diane Simon
Phone No.: (804) 828-3382
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
22.	Richmond Teacher Residency Program	Program will increase student achievement by designing and piloting an innovative approach to recruiting, preparing, and retaining bright, capable teachers for Richmond Public Schools.	Urban schools have specific challenges which traditional teacher preparation programs often do not address effectively; these teachers may be unable to meet the needs of their students and may also leave the school division in a matter of years.	Richmond Public Schools and Dr. Terry Dozier, VCU.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia Commonwealth University
Contact Person: Dr. Diane Simon
Phone No.: (804) 828-3382
Reporting Date: July 2010

	Approved Education Programs *(Only education programs approved at your institution are listed.)*	*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Social Worker*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Visual Arts PreK-12*	*English as a Second Language PreK-12*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Special Ed. - Early Childhood (Birth - Age 5)*	*Special Ed. - Adapted Curriculum K-12* (* Part of a consortium offering an Adapted Curriculum endorsement.)	*Special Ed. - General Curriculum K-12*
1.	Mary Munford Micro Teaching Partnership											X													
2.	Crestwood Micro Teaching Partnership											X													
3.	Metropolitan Health and Physical Education Masters Degree Cohort											X													
4.	Athletci Trainers (ATs) In Public Schools														X	X	X	X	X	X	X				
5.	ACT-ESL										X														
6.	eLEARN Virginia	X		X											X	X	X	X	X	X	X				
7.	Richmond Early Reading First (RERF)	X																							
8.	Urban Educator Certificate Program	X															X	X	X	X	X				
9.	Metropolitan Educational Research Consortium (MERC)		X	X	X										X	X	X	X	X	X	X		X	X	
10.	Metropolitan Educational Training Alliance (META)	X													X	X	X	X	X	X	X				
11.	The Virginia Center for Teaching International Studies															X									
12.	VCU Project COVE	X																						X	
13.	Region I Superintendents Autism Education Professional Development Consortium																					X	X	X	
14.	SEDP Paraprofessional Licensure Program	X																						X	
15.	Post-Baccalaureate Autism Certificate Program	X																				X	X	X	
16.	Peter Paul Development Center Collaborative																					X		X	
17.	Clinical Counseling Partnership				X																				
18.	Clinical Faculty Program	X			X		X	X	X	X		X	X	X	X	X	X	X	X	X	X				
19.	Field Instruction Placement Initiative					X																			
20.	Project Metro Ready	X																				X			
21.	VCU Noyce Initiative																	X	X	X	X				
22.	Richmond Teacher Residency Program														X	X	X	X	X	X	X				

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia Commonwealth University
Contact Person: Dr. Diane Simon
Phone No.: (804) 828-3382
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Chesterfield County Public Schools	The partnership established off-campus master's degree, post master's certificate, and doctoral cohorts for Chesterfield County school personnel.	The system is experiencing many retirements in the ranks of leadership positions and the shortage of applicants to fill positions. This partnership helps the system 'grow their own' applicants.	The partnership includes system administrators and teachers with VCU faculty.	Yes
2.	Hanover County Public Schools	The partnership established off-campus master's degree, post master's certificate, and doctoral cohorts for Hanover County school personnel.	The system is experiencing many retirements in the ranks of leadership positions and the shortage of applicants to fill positions. This partnership helps the system 'grow their own' applicants.	The partnership includes system administrators and teachers with VCU faculty.	Yes
3.	Henrico County Public Schools	The partnership established off-campus master's degree, post master's certificate, and doctoral cohorts for Henrico County school personnel.	The system is experiencing many retirements in the ranks of leadership positions and the shortage of applicants to fill positions. This partnership helps the system 'grow their own' applicants.	The partnership includes system administrators and teachers with VCU faculty.	Yes
4.	Richmond City Public Schools	The partnership established off-campus master's degree, post master's certificate, and doctoral cohorts for Richmond City school personnel.	The system is experiencing many retirements in the ranks of leadership positions and the shortage of applicants to fill positions. This partnership helps the system 'grow their own' applicants.	The partnership includes system administrators and teachers with VCU faculty.	Yes
5.	Fredericksburg City Public Schools and surrounding school systems	The partnership established off-campus master's degree, post master's certificate, and doctoral cohorts for Fredericksburg City and surrounding area school personnel.	The system is experiencing many retirements in the ranks of leadership positions and the shortage of applicants to fill positions. This partnership helps the system 'grow their own' applicants.	The partnership includes system administrators and teachers with VCU faculty.	No
6.	Goochland County Public Schools and surrounding school systems	The partnership established off-campus master's degree, post master's certificate, and doctoral cohorts for Goochland County and surrounding area school personnel.	The system is experiencing many retirements in the ranks of leadership positions and the shortage of applicants to fill positions. This partnership helps the system 'grow their own' applicants.	The partnership includes system administrators and teachers with VCU faculty.	No
7.	Hopewell City Public Schools and surrounding school systems	The partnership established off-campus master's degree, post master's certificate, and doctoral cohorts for Hopewell City and surrounding area school personnel.	The system is experiencing many retirements in the ranks of leadership positions and the shortage of applicants to fill positions. This partnership helps the system 'grow their own' applicants.	The partnership includes system administrators and teachers with VCU faculty.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia Commonwealth University
Contact Person: Dr. Diane Simon
Phone No.: (804) 828-3382
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Project HELP	The partnership establishes a professional development program for principals in New Kent County Schools.	The system is a small division without funding for principal development programs. This partnership helps the division principals work on specific issues of leadership as a team.	The partnership includes New Kent principals and VCU educational leadership faculty and students.	No
9.	Project All	The partnership establishes a principal development program for Richmond City Schools.	The department and Richmond City Schools received a grant to develop an urban principal development program. This program targets both the issue of principal retirements and the need for new principals and the need for principals with a strong understanding of instructional leadership.	The partnership includes VCU educational leadership faculty and Richmond City School administrators and teachers.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Intermont College
Contact Person: Dr. Brenda G'Fellers, Director of Teacher Education
Phone No.: (276) 466-7966
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Bristol, VA Public Schools	PreK-12 representatives serve on the Education Program Advisory Committee, which meets semi-annually to assess program effectiveness and school division needs. Visits are made to school divisions throughout the year to hear long and short term needs and propose ways to address those needs.	VI offers courses of study, alternate avenues for licensure, and hands-on support in collaboration with partnering school divisions. Students, other than student teachers who work full days for the entire semester, work in classrooms selected for a specific reason.	Abingdon HS, Holston HS, Battle HS, P. Henry HS, E.B. Stanley MS, Wallace MS, Adult Ed. Program, Abingdon ES, Greendale ES, High Point ES, Meadowview ES, Rhea Valley ES, Valley Institute ES, and Watauga ES.	No
2.	Washington County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	VA High School, VA Middle School, Highland View Elementary School, Joseph B. VanPelt Elementary School, Stonewall Jackson Elementary School, and Washington-Lee Elementary School.	No
3.	Bristol, TN Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	TN High School, Vance Middle School, Anderson ES, Avoca ES, Central ES, Fairmount ES, Haynesfield ES, and Holston View ES,	No
4.	Kingsport, TN Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Jefferson ES, Johnson ES, John F Kennedy ES, Lincoln ES, Robinson MiS, and Roosevelt ES, Dobyns Bennett HS.	No
5.	Russell County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Castlewood HS, Lebanon HS, Belfast-Elk Garden ES, Honaker ES, Sword's Creek ES, and Lebanon ES, Lebanon PS.	No
6.	Tazewell County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Tazewell HS, Tazewell MS, Graham IS, Cedar Bluff Es, Dudley ES, Tazewell ES, Raven ES, Richlands ES, and Springville ES.	No
7.	Dickenson County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Haysi HS, Clinchco ES, Clintwood Es, Ervinton ES, Longsfork ES, and Sandlick ES.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Intermont College
Contact Person: Dr. Brenda G'Fellers, Director of Teacher Education
Phone No.: (276) 466-7966
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
8.	Wise County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Coeburn MS, St. Paul ES, Coeburn PS, and Powell Valley PS.	No
9.	Buchanan County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Grundy HS, Twin Valley ES/MS, Riverview ES/MS, and Hurley ES/MS.	No
10.	Smyth County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Chilhowie HS, Chilhowie MS, Sugar Grove Combined, Chilhowie ES, Saltville ES, and Marion PS.	No
11.	Lee County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Elk Knob ES, Flatwoods ES, and Stickleyville ES.	No
12.	Scott County, VA Public Schools	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with VA Reading First programs, teach small lessons, and generally assist at the direction of the teacher.	Hilton ES, Shoemaker ES, Weber City ES, and Duffield PS.	No
13.	St. Anne's Catholic School	VI faculty are in contact with St. Anne's principal and faculty in order to be aware of the staffing and program needs of the school.	VI students provide assistance and support to St. Anne's school by helping in the classroom setting and with athletic programs.	PreK-8 education.	No
14.	Boys' and Girls' Club of Bristol, VA	VI faculty are in contact with club directors in order to be aware of the staffing and program needs of the club.	VI students provide assistance and support to club staff by helping with after-school tutoring and athletic programs.	After-School Tutoring Athletic Programs.	No
15.	William King Art Center	VI and Art Center are in contact through program directors to make each program aware of the other's needs.	VI and the Art Center share faculty and resources as needed. VI Visual Art students complete field experiences and internships in the PreK-12 programs sponsored by the Art Center.	PreK-12 Art Programs.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Intermont College
Contact Person: Dr. Brenda G'Fellers, Director of Teacher Education
Phone No.: (276) 466-7966
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
16.	Barter Theatre	VI and Barter Theater are in contact through program directors to make each program aware of the other's needs. VI students complete internships at Barter and assist with various productions.	VI and the Barter Theatre share faculty and resources as needed.	Theatre programs.	No
17.	People, Inc., Abingdon, VA	VI faculty teach classes to allow Head Start teachers to earn a Bachelor of Arts degree prior to the 2013 deadline.	Head Start teachers provide instruction for our young disadvantaged and special needs students.	People, Inc., Abingdon, Va and Lebanon, VA; Lee County Head Start.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia Intermont College
Contact Person: Dr. Brenda G'Fellers, Director of Teacher Education
Phone No.: (276) 466-7966
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Business and Information Technology*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*English*	*History and Social Sciences*	*Science - Biology*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.							
1.	Bristol, VA Public Schools	X	X	X	X	X	X	X	X
2.	Washington County, VA Public Schools	X	X	X	X	X	X	X	X
3.	Bristol, TN Public Schools	X	X	X	X	X	X	X	X
4.	Kingsport, TN Public Schools	X	X	X	X	X	X	X	X
5.	Russell County, VA Public Schools	X	X	X	X	X	X	X	X
6.	Tazewell County, VA Public Schools	X	X	X	X	X	X	X	X
7.	Dickenson County, VA Public Schools	X	X	X	X	X	X	X	X
8.	Wise County, VA Public Schools	X	X	X	X	X	X	X	X
9.	Buchanan County, VA Public Schools	X	X	X	X	X	X	X	X
10.	Smyth County, VA Public Schools	X	X	X	X	X	X	X	X
11.	Lee County, VA Public Schools	X	X	X	X	X	X	X	X
12.	Scott County, VA Public Schools	X	X	X	X	X	X	X	X
13.	St. Anne's Catholic School	X		X	X	X	X	X	X
14.	Boys' and Girls' Club of Bristol, VA	X	X	X	X	X	X	X	X
15.	William King Art Center	X		X		X			

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia Intermont College
Contact Person: Dr. Brenda G'Fellers, Director of Teacher Education
Phone No.: (276) 466-7966
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Business and Information Technology*	*Visual Arts PreK-12*	*Health and Physical Education PreK-12*	*English*	*History and Social Sciences*	*Science - Biology*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.							
16.	Barter Theatre	X				X			X
17.	People, Inc., Abingdon, VA	X							X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia Intermont College
Contact Person: Dr. Brenda G'Fellers, Director of Teacher Education
Phone No.: (276) 466-7966
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Polytechnic Institute and State University
Contact Person: Sue Magliaro
Phone No.: (540) 231-1802
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Southwest Virginia Professional Consortium	The purpose of this program is to develop a cadre of clinical faculty and mentors who are exemplary models of effective teaching for student teachers and beginning teachers. The program also develops and nurtures leadership abilities and exemplary practice in faculty and mentors while facilitating cooperation and communication among consortium members.	This grant-funded program addresses the recruitment and retention of qualified teachers through training faculty and mentors who work with pre-service teachers. Additionally, it addresses the need to improve mentor programs and provide meaningful professional development opportunities.	Public Schools of Roanoke City, Roanoke County, Botetourt, Craig, Floyd, Giles, Montgomery, Pulaski, Radford City, and Salem City.	Yes
2.	Montgomery County Public Schools-Teaching American History Grant (final year 2010)	The purpose of program is the acquisition of history content knowledge and the development of teaching skills in PK-12 teachers.	Improve teaching of U.S. History in MCPS ascertained by needs survey and SOL results.	MCPS-Sharon Zucherwar, social studies supervisor and Virginia Tech-David Hicks and Thomas Ewing.	Yes
3.	America on the World Stage Teaching American History Grant	David Hicks of VT serves on the Editorial Review Board to evaluate teacher work products and also serves on Advisory Board for the Transatlantic Teacher Exchange Program, as part of the grant.	Evaluate a series of lesson materials, alongside Pat Hughes and Heather Streets, that are developed by teachers who participate in the grant. D. Hicks also worked on the rubric and the focus for the types of works in which teachers should be engaging.	Albemarle County, Charlottesville City, Greene County, Madison County and Orange County Public Schools, with Andy Mink serving as contact person from UVA.	Yes
4.	Montgomery County Public Schools/Virginia Tech FIRST Robotics	High School students enhance their application of STEM concepts through hands-on applications mirroring real world processes, which improve numbers of students from underrepresented groups in STEM fields. College students are provided authentic opportunities for facilitating problem solving experiences with high school students, applying the engineering design process, and developing capacity to plan, lead, and participate in teaming processes.	This program addresses the need to provide students with STEM-related experiences.	Three high school teachers from Montgomery County Public Schools: Michael Collver, Tiffany Anton, and Charles Odum.	No
5.	* Training and Technical Assistance Center (TTAC)	Improve the educational opportunities and contribute to the success of children and youth with disabilities. TTAC services increase the capacity of schools, school personnel, service providers, and families to meet the needs of students with disabilities.	Addresses and meets the needs of students with disabilities, grades PK-12.	Special Education Directors in: Alleghany, Botetourt, Covington, Craig, Danville, Floyd, Franklin, Henry, Martinsville, Montgomery, Patrick, Pittsylvania, Roanoke City, Roanoke County, Salem, Bland, Bristol, Buchanan, Carroll, Dickenson, Galax, Giles, Grayson, Lee, Norton, Pulaski, Radford, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Polytechnic Institute and State University
Contact Person: Sue Magliaro
Phone No.: (540) 231-1802
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	Strategies for Collaborative Teaching of Mathematics in Grades 6 and 7	This collaborative project provided school-based and classroom-based professional development on mathematics instruction to grade 6 and 7 teachers in Montgomery County. In addition, the project involved those special needs teachers who worked with the grade 6 and 7 teachers.	Designed to address low statewide SOL mathematics scores for grades 6 and 7.	Montgomery County Public Schools. (Contact person was Jonathan Schulz, MCPS Mathematics Supervisor.)	No
7.	Project ESTEEM (Exploring Strategies to Engage and Empower Minority Students)	ESTEEM was designed as a sustainable community-based project focused on the enhancement of cultural identity, self-esteem, and self-efficacy in elementary-level minority children in Montgomery County. The project is designed to positively influence conceptions of identity through meaningful representations of culture through literacy integrated with science, mathematics and the arts.	In the local schools, it is common for African American/biracial/minority children to be in classrooms in which they are the only representatives of their ethnic groups. There are few to no elements in the local community with which minority children can identify. Minority children need support to build a strong sense of cultural identity.	Project ESTEEM is an after-school program that involves a collaborative effort including: (a) Virginia Tech School of Education Faculty (Brenda Brand and Mary Alice Barksdale, and doctoral students); (b) Radford University School of Ed faculty (Dr. T. Wallace); (c) the Community Group of Montgomery County; (d) the Christiansburg Institute; (e) Montgomery County Public Schools; and (f) Christiansburg Primary School.	No
8.	Studio STEM: Engaging Middle School Students in Networked Science and Engineering Projects	Studio STEM is an after-school program that implements and evaluates an inquiry-based studio experience supported by information and communication technologies. It uses engineering design activities that integrate digital modeling and social networking to engage students in investigating concepts and skills in science, technology, engineering, and math.	Studio STEM engages students in learning by capturing their situational, short-term interest in STEM/ICT topics and developing these short-term interests into longer-term interests.	SOE: Michael Evans (PI), Carol Brandt, and Brett Jones; University of Kentucky: Christine Schnittka; Shawsville Middle School: Dave Dickinson, Principal; and Boys & Girls Club of the New River Valley: Richelle Price.	Yes
9.	"University of Possibilities"	A partnership program developed by Garden Grove Elementary School to inform kindergarten and first-grade students about the importance of higher education.	Each kindergarten and first-grade classroom selected a partnering institution of higher education. Partner schools connected with students in various ways, including sharing information through a variety of electronic communications media, as well as in-person classroom visits by university personnel.	Garden Grove Elementary School (Garden Grove, CA); Virginia Teach (VT) School of Education (SOE); VT Office of Educational Research and Outreach; and Center for Instructional Technology Solutions in Industry and Education.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Polytechnic Institute and State University
Contact Person: Sue Magliaro
Phone No.: (540) 231-1802
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
10.	* Danville City Public Schools, Danville Education, Arts, and Cultural Center (DEACC) and the Center for Instructional Technology Solutions in Industry and Education Partnership (CITSIE)	CITSIE will work with DEACC, and the Galileo Magnet School to establish a video/audio center as part of an after-school program. The notion is to introduce high tech skills in an area that is of interest to disadvantaged students.	Danville City has high unemployment, high poverty, high dropout rate. Superintendent says that students pass the SOLs--need is for enrichment. DEACC is in low income neighborhood two blocks from Galileo.	Danville City Public Schools; Danville Education, Arts, and Cultural Center; and the Center for Instructional Technology Solutions in Industry and Education.	No
11.	Mary Ellen Henderson Middle School Partnership	Presented to students at Career Day regarding requirements for becoming a college professor; provided youth with experiential programs at Challenge Day demonstrating possibility of love and connection through the celebration of diversity, truth, and full expression; and, tutored ESOL students in math.	Helped students understand requirements for this career path so they could best choose appropriate classes; Challenge Day served as a proactive means of addressing common school issues such as teasing, bullying, social isolation; and tutoring for improved math understanding and performance.	Falls Church City Public Schools and Virginia Tech.	No
12.	Virginia Career VIEW	Provide career and educational resources and activities for Virginia residents from kindergarten through adulthood.	Provides hands-on activities and printed activities for grade levels K-adults through a free website www.vacareerview.org. Also conducts free counselor/educator training workshops on utilizing materials and activities with students and clients.	Virginia Department of Education: Career Clusters in Virginia; and Association of Computer-based Systems for Career Information (ACSCI).	Yes
13.	* The College Bound Summer Transition Awareness Program	Program for students with disabilities. Participants are 30 students with disabilities and their parents. In addition, 11-12 college student leaders are trained to serve as mentors to high school students.	Mutually beneficial for student and parent participants as well as for college students trained to support and mentor high school students with disabilities.	Funding from VDOE, VDRS, PepNet, donations and VT's Continuing and Professional Education; volunteers from VT, RU and NRCC including ADA office, disability services, faculty, and academic support personnel.	Yes
14.	Center for Creative Technologies in the Arts with subsidiary, IDEAS, Integrated Design+Education+Arts Studio	Works to conduct research and develop materials that use the arts and technology to develop critical and creative thinking skills in PK-12 environments. The program initiates collaborations between VT faculty and PK-12 teachers to develop and integrate products that combine the arts and technology to schools and classrooms.	IDEAS and CCTA are positioned to bring research and programming to combine the arts and technology to teach content standards while developing critical and creative thinking skills. All of these components have been identified as essential to current teaching and learning needs.	VT (SOE, School of Visual Arts, and Center for Creative Technologies in the Arts); and, schools in Craig, Floyd, Franklin, Giles, Montgomery, Patrick, Pulaski, Roanoke, and Wythe Counties, as well as cities of Roanoke and Salem .	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Polytechnic Institute and State University
Contact Person: Sue Magliaro
Phone No.: (540) 231-1802
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
15.	Northern Virginia School Counseling Leadership team (SCLT)	Collaboration between district school counseling supervisors/directors and counselor education program faculty to create effective working relationships in support of effective school counselors and school counseling programs. Partnership includes summits organized and hosted by SCLT to meet identified needs of practicing school counselors from participating school districts.	School needs: (a) to maintain lines of communication between local PK-12 school counseling supervisors/directors and university counselor education program faculty; (b) to share information on practicum and internship placements, job fairs, and school counseling issues; (c) to provide professional development programs related to 21st century school counseling programs.	Representatives from the following PK-12 school districts: Alexandria, Arlington, Fairfax, Loudoun, Prince William, and Spotsylvania. Faculty members from the following universities with counselor education programs: George Mason University, George Washington University, Marymount University, and Virginia Tech.	No

* Note that some partnerships with P-12 schools relate to School of Education (SOE) programs other than licensure programs so no licensure program is checked.

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia Polytechnic Institute and State University
Contact Person: Sue Magliaro
Phone No.: (540) 231-1802
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Latin PreK-12*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Family and Consumer Sciences*	*English as a Second Language PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Journalism (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.																						
1.	Southwest Virginia Professional Consortium	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.	Montgomery County Public Schools- Teaching American History Grant (final year 2010)																	X						
3.	America on the World Stage Teaching American History Grant																	X						
4.	Montgomery County Public Schools/Virginia Tech FIRST Robotics																		X				X	
5.	* Training and Technical Assistance Center (TTAC)																							
6.	Strategies for Collaborative Teaching of Mathematics in Grades 6 and 7		X																X					
7.	Project ESTEEM (Exploring Strategies to Engage and Empower Minority Students)	X																	X	X	X	X	X	
8.	Studio STEM: Engaging Middle School Students in Networked Science and Engineering Projects																		X				X	
9.	"University of Possibilities"	X																						
10.	* Danville City Public Schools, Danville Education, Arts, and Cultural Center (DEACC) and the Center for Instructional Technology Solutions in Industry and Education Partnership																							
11.	Mary Ellen Henderson Middle School Partnership																		X					
12.	Virginia Career VIEW				X																			
13.	* The College Bound Summer Transition Awareness Program																							
14.	Center for Creative Technologies in the Arts with subsidiary, IDEAS, Integrated Design+Education+Arts Studio														X	X								
15.	Northern Virginia School Counseling Leadership team (SCLT)				X																			

* Note that some partnerships with P-12 schools relate to School of Education (SOE) programs other than licensure programs so no licensure program is checked.

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia Polytechnic Institute and State University
Contact Person: Sue Magliaro
Phone No.: (540) 231-1802
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Partnership with Hanover High School	Understanding a master schedule and the implications for meeting student needs.	At Hanover High School, worked with the principal to develop the master schedule and professional development activities for faculty.	Virginia Tech (VT) and Hanover High School personnel: George Sadler, principal; Bettiann Aylor, senior teacher; Shelby Edmonds, guidance director.	No
2.	Partnership with Hanover High School Trade Center	Understanding how to work together as four comprehensive high schools and a trade center to develop a schedule that meets student needs, industry training hour requirements, and the specific needs of the home schools and county transportation.	Worked with Trade Center of Hanover Public Schools to develop compatible schedule to align with comprehensive high schools; included the bus schedule, alternate day format, and the adjusted schedules for early release and late arrivals.	VT faculty and Hanover personnel (Bob Stakey, director of secondary education; Vince D'Agostino, principal; Jeff Crook, principal; George Sadler, principal; and Charlie Hurd, principal).	No
3.	Virginia School Leadership Institute	VSLI is a partnership designed to prepare the next generation of educational leaders.	The Virginia School Leaders Institute is a comprehensive, in-residence, high-quality professional development experience. The institute offers two different programs: the Recently Appointed Administrators Program and the Aspiring Superintendents Program. Participants engage in multiple, hands-on activities structured to hone and expand existing skills and to sharpen decision-making ability.	The Virginia Tech School of Education, the Virginia Tech Center for Organizational and Technological Advancement, and the 19 member school divisions of the Western Virginia Public Education Consortium.	Yes
4.	Western Virginia Public Education Consortium	Forms a network of 19 school divisions, as well as faculty from Virginia Tech and Radford Universities, for professional development and support to those school divisions and universities.	Provides professional development for school leaders and instructional personnel.	Virginia Tech, Radford University, school divisions in counties of Alleghany, Bath, Bland, Botetourt, Craig, Floyd, Franklin, Giles, Henry, Montgomery, Patrick, Pulaski, Roanoke, Wythe, and the cities of Covington, Martinsville, Radford, Roanoke and Salem.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia Polytechnic Institute and State University
Contact Person: Sue Magliaro
Phone No.: (540) 231-1802
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
5.	Regional Superintendents Study Groups	Provides networking and ongoing meetings of superintendents and university participants.	Discussions serve as informal needs assessment for program planning and evaluation, as well as an ongoing communication conduit.	Superintendents in Region VI: 15; Superintendents in Region VII: 19; Representatives of the Virginia Association of School Superintendents and the Virginia School Boards Association; university participants.	No
6.	AITES Grant Partnership Promoting Women in Information Technology Careers	Partnering with superintendents, counselors, teachers, and counties in five states to promote economic development through recruiting more women to prepare for jobs in information technology.	Annually conduct workshops, along with the extension agents from each county in each state, for counselors and teachers who have been identified by their superintendents; participants design mini-grants for $300 grants aimed at recruiting women to careers in information technology.	Superintendents in the following states/counties: Virginia-Russell and Washington; Kentucky-Pike and Knott; WVA-McDowell and Summers; NC-Graham and Surry; and TN-Carter and Sullivan.	No
7.	Fairfax Educational Leadership Cohort (new cohort begins Fall 2010)	Program prepares PK-12 teachers to become school-based administrators or supervisors.	Addresses the need for school leaders in urban areas.	Fairfax County Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Field Experiences for Health and Physical Education pre-candidates and candidates	The opportunities provide a very structured learning environment for the PETE (physical education teacher education majors) pre-candidates/candidates enrolled in PHED 125, PHED 343, and PHED 344. The PETE students observe, assist and co-teach with the teachers during the field experiences.	This collaboration provided pre-candidates and candidates access to the physical education classroom environment. Their role was to observe the teacher and students in a PE classroom. Pre-candidates are given the opportunities to interact, engage in, and take part in the teaching and learning process in preparation for a teaching career.	Chesterfield County Public Schools DuPont Elementary School - Joann Tucker and Mike Crosby; Matoaca Middle School - Elizabeth Wood; Petersburg City Schools Peobody Middle School - Antionette Jackson.	Yes
2.	Field Experience with Matoaca High School	Virginia State University's Professional Education Programs Unit has partnered to provide field experiences for Introduction to Teaching II. A total of 50 students were paired with a selected teacher to observe and participate in the classroom.	This collaboration provided pre-candidates access to the classroom environment. Pre-candidates are given the opportunity to interact, engage in, and take part in the teaching and learning process in an suburban school setting. Their role was to observe how this school system implements the teaching and learning environment and begin to formulate a philosophy of teaching.	Chesterfield Public Schools Shawn Fitzgerald (Matoaca) Stephen Cunningham (Principal of Matoaca High).	Yes
3.	Field Experience with Martin Luther King Jr. Middle School	Virginia State University's Professional Education Programs Unit has partnered to provide field experiences for Introduction to Teaching II. A total of 50 students were paired with a selected teacher to observe and participate in the classroom.	This collaboration provided pre-candidates access to the classroom environment. Pre-candidates are given the opportunity to interact, engage in, and take part in the teaching and learning process in an urban school setting. Their role was to observe how this school system implements the teaching and learning environment and begin to formulate a philosophy of teaching.	Richmond Public Schools Yardley Farquason (MLK. JR) Aaron Dixon (Principal of MLK. Jr).	Yes
4.	Professional Development Series for Teachers	Provided continuing education courses to satisfy teacher/district demands relative to licensure, clinical development, and improvement in student performance.	Teacher recruitment is indicative of provisionally licensed teachers requiring needed competencies for licensure. The University facilitated on-site delivery of such needs.	Petersburg City Public Schools, Hopewell Public Schools, and Virginia State University (Professional Education Programs Unit).	Yes
5.	VSU- National Board "Take One" and Full Candidacy Support Program	Partnered with Petersburg Public Schools to identify and support teachers interested in seeking National Board Certification. The University hosted development of the first "Take One"/ NBPTS support program in Petersburg City Public Schools.	Pre-K-12 teachers were provided University support for success on the National Board's five core propositions. This collaboration will increase the number of National Board Teachers for the Petersburg Public Schools.	Virginia State University, Professional Education Programs Unit's Department of Teaching and Learning and Petersburg Public Schools, Dr. Patrick Bingham and Mrs. Gail Wade.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
6.	Student Teaching and Field Experiences Chesterfield County Public Schools	Pre-candidates from the Professional Education Programs Unit completed field experiences and student teaching in agreed upon classrooms in the division.	Virginia State University and Chesterfield County Public Schools collaborated to provide a diverse large suburban classroom experience for pre-candidates/candidates. Participation in a variety of activities which include: observations, individual and small group tutoring and instruction, and student teaching undergird the development of future teachers who are prepared to teach students from all environments.	Chesterfield County Public Schools, Phil Sword.	Yes
7	Student Teaching and Field Experiences Henrico County Public Schools	Pre-candidates from the Professional Education Programs Unit completed field experiences and student teaching in agreed upon classrooms in the division.	Virginia State University and Henrico County Public Schools collaborated to provide a large suburban and urban classroom experience for pre-candidates/candidates. Participation in a variety of activities which include: observations, individual and small group tutoring and instruction, and student teaching undergird the development of future teachers who are prepared to teach students from all environments.	Henrico County Public Schools, Ms. Seza Alddrich.	Yes
8	Student Teaching and Field Experiences Hopewell Public Schools	Pre-candidates from the Professional Education Programs Unit completed field experiences and student teaching in agreed upon classrooms in the division.	Virginia State University and Hopewell Public Schools collaborated to provide a diverse small urban classroom experience for pre-candidates/candidates. Participation in a variety of activities which include: observations, individual and small group tutoring and instruction, and student teaching undergird the development of future teachers who are prepared to teach students from all environments.	Hopewell Public Schools, Mrs. Melody Bage.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
9	Student Teaching and Field Experiences Prince George County Public Schools	Pre-candidates from the Professional Education Programs Unit completed field experiences and student teaching in agreed upon classrooms in the division.	Virginia State University and Prince George County Public Schools collaborated to provide diverse rural classroom experiences for pre-candidates/candidates. Participation in a variety of activities which include: observations, individual and small group tutoring and instruction, and student teaching undergird the development of future teachers who are prepared to teach students from all environments.	Prince George County Public Schools, Dr. Shelley Bazemore.	Yes
10	Student Teaching and Field Experiences Richmond City Public Schools	Pre-candidates from the Professional Education Programs Unit completed field experiences and student teaching in agreed upon classrooms in the division.	Virginia State University and Richmond City Public Schools collaborated to provide diverse large urban classroom experiences for pre-candidates/candidates. Participation in a variety of activities which include: observations, individual and small group tutoring and instruction, and student teaching undergird the development of future teachers who are prepared to teach students from all environments.	Richmond City Public Schools, Mrs. Valerie Dupree, and Mrs. Bernie Johnson.	Yes
11	Student Teaching and Field Experiences Petersburg City Public Schools	Pre-candidates from the Professional Education Programs Unit completed field experiences and student teaching in agreed upon classrooms in the division.	Virginia State University and Petersburg City Public Schools collaborated to provide diverse small urban classroom experiences for pre-candidates/candidates. Participation in a variety of activities which include: observations, individual and small group tutoring and instruction, and student teaching undergird the development of future teachers who are prepared to teach students from all environments.	Petersburg City Public Schools, Mrs. Gail Wade, and Dr. Patrick Bingham.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
12	Student Teaching and Field Experiences Dinwiddie County Public Schools	Pre-candidates from the Professional Education Programs Unit completed field experiences and student teaching in agreed upon classrooms in the division.	Virginia State University and Dinwiddie County Public Schools collaborated to provide diverse small rural classroom experience for pre-candidates/candidates. Participation in a variety of activities which include: observations, individual and small group tutoring and instruction, and student teaching undergird the development of future teachers who are prepared to teach students from all environments.	Dinwiddie County Public Schools, Mrs. Linda Ampy.	Yes
13	Adaptive Physical Education with Petersburg City Public Schools and Chesterfield County Public Schools	The collaboration was a project designed to provide VSU HPER pre-candidates and candidates the opportunity to work with students with various mental and physical disabilities. This was done in conjunction with the Motor Learning and Adapted Physical Education classes.	This collaboration involved students with mental and physical disabilities and pre-candidate and candidates from Virginia State University's Health and Physical Education Program. The pre-candidates and candidates designed games and adapted activities for the students with disabilities.	Petersburg City Public Schools, Chesterfield County Public Schools, and Virginia State University (HPER Department).	Yes
14	District 8 Southside Region History Day	Virginia State University conducted a Virginia History Day competition for High School students. Students competed in different categories from Oration to Visual Presentations.	Students had an opportunity to expand their knowledge of History and extend learning beyond the classroom	Virginia State University (History & Philosophy Departments), Cosby High School (Midlothian), The New Community School (Richmond), and Lucille Brown Middle School (Richmond).	Yes
15	PRAXIS II Prep Workshop	Provided workshops to prepare provisionally licensed teachers to take the Mathematics Content PRAXIS EXAM (0061).	School systems were assisted in filling the need for licensed Secondary Mathematics Teachers	Virginia State University (Mathematics Department) Chesterfield Public Schools, and Richmond Public Schools.	Yes
16	Provisional Mathematics Teachers Collaboration	A partnership has been established between the Mathematics Department at Virginia State University and Chesterfield County Schools to train and assist provisionally licensed mathematics teachers with PRAXIS II.	This partnership helps Chesterfield Public School have highly qualified Mathematics teachers for the classroom.	Virginia State University (Mathematics Department) and Chesterfield County Public Schools.	Yes
17	Virginia State University Future Teacher Career Fair	This Career Fair was designed to recruit high school students into the teaching profession. Teacher Cadet and Future Teacher clubs were targeted to come to Virginia State University and learn about the Teacher Education Program through workshops and college tours.	Students from Regions 1, 5 and 8 attended the career fair to encourage them to pursue teaching as a career. School divisions expressed an interest for assisting in growing their own teachers.	Buckingham County, Sussex County, Suffolk County, Petersburg City, Cumberland County, Prince Williams County, Prince William County, and Hopewell Public Schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
18	Virginia State University SEA Shadowing Day	This event was a collaboration with the Student Education Association the Professional Education Programs Unit and multiple public schools	Students from local school divisions who participate in Teacher Cadet programs and Teach for Tomorrow programs spent a day shadowing VSU pre-candidates and candidates to prepare for teaching careers.	Sussex County, Suffolk County, Petersburg City, Cumberland County, Prince Williams County, Prince William County, and Hopewell Public Schools.	No
19	Dual Credit courses for Prince George County Public Schools	Mathematics or Statistics courses offered at the high school, receiving both high school and college credit.	This partnership helps students from Prince George County take Math courses for college credit through Virginia State University.	Prince George County Public Schools, Dr. Shelley Bazemore.	Yes
20	HBCU UP STEM Project	Virginia State University's High School Senior Enhancement (HSSE) program was a program that introduced rising high school seniors to Science, Technology, Engineering, and Mathematics (STEM) fields and boost their desire to select a STEM field for further study as a potential career.	This program provides high school students exposure to engineering, mathematics, and science classes to promote exploration into STEM careers and create a desire to study STEM areas in college.	Virginia State University School of Engineering, Science, and Technology Regions 1, 5, and 8.	No
21	Counseling Practicum/Internship Programs in Richmond Public School	Partnership programs were held in Richmond City Public Schools system for graduate candidates in School Counseling.	These practicum/internship programs are fulfilling the school need for the development of future qualified school counselors. These school counselor candidates were well received and assisted in the educational development of children in urban, rural and suburban schools.	Richmond Public School Divisions, Mrs. Bernette Johnson.	Yes
22	Professional Development for local School Counselors Petersburg Public Schools	A Professional Development workshop was held on November 1, 2009 for all Petersburg School Counselors	A professional development program was conducted on the role of the school counselor in program assessment at their schools. School counselors were given examples of program assessment models, appropriate for their schools, that would make them more effective.	Petersburg Public Schools, Mrs. Gail Wade.	Yes
23	Counseling Practicum/Internship programs in Henrico County Public Schools	Collaboration program with Henrico County Public Schools division for graduate candidates in School Counseling.	These practicum/internship programs are fulfilling the school need for the development of future qualified school counselors. These school counselor candidates assisted in the educational development of children in urban and suburban settings.	Henrico County Public Schools, Ms. Seza Aldrich.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
24	Counseling Practicum/Internship programs in Chesterfield County Public Schools	Collaboration program with Chesterfield County Schools for graduate candidates in School Counseling.	These practicum/internship programs are fulfilling the school need for the development of future qualified school counselors. These school counselor candidates assisted in the educational development of children in urban and suburban settings.	Chesterfield County Public Schools, Mr. Philip Sword.	Yes
25	Counseling Practicum/Internship programs in Prince George County Public Schools	Collaboration program with Prince George County Schools for graduate candidates in School Counseling.	These practicum/internship programs are fulfilling the school need for the development of future qualified school counselors. These school counselor candidates assisted in the educational development of children in rural settings.	Prince George County Public Schools, Dr. Bobby Browder.	Yes
26	Counseling Practicum/Internship programs in Sussex County Public Schools	Collaboration program with Sussex County Public Schools for graduate candidates in School Counseling.	These practicum/internship programs are fulfilling the school need for the development of future qualified school counselors. These school counselor candidates assisted in the educational development of children rural settings.	Sussex County Public Schools, Dr. Charles Harris.	Yes
27	Counseling Practicum/Internship programs in Petersburg Public Schools	Collaboration program with Petersburg Public Schools for graduate candidates in School Counseling.	These practicum/internship programs are fulfilling the school need for the development of future qualified school counselors. These school counselor candidates assisted in the educational development of children in urban settings.	Petersburg Public Schools, Mrs. Gail Wade.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*School Counselor PreK-12*	*Agricultural Education*	*Family and Consumer Sciences*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Driver Education (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.															
1.	Field Experiences for Health and Physical Education pre-candidates and candidates						X										X
2.	Field Experience with Matoaca High School	X			X	X	X	X	X	X	X	X	X	X	X	X	
3.	Field Experience with Martin Luther King Jr. Middle School	X			X	X	X	X	X	X	X	X	X	X	X	X	
4.	Professional Development Series for Teachers	X														X	
5.	VSU- National Board "Take One" and Full Candidacy Support Program	X														X	
6.	Student Teaching and Field Experiences Chesterfield County Public Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	
7.	Student Teaching and Field Experiences Henrico County Public Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	
8.	Student Teaching and Field Experiences Hopewell Public Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	
9.	Student Teaching and Field Experiences Prince George County Public Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	
10.	Student Teaching and Field Experiences Richmond City Public Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	
11.	Student Teaching and Field Experiences Petersburg City Public Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	
12.	Student Teaching and Field Experiences Dinwiddie County Public Schools	X			X	X	X	X	X	X	X	X	X	X	X	X	
13.	Adaptive Physical Education with Petersburg City Public Schools and Chesterfield County Public Schools						X										
14.	District 8 Southside Region History Day										X						
15.	PRAXIS II Prep Workshop		X									X					
16.	Provisional Mathematics Teachers Collaboration		X									X					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Mathematics Specialist for Elem./Middle Ed.*	*School Counselor PreK-12*	*Agricultural Education*	*Family and Consumer Sciences*	*Health and Physical Education PreK-12*	*Music Education - Instrumental PreK-12*	*Music Education - Vocal/Choral PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Physics*	*Special Ed. - General Curriculum K-12*	*Driver Education (add-on endorsement)*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.															
17.	Virginia State University Future Teacher Career Fair	X			X	X	X	X	X	X	X	X	X	X	X	X	
18.	Virginia State University SEA Shadowing Day	X			X	X	X	X	X	X	X	X	X	X	X	X	
19.	Dual Credit courses for Prince George County Public Schools											X					
20.	HBCU UP STEM Project											X	X	X	X		
21.	Counseling Practicum/Internship Programs in Richmond Public School			X													
22.	Professional Development for local School Counselors Petersburg Public Schools			X													
23.	Counseling Practicum/Internship programs in Henrico County Public Schools			X													
24.	Counseling Practicum/Internship programs in Chesterfield County Public Schools			X													
25.	Counseling Practicum/Internship programs in Prince George County Public Schools			X													
26.	Counseling Practicum/Internship programs in Sussex County Public Schools			X													
27.	Counseling Practicum/Internship programs in Petersburg Public Schools			X													

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Tiers of Possibility Principal Preparation Program	This was a collaborative effort between Dinwiddie County Schools, Petersburg City Schools, and the Cameron Foundation. The school divisions selected five candidates each to enroll in a Masters degree program here at VSU in order to become endorsed as PK12 school administrators.	School Divisions needed leaders with greater vision and that are more in tune to today's educational forces and phenomena. Professional development activities for all of the assistant principals and principals were provided. All ten candidates have graduated with a Masters degree in EDAS.	Petersburg City Schools: Dinwiddie County Public Schools; Virginia State University; The Cameron Foundation.	Yes
2.	Administration and Supervision Cohort - Chesterfield County Schools	Eight candidates from Chesterfield County schools are participating in an EDAS cohort with the goal of acquiring a Master's Degree in EDAS.	County administrators requested that VSU offer a cohort in Chesterfield for teachers who choose to enroll. Eight candidates enrolled initially. This is a 36 hr. program designed to provide the candidates with the same experience that they would receive if they were on campus.	Chesterfield County Public Schools and Virginia State University.	No
3.	Organizational Leadership for Teachers	Sussex County officials requested that we offer a Masters degree program to selected teachers in the area of Organizational Leadership. The goal was to prepare more teachers for leadership type roles by giving them a stronger base in leadership theory. Eighteen candidates were selected from app. forty names.	Sussex County Schools is a very small rural division approximately 40 miles from VSU. The needs there are unique in that teacher turnover is not as great and teachers tend to stay in the division longer. Greater need to grow well trained leaders for today and tomorrow. Data analysis, team building, and decision making skills all need to be developed. This is the goal of the program. Not to prepare principals, but capable leaders who can think like principals.	Sussex County Public Schools and Virginia State University.	Yes
4.	Internship	Dinwiddie County provided candidates an opportunity to complete their internships with practicing administrators within their schools.	All EDAS candidates are required to complete 400+ hours of supervised internship activities to complete their program. School administrators are briefed and trained on the conceptual framework, and work very closely with the University supervisor to maintain quality within the program.	Sutherland Elementary School, Dinwiddie Elementary School, Midway Elementary School, Dinwiddie Junior High School, Sunnyside Elementary School, and Dinwiddie High School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
5.	Internship	Petersburg City Schools provided candidates an opportunity to complete their internships with practicing administrators within their schools.	All EDAS candidates are required to complete 400+ hours of supervised internship activities to complete their program. School administrators are briefed and trained on the conceptual framework, and work very closely with the University supervisor.	Walnut Hill Elementary School, Petersburg High School, Robert E. Lee Elementary School, Vernon Johns Middle School, Albert Hill Elementary School.	Yes
6.	Internship	Chesterfield County Schools provided candidates an opportunity to complete their internships with practicing administrators within their schools.	All EDAS candidates are required to complete 400+ hours of supervised internship activities to complete their program. School administrators are briefed and trained on the conceptual framework, and work very closely with the University supervisor.	Chesterfield Community High School.	Yes
7.	Internship	Richmond City Public Schools provided candidates an opportunity to complete their internships with practicing administrators within their schools.	All EDAS candidates are required to complete 400+ hours of supervised internship activities to complete their program. School administrators are briefed and trained on the conceptual framework, and work very closely with the University supervisor.	JEB Stuart Elementary School, Boushall Middle School, John Marshall High School.	Yes
8.	Internship	Prince George County Schools provided candidates an opportunity to complete their internships with practicing administrators within their schools.	All EDAS candidates are required to complete 400+ hours of supervised internship activities to complete their program. School administrators are briefed and trained on the conceptual framework, and work very closely with the University supervisor.	JEJ Moore Middle School.	Yes
9.	Internship	Private School(Collegiate Upper School) provided candidates an opportunity to complete their internships with practicing administrators within their schools .	All EDAS candidates are required to complete 400+ hours of supervised internship activities to complete their program. School administrators are briefed and trained on the conceptual framework, and work very closely with the University supervisor.	The Collegiate School.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
10.	Hopewell City Public Schools	Faculty members are serving as grant program evaluator for a Department of Defense grant at Harry E. James Elementary School in Hopewell, VA. Specific responsibilities include observations of after-school program, data analysis of student performance on SOL's in Reading and Math based on participation in the Success Maker remediation program.	Results of this grant-sponsored program evaluation will provide the school and school district with data to determine the effectiveness of the remediation program. Specific program components to be evaluated are military vs. non-military student differences as well as those who received the remediation.	Tracy Walker (VSU); Justina Osa (VSU); Cheryl Riggins (Hopewell City); Matt Robeson (Pearson).	Yes
11.	Petersburg City Public Schools	Faculty from the Doctoral Studies and School Counseling Department collaborated to provide professional development trainings for school counselors in Petersburg City Public Schools related to assessment of the guidance and school counseling program and program activities	The partnership allowed the VSU faculty to work with school-based staff to create solutions for assessing the effectiveness of the school counseling departments and counselors. VSU faculty were able to share details regarding the ASCA National Model and how the local school division can use the tools to evaluate their programs.	Tracy Walker (VSU); Claire Robinson (VSU); Sylvia Statton (VSU); Andrean Oliver (VSU); Petersburg City School Counselors.	yes
12.	Hopewell City Public Schools	Dr. Osa, Chair of the Department of Doctoral Studies and Dr. Winston Odom, Superintendent Hopewell Public Schools, are spearheading the initiative to study the variables that impact dropout and teen pregnancy rates in the Tri-City area.	The partnership and collaboration provides research opportunities between the Department of Doctoral Studies and Hopewell Public Schools. Dr. Odom identified some issues in the Hopewell community that involved the school system related to student drop-out prevention.	Hopewell Public School, Dr. Winston Odom, Superintendent.	No
13.	Leadership Internship for Doctor of Education Candidates	Candidates for the degree of Doctor of Education (Ed.D.) must complete 90 hours of field service with a District Level Administrator.	The internship program provides significant opportunities for candidates to synthesize and apply the knowledge and practice necessary to develop leadership skills through substantial, sustained, standards-based work in real settings, planned and guided cooperatively.	USAID-Washington, DC; Dr. Carolyn Coleman, Mission Director.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
14.	Leadership Internship for Doctor of Education Candidates	Candidates for the degree of Doctor of Education (Ed.D.) must complete 90 hours of field service with a District Level Administrator.	The internship program provided significant opportunities for candidates to synthesize and apply the knowledge and practice necessary to develop leadership skills through substantial, sustained, standards-based work in real settings, planned and guided cooperatively.	Virginia Department of Education Dr. Sandra Ruffin, Division of Federal Program Monitoring.	Yes
15.	Leadership Internship for Doctor of Education Candidates	Candidates for the degree of Doctor of Education (Ed.D.) must complete 90 hours of field service with a District Level Administrator.	The internship program provided significant opportunities for candidates to synthesize and apply the knowledge and practice necessary to develop leadership skills through substantial, sustained, standards-based work in real settings, planned and guided cooperatively.	Petersburg Public Schools, Dr. Brenda Petteway, Director, Secondary Instruction and Dr. Patrick Bingham, Director of Human Resources.	Yes
16.	Leadership Internship for Doctor of Education Candidates	Candidates for the degree of Doctor of Education (Ed.D.) must complete 90 hours of field service with a District Level Administrator.	The internship program provided significant opportunities for candidates to synthesize and apply the knowledge and practice necessary to develop leadership skills through substantial, sustained, standards-based work in real settings, planned and guided cooperatively.	Hopewell City Schools, Dr. Winston Odom, Superintendent.	Yes
17.	Leadership Internship for Doctor of Education Candidates	Candidates for the degree of Doctor of Education (Ed.D.) must complete 90 hours of field service with a District Level Administrator.	The internship program provided significant opportunities for candidates to synthesize and apply the knowledge and practice necessary to develop leadership skills through substantial, sustained, standards-based work in real settings, planned and guided cooperatively.	Prince Edward County Schools, Dr. Patricia Watkins, Superintendent.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene/ John Blackwell
Phone No.: (804) 524-5742/(804) 524-5929
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
18.	Leadership Internship for Doctor of Education Candidates	Candidates for the degree of Doctor of Education (Ed.D.) must complete 90 hours of field service with a District Level Administrator.	The internship program provided significant opportunities for candidates to synthesize and apply the knowledge and practice necessary to develop leadership skills through substantial, sustained, standards-based work in real settings, planned and guided cooperatively.	Chesterfield Public Schools, Dr. Robert Wingfield, Director of Middle Schools.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Union University
Contact Person: Wilbert L. Jenkins
Phone No.: (804) 257-5743
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Saturday Academy	The Saturday Academy is a bridge program for 9th graders designed to serve as an early orientation to college life.	John Marshall High School needs assistance to increase their respective number of graduates pursuing post-secondary education.	VUU School of Education, Psychology and IDS is partnering with John Marshall on this project and has received grant funds to implement the project.	Yes
2.	Pre-Service Teacher Math and Science Initiative	This project provides scholarships and mentoring for 10 students to earn a degree in math or science and be endorsed to teach grades 6-12. Funding has been provided for three years by Altria Group, Inc.	Richmond Public School Division has a critical shortage of highly qualified math and science teachers.	The grant was awarded by Altria Group, Inc. to train math and science teachers for Richmond Public School Division.	Yes
3.	Early Field Experience Tutoring Program	The project provides tutoring in the academic core areas for students who need assistance in meeting the SOL requirements. VUU pre-service candidates are assigned to schools based on needs identified by the partnering schools and tutor the students assigned to them at designated times.	The Early Field Experience Tutoring project enhances the opportunity for students in academic difficulty to receive additional assistance in order to meet the SOL requirements.	VUU (School of Education, Department English, Mathematics, Science and Social Studies) and Overby-Sheppard Elementary School, Martin Luther King, Jr., Middle School and Armstrong High.	No
4.	Teacher 2 Teacher Conference	Teacher 2 Teacher is an annual conference designed to provide teachers the latest trends and best practices in teaching science, mathematics, English and social studies. The workshop format of the conference allows teacher participants to serve as presenters and share successful classroom instructional practices.	The conference provides the opportunity for PK-12 teachers to improve their instructional practices to better meet the needs of their students.	VUU (Schools of Education, Business and Dept. English, Science, History/Social Sciences and Math) Richmond City Schools, Chesterfield Co. Schools, Henrico Co. Public Schools, Charles City Schools.	No
5.	Students Teachers: Partnering for Success	This collaboration provides ten weeks of supervised experience under a master teacher for student teachers to complete their capstone course at the school site.	Student teaching is designed to prepare tomorrow's teachers to transition successfully into the teaching profession.	Virginia Union's approved programs and the school divisions of Richmond, Henrico, King William and Charles City.	No
6.	Early Field Experience for Tomorrow's Teachers	This experience enables students to gain greater understanding about teaching for learning as they progress through the teacher education program. Students observe teachers and perform some instructional tasks assigned by the classroom teacher.	Early field experience gives veteran teachers the opportunity to inspire and encourage tomorrow's teachers to aspire to become master teachers.	Virginia Union's approved programs and the school divisions of Richmond, Henrico, King William and Charles City.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Union University
Contact Person: Wilbert L. Jenkins
Phone No.: (804) 257-5743
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	University Faculty Support Program	This project provides support for beginning teachers. Improving classroom practice is the focus of this collaboration. University faculty from all approved programs provides workshops and consultation upon request.	The clinical faculty support program is critical in responding to the schools' need for additional support mechanism for beginning teachers to transition smoothly into the teaching profession.	VUU (Schools of Education and Business Departments of English, Science, Social Sciences, Mathematics) and Richmond City, Henrico Co., Chesterfield Co., and Charles City Co. public schools.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia Union University
Contact Person: Wilbert L. Jenkins
Phone No.: (804) 257-5743
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Business and Information Technology*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.							
1.	Saturday Academy	X	X	X	X	X	X	X	X
2.	Pre-Service Teacher Math and Science Initiative					X	X	X	
3.	Early Field Experience Tutoring Program			X	X	X	X		
4.	Teacher 2 Teacher Conference	X	X	X	X	X	X	X	X
5.	Students Teachers: Partnering for Success	X	X	X	X	X	X	X	X
6.	Early Field Experience for Tomorrow's Teachers	X	X	X	X	X	X	X	X
7.	University Faculty Support Program	X	X	X	X	X	X	X	X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia Union University
Contact Person: Wilbert L. Jenkins
Phone No.: (804) 257-5743
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Wesleyan College
Contact Person: Stacey L. Wollerton
Phone No.: (757) 455-3138
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Shelton Park Reading Partnership	Students are given the opportunity to observe reading instruction for five hours in an elementary reading classroom or various reading classrooms. This allows students in the reading course to see how teachers implement the programs.	While working in the elementary classrooms, students observe reading instruction provided to groups and individuals. Students can assist with reading tasks.	Dr. Jayne Sullivan, Reading Professor VWC; LouAnne Metzger, Principal, Shelton Park Elementary; Stacey Wollerton, Director of Field Experiences; and students enrolled in EDUC 320.	No
2.	Student Teaching Placements (Virginia Beach, Chesapeake, Norfolk)	Student teachers are placed in two settings in two local school divisions. Students seeking elementary certification are placed in K-3 and 4-5; students seeking secondary certification are placed in middle and high schools; special education students are placed in elementary and high school; and K-12 certification are placed in elementary and high school.	Students are responsible for all aspects of the day to day instruction of their 7.5 week placement Students plan and provide direct instruction under the supervision of a cooperating teacher and college supervisor.	Stacey Wollerton, Director of Field Experiences; student teaching supervisors; cooperating teachers from local school divisions; and administrators from local school divisions.	No
3.	Practicum Field Experiences Elementary PreK-6, Secondary 6-12, K-12, Middle School, Special Education (Virginia Beach, Chesapeake, Norfolk)	All practicum students spend a total of 80 hours (50 supervised) in the field covering all areas of their certification levels. Special Education students spend an additional 25 hours in a placement with a school psychologist to observe and participate in testing administration and interpretation.	Students often assist with groups or individual students, allowing the teacher more time to work with others. Students plan and provide direct instruction for three lessons under the supervision of a cooperating teacher.	Stacey Wollerton, Director of Field Experiences; course instructors; and cooperating teachers from local school divisions.	No
4.	Virginia Wesleyan College National Board Certification Support Program	Virginia Wesleyan College, in partnership with the National Board for Professional Teaching Standards (NBPTS) and the Southeast Virginia National Board Certified Teacher Regional Network (SEVA), has developed and coordinates the program to support Virginia Region II teachers in all aspects of National Board Certification, covering all contents areas K-12.	The Program offers pre-candidate and active candidate professional development and guided study courses, mentors, mentor workshops, recognition receptions, National Board Academies, Outreach information sessions, and coordination for all NBPTS initiatives.	Virginia Wesleyan College (VWC); the National Board for Professional Teaching Standards (NBPTS); and the Southeast Virginia National Board Certified Teacher Regional Network (SEVA).	Yes
5.	The Take Five Program	In collaboration with Southside Hampton Roads school divisions, Virginia Wesleyan College provides a 50 percent tuition reduction for all provisionally licensed teachers.	Take Five is an opportunity offered to all provisionally licensed teachers to provide an academic and financial incentive to complete the VDOE course requirements and enhance the retention of provisionally licensed teachers to full licensure.	Virginia Wesleyan College;, Norfolk Public Schools; Chesapeake Public Schools; Suffolk Public Schools; Virginia Beach City Public Schools; and Portsmouth Public Schools.	Yes
6.	Special Education	In collaboration with Norfolk Public Schools, students seeking special education certification shadow a school psychologist for 10 hours to observe the administration of tests for the identification of special education services.	This program helps meet the needs of the community by providing students an opportunity to be more knowledgeable about the testing process.	Virginia Wesleyan College; and Norfolk Public Schools, coordinated through Dr. Harolyn Katherman.	No

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 1: Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Wesleyan College
Contact Person: Stacey L. Wollerton
Phone No.: (757) 455-3138
Reporting Date: July 2010

Number	Education Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
7.	Teaching and Learning in the Bayside Community Bayside Elementary	Administrators and teachers met and exchanged e-mails in the spring of 2008 with VWC faculty to explore the special needs of students in the Bayside schools, which have one of the highest percentages of students who qualify for reduced rate lunches in the city. It was decided that it would be beneficial for representatives from each level to meet with each other and faculty at VWC to explore ways to enhance the educational process for students from Pre-K to the college level.	In the fall of 2008, representatives from the elementary, middle, and high school levels will meet with faculty from Education and the Liberal Arts to identify needs and work on a plan to deal with the concerns of teachers and administrators in the Bayside section of the city of Virginia Beach.	Mr. George Mackay, Principal, Williams Elementary; and Dr. Malcolm Lively, VWC Professor, VWC Liberal Arts Faculty.	No
8.	Teaching and Learning in the Bayside Community Bayside Middle School	Administrators and teachers met and exchanged e-mails in the spring of 2008 with VWC faculty to explore the special needs of students in the Bayside schools, which have one of the highest percentages of students who qualify for reduced rate lunches in the city. It was decided that it would be beneficial for representatives from each level to meet with each other and faculty at VWC to explore ways to enhance the educational process for students from Pre-K to the college level.	In the fall of 2008, representatives from the elementary, middle, and high school levels will meet with faculty from Education and the Liberal Arts to identify needs and work on a plan to deal with the concerns of teachers and administrators in the Bayside section of the city of Virginia Beach.	Dr. Barbara O. Cooper, Principal; and Dr. Malcolm Lively, VWC Professor, VWC Liberal Arts Faculty.	No
9.	Teaching and Learning in the Bayside Community Bayside High School	Administrators and teachers met and exchanged e-mails in the spring of 2008 with VWC faculty to explore the special needs of students in the Bayside schools, which have one of the highest percentages of students who qualify for reduced rate lunches in the city. It was decided that it would be beneficial for representatives from each level to meet with each other and faculty at VWC to explore ways to enhance the educational process for students from Pre-K to the college level.	In the fall of 2008, representatives from the elementary, middle, and high school levels will meet with faculty from Education and the Liberal Arts to identify needs and work on a plan to deal with the concerns of teachers and administrators in the Bayside section of the city of Virginia Beach. Bayside faculty assisted in the hiring of our new faculty member.	Ms. Kay Thomas, Principal; Ms. Bermina Nickerson, Assistant Principal; and Dr. Malcolm Lively, VWC Professor, VWC Liberal Arts Faculty.	No
10.	Marlin Reads	VWC Education Certification student volunteers read every other Friday for 30 minute increments with students in a one-on-one setting. The program is run with Diamond Springs and Newtown Elementary.	In the fall of 2009, students began volunteering with the Marlin Reads program.	Daine Hotaling, VWC; Community Service, VWC Students; and Bayside Community.	Yes
11.	VWC Neighborhood Tutoring Program	VWC Education Certification students serve as tutors through the neighborhood tutoring program, working with students grades 1-5 every Tuesday and Thursday during the semester.	Students are given an opportunity to work one-on-one, or in a small group, with students to assist with homework as well as craft projects. The program also assists the members of the Bayside community and the students enrolled with extra assistance with homework and skills.	Daine Hotaling, VWC; Community Service, VWC Students; and Bayside Community.	Yes

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia Wesleyan College
Contact Person: Stacey L. Wollerton
Phone No.: (757) 455-3138
Reporting Date: July 2010

Approved Education Programs *(Only education programs approved at your institution are listed.)*		*Elementary Education PreK-6*	*Middle Education 6-8*	*French PreK-12*	*German PreK-12*	*Spanish PreK-12*	*Visual Arts PreK-12*	*English*	*History and Social Sciences*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Special Ed. - General Curriculum K-12*
Number	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below.												
1.	Shelton Park Reading Partnership	X												X
2.	Student Teaching Placements (Virginia Beach, Chesapeake, Norfolk)	X	X	X	X	X	X	X	X	X	X	X	X	X
3.	Practicum Field Experiences Elementary PreK-6, Secondary 6-12, K-12, Middle School, Special Education (Virginia Beach, Chesapeake, Norfolk)	X	X	X	X	X	X	X	X	X	X	X	X	X
4.	Virginia Wesleyan College National Board Certification Support Program	X	X	X	X	X	X	X	X	X	X	X	X	X
5.	The Take Five Program	X	X	X	X	X	X	X	X	X	X	X	X	X
6.	Special Education	X												X
7.	Teaching and Learning in the Bayside Community Bayside Elementary	X		X	X	X								X
8.	Teaching and Learning in the Bayside Community Bayside Middle School	X	X	X	X	X	X	X	X	X	X	X	X	X
9.	Teaching and Learning in the Bayside Community Bayside High School			X	X	X	X	X	X	X	X	X	X	X
10.	Marlin Reads	X	X											X
11.	VWC Neighborhood Tutoring Program	X	X											X

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations (8VAC20-542-40.7.b)
Part 3: Administration and Supervision Programs

Name of Institution: Virginia Wesleyan College
Contact Person: Stacey L. Wollerton
Phone No.: (757) 455-3138
Date: July 2010

Number	Administration and Supervision Programs - Partnership and Collaboration Name	Partnership and Collaboration Description - Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of School Leadership Needs - Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified school leadership needs of the school community.	Partners and Collaborators - Please list the names of the entities that took part in the partnership and collaboration.	Evidence of Agreement - Is there written documentation with the partners and collaborators? Yes or No?
1.	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

Board of Education Agenda Item

Item: P. **Date:** November 18, 2010

Topic: Final Review of a Recommendation of the Advisory Board on Teacher Education and Licensure (ABTEL) to Grant Approval to Add New Education (Endorsement) Programs at James Madison University, Longwood University, Lynchburg College, Radford University, Shenandoah University, University of Richmond, The University of Virginia's College at Wise, Virginia Intermont College, and Virginia State University

Presenter: Mrs. Patty S. Pitts, Assistant Superintendent for Teacher Education and Licensure

Telephone Number: (804) 371-2522 **E-Mail Address:** Patty.Pitts@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- ____ State or federal law or regulation
- _X_ Board of Education regulation
- ____ Other: _____

_X_ Action requested at this meeting ____ Action requested at future meeting: _____

Previous Review/Action:

____ No previous board review/action

_X_ Previous review/action
date October 28, 2010
action The Board of Education accepted this item for first review.

Background Information:

The *Regulations Governing the Review and Approval of Education Programs in Virginia* (8VAC20-542-10 et seq.), effective September 21, 2007, require colleges and universities that offer programs for the preparation of professional school personnel to obtain education program (endorsement) approval from the Board of Education. Requests to offer new education endorsement programs are submitted to the Department of Education. Personnel in the Division of Teacher Education and Licensure and program specialists within the Department of Education review the programs to ensure competencies have been addressed. The Advisory Board on Teacher Education and Licensure (ABTEL) reviews and makes recommendations to the Board of Education on approval of Virginia education programs for school personnel. Final authority for program approval rests with the Board of Education. Requests for new program endorsements approved by the Board of Education will receive a rating of *Approved*; *Approved with Stipulations*; or *Approval Denied*.

The *Regulations Governing the Review and Approval of Education Programs in Virginia*, in part, stipulate the following:

8VAC20-542-20. Administering the regulations.

D. Institutions of higher education seeking approval of an education program shall be accredited by a regional accrediting agency….

H. Education programs shall be approved under these regulations biennially based on compliance with the criteria described in 8VAC20-542-40….

8VAC20-542-40. Standards for biennial approval of education programs.

Approved education programs in Virginia shall have national accreditation or be accredited by a process approved by the Board of Education and demonstrate achievement biennially of the following accountability measures:

1. Candidate progress and performance on prescribed Board of Education licensure assessments. Candidate passing rates, reported by percentages, shall not fall below 70 percent biennially for individuals completing and exiting the program. Achievement of an 80 percent biennial passing rate shall be required by July 1, 2010. Candidates completing a program shall have successfully completed all coursework, required assessments, including those prescribed by the Board of Education, and supervised student teaching or internship. Candidates exiting a program shall have successfully completed all coursework, regardless of whether the individuals attempted, passed, or failed required assessments, including those prescribed by the Board of Education, and/or who may not have completed supervised student teaching or required internship.

2. Candidate progress and performance on an assessment of basic skills as prescribed by the Board of Education for individuals seeking entry into an approved education preparation program….

3. Structured and integrated field experiences to include student teaching requirements….

4. Evidence of opportunities for candidates to participate in diverse school settings that provide experiences with populations that include racial, economic, linguistic, and ethnic diversity throughout the program experiences….

5. Evidence of contributions to preK-12 student achievement by candidates completing the program….

6. Evidence of employer job satisfaction with candidates completing the program….

7. Partnerships and collaborations based on preK-12 school needs….

Summary of Major Elements:

James Madison University, Longwood University, Lynchburg College, Radford University, Shenandoah University, University of Richmond, The University of Virginia's College at Wise, Virginia Intermont University, and Virginia State University have submitted requests to add new endorsement programs in the areas noted on the following chart:

Institution	Endorsement Program Requested	Level of Program
James Madison University	• Foreign Language PreK-12 – Italian • Mathematics Specialist for Elementary and Middle Education	Undergraduate Graduate
Longwood University	• Algebra I – Add-on Endorsement	Graduate
Lynchburg College	• Special Education – General Curriculum K-12	Undergraduate
Radford University	• Dance Arts PreK-12 • Science – Biology • Science – Chemistry • Science – Earth Science • Science – Physics • Special Education – Hearing Impairments PreK-12	Undergraduate Graduate Graduate Graduate Graduate Graduate
Shenandoah University	• Career Technology Education – Business and Information Technology • Elementary Education PreK-6 • English • History and Social Sciences • Mathematics – 6-12 • Middle Education 6-8 • Science – Biology • Science – Chemistry	Graduate Graduate Graduate Graduate Graduate Graduate Graduate Graduate
University of Richmond	• Special Education – General Curriculum K-12	Undergraduate/ Graduate
The University of Virginia's College at Wise	• Theatre Arts PreK-12	Undergraduate
Virginia Intermont College	• Theatre Arts PreK-12	Undergraduate
Virginia State University	• Algebra I – Add-on Endorsement	Graduate

On October 4, 2010, the Advisory Board on Teacher Education and Licensure recommended that the Board of Education grant "Approved" status to the new education (endorsement) programs at James Madison University, Longwood University, Lynchburg College, Radford University, Shenandoah University, University of Richmond, The University of Virginia's College at Wise, Virginia Intermont University, and Virginia State University.

Program endorsement competencies, based on the *Regulations Governing the Review and Approval of Education Programs in Virginia* (8VAC20-542-10 et seq.), have been verified through the review of course descriptions and syllabi to determine alignment with each of the competencies required, including supervised classroom instruction. A review of the *Request for New Endorsement Program* application submitted by each institution evidenced written documentation of school division demand data, as well as institutional and school division support for the requested programs.

Section 8VAC20-542-40 of the *Regulations Governing the Review and Approval of Education Programs in Virginia* requires institutions seeking education program approval to establish partnerships and collaborations based on PreK-12 school needs. A copy of the *Virginia Department of Education – Standards for Biennial Approval of Education Programs Accountability Measurement of Partnerships and Collaborations Based on PreK-12 School Needs (8VAC20-542-40.7.a) – Education Programs (excluding Administration and Supervision Programs)* form for each requested program endorsement area is attached in the appendix.

Superintendent's Recommendations:

1. The Superintendent of Public Instruction recommends that the Board of Education approve the Advisory Board on Teacher Education and Licensure's recommendation to grant "Approved" status to the new endorsement programs (including approval of partnerships) at James Madison University, Longwood University, Lynchburg College, Radford University, Shenandoah University, University of Richmond, Virginia Intermont College, and Virginia State University.

2. The Superintendent of Public Instruction recommends that the Board of Education approve the Advisory Board on Teacher Education and Licensure's recommendation to grant "Approved" status to the new endorsement program (including approval of the partnerships) at The University of Virginia's College at Wise.

Impact on Resources:

There is a minimal impact on resources.

Timetable for Further Review/Action:

Colleges and universities must meet requirements, including biennial reporting, for the approval of new program endorsement areas in accordance with the *Regulations Governing the Review and Approval of Education Programs in Virginia*.

APPENDIX

Virginia Department of Education – Standards for Biennial Approval of Education Programs Accountability Measurement of Partnerships and Collaborations Based on PreK-12 School Needs (8VAC20-542-40.7.a) – Education Programs (excluding Administration and Supervision Programs)

- ***James Madison University***
- ***Longwood University***
- ***Lynchburg College***
- ***Radford University***
- ***Shenandoah University***
- ***University of Richmond***
- ***The University of Virginia's College at Wise***
- ***Virginia Intermont College***
- ***Virginia State University***

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: James Madison University Submitted by: Peggy Shaeffer

Telephone Number: 540-568-7337 Email: shaeffmb@jmu.edu Reporting Date: September 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	MidValley Consortium (Mathematics Specialist for Elementary and Middle Education; Foreign Language PreK-12: Italian)	The MidValley Consortium is a partnership among the James Madison University (JMU), Eastern Mennonite University (EMU), Mary Baldwin College (MBC), and Bridgewater College (BC) teacher preparation programs and seven regional school divisions that host education candidate practicum and student teachers during their field placements.	The program provides support for the classroom teachers and also additional academic support for K-12 students in the assigned classrooms.	Seven school divisions: Rockingham, Augusta, Shenandoah, and Page County Public Schools; Harrisonburg, Staunton, and Waynesboro City Public Schools Three institutions of higher education: EMU, MBC, and BC	Yes
2.	Augusta County (Mathematics Specialist for Elementary and Middle Education)	The Teacher-in-Resident program provides support for a shared professional educator position between Augusta County and the JMU Teacher Education program.	The partnership supports increased academic support utilizing skills and services of additional practicum students and tutoring for children at Clymore Elementary School in Augusta County.	John Chase, Principal, Clymore Elementary School	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
3.	Augusta County/Waynesboro City Public Schools and JMU Partnership	This is a partnership with Augusta County and Waynesboro City School Public Schools dedicated to strengthening the supportive relationship of the collaborating partners in enhancing public education and pre-service preparation of future educators.	The partnership provides support for the professional development of classroom teachers, while at the same time providing additional classroom support.	John Chase, Linda Krause, Larry Landes, Bill Roberts, Pam Unger: Augusta County Public Schools Sue Wright, Director of Instruction; Sharon Tooley, Principal Waynesboro City Schools	Yes
4.	Developing Mathematics Content Knowledge (Mathematics Specialist for Elementary and Middle Education)	This is a partnership with Harrisonburg, Rockingham, Staunton, Waynesboro, and Page County Public Schools.	The partnership is funded by two Virginia Department of Education grants to support the development of specialized content knowledge for teachers of mathematics in grades K-3 and grades 4-6.	John Matherly (Augusta County), Joe Hill (Rockingham County), Donna Whitley-Smith (Page County), Bobby Wells (Page County), Vermell Grant (Waynesboro City), Sue Wright (Waynesboro City), Pat Lintner (Harrisonburg City) , Dori Walk (Staunton City), Ann Wallace (JMU), LouAnn Lovin (JMU), Judy Kidd (JMU)	Yes
5.	Student Centered Mathematics Instruction (Mathematics Specialist for Elementary and Middle Education)	This partnership is with Staunton City Public Schools.	This is a multi-year project to work with differentiation specialists, mathematics coaches, and elementary teachers on effective mathematics instruction.	Dori Walk and Stephanie Haskins (Staunton City Schools) LouAnn Lovin and Maggie Kyger (JMU).	Yes

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: James Madison University
Contact Person: Phil Wishon
Phone No.: 540-568-6572 **Fax No.:** 540 568 4161 **E-mail Address:** wishonpm@jmu.edu

Reporting Date: September 1, 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education					PreK-12 Endorsements								Secondary Grades 6-12								Special Education							Add-on Endorsements						
Content Areas	*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*					Y									Y																																			

Section B:	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																																															
1.	MidValley Consortium					X																																												
2.	Augusta County					X									X																																			
3.	Augusta County/Waynesboro City Public Schools and James Madison University Partnership					X																																												
4.	Developing Mathematics Content Knowledge					X																																												
5.	Student Centered Mathematics Instruction					X																																												

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Longwood University Submitted by: Wayne White

Telephone Number: 434-395-2481 Email: whitewk@longwood.edu Reporting Date: Fall 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	Field Placements	Practicum I and Practicum II choices; student teaching in K-2 and non-*Standards of Learning* (SOL) subjects.	Albemarle County Public Schools is interested in sponsoring field experiences for the College of Education and Human Services (CEHS) graduates to obtain selected student in specific subject areas.	Superintendent or the Superintendent's representative and Connie Ballard, Director of the Office of Professional Services, Longwood University	Yes
	Field Placements continued	Practicum I students, Practicum II students, and student teachers	Amelia, Appomattox, Buckingham, Charlotte, Cumberland, Halifax, Hanover, Henrico, Loudoun, Lunenburg, Mecklenburg, Powhatan, Prince William and Amelia County Public Schools are interested in sponsoring field experiences for the CEHS graduates to obtain selected graduates for teaching positions.	Superintendent or the Superintendent's representative and Connie Ballard, Director of the Office of Professional Services, Longwood University	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
	Field Placements continued	Student teaching field placements	Salem City, Louisa County, and Spotsylvania County Public Schools are interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	Superintendent or the Superintendent's representative and Connie Ballard, Director of the Office of Professional Services, Longwood University	Yes
	Field Placements continued	Practicum I students, Practicum II students, (residents only) and student teachers	The Lynchburg County Public School division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	Superintendent or the Superintendent's representative and Connie Ballard, Director of the Office of Professional Services, Longwood University	Yes
	Field Placements continued	Practicum I students only and student teachers	The Stafford County Public School division is interested in sponsoring field experiences for CEHS candidates for graduates to obtain selected graduates for teaching positions.	Superintendent or the Superintendent's representative and Connie Ballard, Director of the Office of Professional Services, Longwood University	Yes

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Longwood University
Contact Person: Wayne White
Phone No.: 434-395-2481 **Fax No.:** 434-395-2800 **E-mail Address:** whitewk@longwood.edu

Reporting Date: Fall 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education				
Content Areas	*Early/Priamry Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																			
Section B: **Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																		
1. Field Placements																			

Education Programs Matrix	PreK-12 Endorsements								Secondary Grades 6-12								Special Education						Add-on Endorsements						
Content Areas	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																												Y	
Section B: **Partnership and Collaboration Name**																													
1. Field Placements																												X	

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College Submitted by: Dr. Jan S. Stennette

Telephone Number: 434-544-8662 Email: Stennette@lynchburg.edu Reporting Date: August 27, 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	"Book Buddies" Special Education Field Experience II	Pre-service candidates in the special education preparation program work one-on-one twice a week with second-grade students with identified special needs to improve reading and comprehension skills.	Second-grade students with special needs benefit from one-on-one instruction to help them improve skills in word identification, sounds, and basic sentence structure.	Lynchburg College Coordinator K. Husted, Master Teachers at Amelon Elementary (Amherst County Public Schools), Bedford Hills, and T. C. Miller Elementary Schools (Lynchburg City Public Schools)	No
2.	Field Experience III Special Education (SPED) Pre-Service Teachers	Pre-service teachers seeking a SPED endorsement work with SPED classroom teachers to identify strategies for one-on-one instruction.	Pre-service teachers seeking a SPED endorsement put into practice their Lynchburg College classroom instruction to work one-on-one with K-12 special education students to help them improve their every-day living and academic skills.	Lynchburg College Coordinator M. Tolbert and teachers in Lynchburg City Public Schools	No
3.	Special Olympics	Pre-service teachers completing a SPED program participate as leaders in working with Special Olympics organizers to help with students and activities.	This partnership provides pre-service teachers seeking a SPED endorsement with additional opportunities to help special needs students develop living skills and enjoyment in participation in an informal setting.	Lynchburg City Public Schools and Amherst, Appomattox, Bedford, and Campbell County Public Schools	No

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Lynchburg College
Contact Person: Dr. Jan S. Stennette
Phone No.: 434-544-8662 **Fax No.:** 434-544-8483 **E-mail Address:** stennette@lynchburg.edu

Reporting Date: August 27, 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education				
Content Areas	*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																			
Section B: **Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																		
1. "Book Buddies" Special Education Field Experience																			
2. Field Experience III Special Education (SPED) Pre-Service Teachers																			
3. Special Olympics																			

Education Programs Matrix	PreK-12 Endorsements								Secondary Grades 6-12								Special Education						Add-on Endorsements						
Content Areas	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																				Y									
Section B: **Partnership and Collaboration Name**																													
1. "Book Buddies" Special Education Field Experience																				X									
2. Field Experience III Special Education (SPED) Pre-Service Teachers																				X									
3. Special Olympics																				X									

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Radford University Submitted by: Dr. Patricia Shoemaker

Telephone Number: 540-831-6374 Email: pshoemak@radford.edu Reporting Date: Fall 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	Southwest Virginia Professional Education Consortium (SWVA PEC)	The consortium was developed in 1998 to formalize the collaborations between P-12 schools in the New River and Roanoke Valleys and regional institutions of higher education. Its primary purpose is to enhance teacher preparation and support continuing teacher education. The project is funded by the Virginia Department of Education and serves Botetourt, Carroll, Floyd, Giles, Montgomery, Pulaski, Salem, Wythe, and Roanoke Counties as well as the cities of Radford and Roanoke.	The partnership is intended to strengthen the connections between and among institutions of higher education in the region and increase the efficiency and timeliness of their response to the current and emerging needs of K-12 education.	Dalton Intermediate School; Pulaski Elementary School; Radford High School; Dublin Elementary School; Belle Heth Elementary School; Riverlawn Elementary School; Christiansburg Elementary School; McHarg Elementary School; Critzer Elementary School; Riverlawn Elementary School; Radford High School; Dublin Middle School; Belle Heth Elementary School; Riverlawn Elementary School; Kipps Elementary School; Auburn Elementary School; Pulaski County High School; Belview Elementary School; Huff	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
				Lane MicroVillage; Round Hill Elementary School; Dublin Middle School	
2.	The Training and Technical Assistance Center (T/TAC)	T/TAC was established in 1996 to increase the capacity of schools, service providers, and families to improve educational opportunities for, meet the needs of, and contribute to the success of children and youth with disabilities from birth to age 22.	The partnership provides long-term technical assistance that brings about systemic change in the way schools serve youth and children.	Lee, Wise, Franklin, Patrick, Botetourt, and Smyth County Public Schools; Galax, Bristol, Grayson, and Roanoke City Public Schools; Craig, Floyd, Pittsylvania, Dickenson, Pulaski, Montgomery, Carroll, Bland, Alleghany, Buchanan, Washington, Scott, Tazewell, Giles, Henry, and Roanoke County Public Schools; Norton, Salem, Martinsville, Danville, and Covington City Public Schools	Yes
3.	CEHD graduate degree cohorts developed in response to requests from school divisions.	New College Institute in Martinsville Earth Science Teaching Cohort, Roanoke County (2 cohorts), Montgomery County (2 cohorts) (Educational Leadership), Fairfax County and three other statewide sites (Library Media Cohort).	The purpose of the cohort programs are to respond directly to school divisions' requests for preparing school personnel who are in high demand and to expand the knowledge and skills of current teachers and school personnel.	Roanoke County (Educational Leadership), Montgomery County (Educational Leadership); Fairfax County (Library Media Cohort) Three Distance Education Library Media Cohorts	Yes
4.	CEHD - Individual courses for schools.	Carroll County (Reading Courses, English Language Learners, and Assessment)	RU provides individual courses as requested by the school divisions.	Carroll County TAG Grant (Reading offered as distance site, TAG grant pays tuition for distance or on-campus courses); Henry and Pittsylvania Counties (physical science course)	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
5.	VITAL: Virginia Improving Teaching and Learning	VITAL is a project to develop a statewide teacher preparation and follow-up database. The purpose is to capture data on candidates entering teacher preparation programs and to follow them throughout ten years of practice. Data on candidates are entered by institutions, and surveys of candidates and partnerships are conducted. Surveys of employers are planned.	There is a dearth of information about candidates who enter or complete teacher preparation programs in Virginia, where they go after completing programs, whether they persist in their careers, etc. The purpose of the database is to provide crucial information that will enable planning and decision-making to enable institutions of higher education, career switcher programs, the Department of Education, the State Council of Higher Education, and the General Assembly to provide highly qualified teachers for the children of Virginia.	State Council of Higher Education; Virginia Department of Education; Virginia Community College System; James Madison University; Mary Baldwin College; The College of William and Mary	Yes
6.	Teacher Education Articulation Agreement	Virginia Community College (VCCS) System and 11 Virginia institutions with teacher preparation programs.	The purpose of the VCCS "TEAC," Teacher Education Articulation Council is to: (1) develop statewide articulation agreements for community college students interested in entering teacher preparation programs; (2) to create communication channels that will facilitate transfer admissions. The transfer agreement outlines curriculum and processes for transfer and advising for several teacher preparation programs.	Virginia Community College System and 11 Virginia institutions with teacher preparation programs.	Yes
7.	STEL Deaf and Hard of Hearing Program	This program provides training for teachers working with deaf and hard-of-hearing K-12 students	Dr. Sharon Gilbert is coordinating the grant Radford University (RU) has received to provide statewide	RU is the sole provider and is establishing distance sites.	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
		statewide.	preparation in working with deaf and hard of hearing K-12 students.		
8.	STEL High Quality Professional Development	Enhancing content knowledge and content pedagogical knowledge of middle and high school teachers.	Dr. Robert McCracken and others have marshaled the expertise of RU arts and science and education faculty to provide content area pedagogy training for middle school and high school teachers.	Regions 6 and 7	Yes
9.	Teacher Preparation Internship Agreements	Regions 6 and 7	Candidates in programs contribute to students' learning and well-being through internships and practica.	Regions 6 and 7	Yes
10.	Dance Education Partnerships	The partnership provides internships for students and serves in an advisory capacity to the program.	These schools have been collaborating with the dance education program in providing internships for students.	William Fleming High School in Roanoke. Appomattox Regional and the Governor's School for Arts and Technology in Petersburg.	Yes

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Radford University
Contact Person: Dr. Patricia Shoemaker
Phone No.: 540-831-6374 **Fax No.:** 540-831-6053 **E-mail Address:** pshoemak@radford.edu

Reporting Date: Fall 2010

Education Programs Matrix		Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education					PreK-12 Endorsements								Secondary Grades 6-12								Special Education						Add-on Endorsements						
Content Areas		*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area approved program offered by your institution.*																						Y											Y	Y	Y	Y		Y											
Section B:	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																																															
1.	Southwest Virginia Professional Education Consortium (SWVA PEC)																															X	X	X	X		X												
2.	The Training and Technical Assistance Center (T/TAC)																															X	X	X	X														
3.	CEHD graduate degree cohorts developed in response to requests from school divisions.																																	X															
4.	CEHD - Individual courses for schools.																																				X												
5.	VITAL: Virginia Improving Teaching and Learning																					X										X	X	X	X		X												
6.	Teacher Education Articulation Agreement																															X	X	X	X		X												
7.	Deaf and Hard of Hearing																																				X												
8.	STEL High Quality Professional Development																															X	X	X	X														
9.	Teacher Preparation Internship Agreements																					X										X	X	X	X		X												
10.	Dance Education Partnerships																					X																											

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Shenandoah University Submitted by: Dr. Mary Bowser

Telephone Number: 540-535-3575 Email: mbowser@su.edu Reporting Date: Fall 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	Clinical Faculty Training	Shenandoah University (SU) has partnered with Frederick, Clarke, Warren, and Rappahannock Counties, and Winchester City Public Schools to provide clinical faculty and mentor training.	The partnerships are based on mutually identified needs. SU needed cooperating teachers trained to work with its pre-service candidates and school divisions needed teachers to be trained to work with new teachers and with our student teacher candidates.	Frederick, Warren, Clarke, and Rappahannock County Public Schools and Winchester City Public Schools	Yes
2.	Student Teacher Placements	Selected school divisions accept our student teacher candidates for internships.	School divisions are able to get additional support in the classroom; teachers are able to team teach with newly-trained teachers who are adept with technology and are trained based on more recent research.	Frederick, Warren, Clarke, Loudoun, Rappahannock, Shenandoah, Fairfax, Prince William, and Fauquier County Public Schools and Winchester City Public Schools	Yes
3.	Field Experiences	School divisions accept our teacher candidates for field placements and practica experiences.	School divisions are able to receive additional support in the classroom; teachers are able to team teach with newly-trained teachers who are adept with technology and trained based on more recent research.	Frederick, Warren, Clarke, Loudoun, Shenandoah, Prince William, and Fauquier County Public Schools and Winchester City Public Schools	Yes

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Shenandoah University
Contact Person: Mary Bowser
Phone No.: 540-535-3575 **Fax No.:** 540-665-3496 **E-mail Address:** mbowser@su.edu

Reporting Date: Fall 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education					PreK-12 Endorsements								Secondary Grades 6-12								Special Education							Add-on Endorsements						
Content Areas	*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*		Y	Y													Y												Y	Y	Y	Y	Y																	

Section B:	**Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																																															
1.	Clinical Faculty Training		X	X													X												X	X	X	X	X																	
2.	Student Teacher Placements		X	X													X												X	X	X	X	X																	
3.	Field Experiences		X	X													X												X	X	X	X	X																	

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: University of Richmond Submitted by: Patricia Stohr-Hunt

Telephone Number: 804-289-8432 Email: pstohrhu@richmond.edu Reporting Date: August 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	Mentor Teacher Institute	This is a partnership with local school divisions to train teachers to mentor student teachers and first year teachers.	All teachers participating come from hard-to-staff schools. The schools have asked for training specifically for these teachers in an effort to better mentor candidates and help retain new teachers in challenging positions.	Chesterfield, Hanover, and Henrico County Public Schools	Yes
2.	Student Teaching Partnerships	This is a partnership with local schools divisions to place student teachers in accredited public schools.	Our candidates are not only in the schools to learn to be effective teachers, but they also are there to serve the students and help full-time teachers deliver the curriculum.	Chesterfield, Goochland, Hanover, and Henrico County Public Schools Richmond City Public Schools	Yes
3.	Book Buddies	This is a partnership where pre-service teachers tutor students in first- and second-grade scoring low on the Phonological Awareness Literacy Screening assessment.	The local school division asked us for help in providing one-on-one instruction for students in the area of reading.	Henrico County Public Schools	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
4.	Middle and High School Practicum Partnerships	This is a partnership with local schools divisions to place candidates in classrooms with experienced teachers who mentor them on a weekly basis.	During the practicum experience, our candidates directly serve the needs of the teacher and students by working with individual students and with small groups.	Chesterfield, Hanover, and Henrico County Public Schools	Yes
5.	Elementary Mathematics Practicum	This is a partnership in which pre-service teachers work with individual students and lead small group instruction in mathematics grades three through five.	The local school division requested us to work in schools where students need additional help in mathematics.	Henrico County Public Schools	No

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: University of Richmond
Contact Person: Patricia Stohr-Hunt
Phone No.: 804-289-8432 **Fax No.:** 804-287-6369 **E-mail Address:** pstohrhu@richmond.edu

Reporting Date: August 1, 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education				
Content Areas	*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																			
Section B: **Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																		
1. Mentor Teacher Institute																			
2. Student Teaching Partnerships																			
3. Book Buddies																			
4. Middle and high School Practicum Partnerships																			
5. Elementary Mathematics Practicum																			

Education Programs Matrix	PreK-12 Endorsements								Secondary Grades 6-12								Special Education						Add-on Endorsements						
Content Areas	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																				Y									
Section B: **Partnership and Collaboration Name**																													
1. Mentor Teacher Institute																				X									
2. Student Teaching Partnerships																				X									
3. Book Buddies																				X									
4. Middle and high School Practicum Partnerships																				X									
5. Elementary Mathematics Practicum																				X									

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: The University of Virginia's College at Wise Submitted by: G. Jewell Askins, Director, Teacher Education Program

Telephone Number: 276 -328-0163 Email: gja8b@uvawise.edu Reporting Date: Fall 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	Partners in Education	The Education Department at the University of Virginia's College at Wise (UVA-Wise) collaborates with the eight public school systems in Southwest Virginia through the Southwest Virginia Education Consortium and the Partners in Education. The eight public school systems in the coalfield counties of Southwest Virginia, including Dickenson, Wise, Russell, Tazewell, Buchanan, Scott, Lee, and the City of Norton comprise this partnership.	The UVA-Wise Education Department provides training for clinical faculty and teacher mentors and endorsement programs for identified and/or critical teacher shortage areas, as well as other endorsement areas. The school system provides early field and intern experiences for pre-service teachers.	Dickenson, Wise, Russell, Tazewell, Buchanan, Scott, and Lee County Public Schools; Norton City Public Schools	Yes
2.	Southwest Virginia Public Education Consortium (SVPEC)	The Education Department and the Center for Teacher Excellence at UVA-Wise collaborate with the Southwest Virginia Public Education Consortium. The Consortium is comprised of the schools identified in the Partners in Education (coalfield county school systems) as well as most of the	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas, as well as other endorsement areas. The school system provides early field and intern experiences for pre-service	The SVPEC provides assistance to the public school divisions of Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe Counties, and the	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
		remaining public school divisions in Region Seven.	teachers.	cities of Bristol, Galax, and Norton.	
3.	Field Experiences	The UVa-Wise Education Department collaborates with selected school divisions in Virginia, Kentucky, and Tennessee to provide quality early field and internship experiences for pre-service teachers, training for teaching faculty who serve as clinical faculty and mentors to first year teachers, and teacher education endorsement programs for indentified need areas.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas, as well as other endorsement areas. The school system provides early field and intern experiences for pre-service teachers.	Buchanan, Lee, Russell, Scott, Dickenson, Tazewell, Wise, Smyth, Washington, Norton, and Loudoun County Public Schools; Bristol (Virginia), Bristol (Tennessee), and Roanoke City Public Schools; Jenkins Independent Schools (Jenkins, Kentucky), Pike County (Kentucky), and Kingsport (Tennessee) Schools	No
4.	Partnerships for Teacher Excellence/ Preparing Teachers as Transformative Leaders	The Education Department at UVA-Wise, funded by a grant from the Virginia Department of Education, has established a training and partnership program with the area schools and school divisions in which we place pre-service teachers for field experiences. UVa-Wise provides initial and ongoing training for clinical faculty and mentors for first year teachers.	The UVA-Wise Education Department provides training for Clinical Faculty and Teacher Mentors and endorsement programs for identified and/or critical teacher shortage areas, as well as other endorsement areas. The school system provides early field and intern experiences for pre-service teachers.	Dickenson, Wise, Russell, Tazewell, Buchanan, Scott, Lee and Washington County Public Schools; Norton City Public Schools	No

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: The University of Virginia's College at Wise
Contact Person: G. Jewell Askins
Phone No.: 276-328-0163 **Fax No.:** 276-376-4589 **E-mail Address:** gja8b@uvawise.edu

Reporting Date: Fall 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education				
Content Areas	*Early/Primary Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																			
Section B: **Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																		
1. Partners in Education																			
2. Southwest Virginia Public Education Consortium (SVPEC)																			
3. Field Experiences																			
4. Partnerships for teacher Excellence/ Preparing Teachers as Transformative Leaders																			

Education Programs Matrix	PreK-12 Endorsements								Secondary Grades 6-12								Special Education						Add-on Endorsements						
Content Areas	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*								Y																					
Section B: **Partnership and Collaboration Name**																													
1. Partners in Education								X																					
2. Southwest Virginia Public Education Consortium (SVPEC)								X																					
3. Field Experiences								X																					
4. Partnerships for teacher Excellence/ Preparing Teachers as Transformative Leaders								X																					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia Intermont College Submitted by: Dr. Brenda G'Fellers, Director of Teacher Education

Telephone Number: 276-466-7966 Email: brendagfellers@vic.edu Reporting Date: May 2010

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
1.	Bristol Virginia Public Schools	PreK-12 representatives serve on the Virginia Intermont College (VIC) Education Program Advisory Committee which meets semi-annually to assess program effectiveness and school division needs. Visits are made to school divisions throughout the year to discuss long- and short-term needs and propose ways to address those needs.	VIC offers courses of study, alternate avenues for licensure and hands-on support in collaboration with partnering school divisions. Students, other than student teachers who work full days for the entire semester, work in classrooms selected for a specific reason.	Virginia High School, Virginia Middle School, Highland View, Joseph B. VanPelt, Stonewall Jackson, and Washington-Lee Elementary Schools	No
2.	Field Experiences	Graduating highly qualified teachers to meet the needs of area schools is our primary goal.	Instructional aides tutor individual students or groups, work with Virginia Reading First programs, teach small lessons and generally assist at the direction of the teacher. Teacher preparation candidates complete their internships.	Washington County Public Schools: Abingdon, Holston, Battle, and P. Henry High Schools; E.B. Stanley and Wallace Middle Schools; Adult Education Program; Abingdon, Greendale, High Point, Meadowview, Rhea Valley, Valley Institute, and Watauga Elementary Schools, Virginia High	No

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
				Schools Bristol, Tennessee Public Schools: Tennessee High School, Vance Middle School, Anderson, Avoca, Central, Fairmount, Haynesfield, and Holston View Elementary Schools Kingsport, Tennessee Public Schools: Jefferson, Johnson, John F Kennedy, Lincoln, and Roosevelt elementary Schools, Robinson Middle School, Dobyns Bennett High School Russell County Public Schools: Castlewood and Lebanon High Schools, Belfast-Elk Garden, Honaker, Sword's Creek, and Lebanon Elementary Schools, Lebanon Primary School Tazewell County Public Schools: Tazewell High School, Tazewell Middle School, Graham Intermediate School, Cedar Bluff, Dudley, Tazewell,	

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
				Raven, Richlands, and Springville Elementary School Dickenson County Public Schools: Haysi High School, Clinchco, Clintwood, Ervinton, Longsfork, and Sandlick Elementary Schools Wise County Public Schools: Coeburn Middle School, St. Paul Elementary School, Coeburn and Powell Valley Primary Schools Buchanan County Public Schools: Grundy High School, Twin Valley, Riverview, and Hurley Elementary/Middle Schools Smyth County Public Schools: Chilhowie High School, Chilhowie Middle School, Sugar Grove Combined School, Chilhowie and Saltville Elementary Schools, Marion Primary School Lee County Public Schools: Elk Knob, Flatwoods, and	

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
				Stickleyville Elementary Schools Scott County Public Schools: Hilton, Shoemaker, and Weber City Elementary, and Duffield Primary School	
3.	St. Anne's Catholic School	VIC faculty is in contact with St. Anne's principal and faculty in order to be aware of the staffing and program needs of the school.	VIC students provide assistance and support to St. Anne's school by helping in the classroom setting and with athletic programs.	PreK-8 education personnel	No
4.	Boys' and Girls' Club of Bristol, Virginia	VIC faculty is in contact with Club directors in order to be aware of the staffing and program needs of the Club.	VIC students provide assistance and support to Club staff by helping with after-school tutoring and athletic programs.	After-school Tutoring and Athletic Programs personnel	No
5.	William King Art Center	VIC and Art Center are in contact through program directors to make each program aware of the other's needs.	VIC and the Art Center share faculty and resources as needed. VIC Visual Art students complete field experiences and internships in the PreK-12 programs sponsored by the Art Center.	PreK-12 Art Program personnel	No
6.	Barter Theatre	VIC and Barter Theater are in contact through program directors to make each program aware of the other's needs. VIC students complete internships at the Barter Theater and assist with various productions.	VIC and the Barter Theatre share faculty and resources as needed.	PreK-12 Theatre Program personnel	No

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia Intermont College
Contact Person: Dr. Brenda G'Fellers
Phone No.: 276-466-7966 **Fax No.:** 276-466-7963 **E-mail Address:** brendagfellers@vic.edu

Reporting Date: Fall 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education				
Content Areas	*Early/Priamry Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																			
Section B: **Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																		
1. Bristol Virginia Public Schools																			
2. Field Experiences																			
3. St. Anne's Catholic School																			
4. Boys' and Girls' Club of Bristol Virginia																			
5. William King Art Center																			
6. Barter Theatre																			

Education Programs Matrix	PreK-12 Endorsements								Secondary Grades 6-12								Special Education						Add-on Endorsements						
Content Areas	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*								Y																					
Section B: **Partnership and Collaboration Name**																													
1. Bristol Virginia Public Schools								X																					
2. Field Experiences								X																					
3. St. Anne's Catholic School								X																					
4. Boys' and Girls' Club of Bristol Virginia								X																					
5. William King Art Center								X																					
6. Barter Theatre								X																					

Virginia Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations
Based on PreK-12 School Needs (8VAC20-542-40.7.a)

Education Programs (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University Submitted by: Dr. Delores R. Greene

Telephone Number: 804-524-5742/524-5929 Email: dgreene@vsu.edu Reporting Date: Fall 2010

Number	**Partnership and Collaboration Name**	**Partnership and Collaboration Description –** Please provide a brief description of the partnership and collaboration (about 50 words or less).	**Description of PreK-12 School Needs –** Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	**Partners and Collaborators –** Please list the names of the entities that took part in the partnership and collaboration.	**Written Agreement –** Is there a written agreement with the partners and collaborators? Yes or No?
1.	Student Teaching and Field Experiences	Virginia State University's Professional Education Programs Unit has partnered to provide field experiences at Martin Luther King, Jr., Middle School and Matoaca High School for the course: *Introduction to Teaching II*. Students are paired with a selected teacher to observe and participate in classroom activities. Pre-candidates from the Professional Education Programs Unit complete student teaching and other field experiences in agreed upon classrooms in the following school divisions: Henrico, Chesterfield, Hopewell, Prince George, and Dinwiddie County Public Schools Richmond and Petersburg City	This collaboration provided pre-candidates access to the classroom environment. Pre-candidates are given the opportunity to interact, engage in, and take part in the teaching and learning process in an urban school setting. Their role was to observe how this school system implements the teaching and learning environment and begin to formulate a philosophy of teaching. Virginia State University and selected school divisions collaborate to provide diverse small urban, rural, classroom experiences for pre-candidates/candidates. Students participate in a variety of activities which include observations, individual and small group tutoring	Chesterfield Public Schools: Shawn Fitzgerald and Stephen Cunningham, Principal, Matoaca High School Richmond City Public Schools: Yardley Farquason and Aaron Dixon, Principal, martin Luther King, Jr., Middle School Chesterfield County Public Schools: Phil Sword Henrico County Public Schools: Ms. Seza Alddrich; Hopewell Public Schools: Mrs. Melody Bage; and Prince George County	Yes

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
		Public Schools	and instruction. Student teaching undergirds the development of future teachers who are prepared to teach students from all environments.	Public Schools: Dr. Shelley Bazemore Petersburg City Public Schools: Mrs. Gail Wade and Dr. Patrick Bingham Richmond City Public Schools: Mrs. Valerie Dupree and Mrs. Bernie Johnson Dinwiddie County Public Schools: Mrs. Linda Ampy	
2.	Praxis II Prep Workshop	Workshops are provided to prepare provisionally licensed teachers to take the Praxis II Mathematics: Content Knowledge examination.	School divisions are assisted in addressing the need to hire licensed secondary mathematics teachers.	Virginia State University (Mathematics Department) Chesterfield County Public Schools, Richmond City Public Schools	Yes
3.	Provisional Mathematics Teachers Collaboration	A partnership has been established between the Mathematics Department at Virginia State University and Chesterfield County Schools to train and assist Provisionally Licensed Mathematics Teachers with Praxis II.	This partnership helps Chesterfield Public School have highly qualified mathematics teachers for the classroom.	Virginia State University (Mathematics Department) Chesterfield County Public Schools	Yes
4.	Virginia State University Future Teacher Career Fair	This Career Fair was designed to recruit high school students into the teaching profession. Teacher Cadet and Future Teacher clubs are encouraged to attend Virginia State University and learn about the Teacher Education Program	Students from Regions 1, 5 and 8 are participants. The career fair is designed to encourage the students to pursue teaching as a career. School divisions expressed an interest for assisting in "growing" their own teachers.	Buckingham County, Sussex County, Suffolk County, Petersburg City, Cumberland, Prince William County Public Schools, and Hopewell Public Schools	No

Number	Partnership and Collaboration Name	Partnership and Collaboration Description – Please provide a brief description of the partnership and collaboration (about 50 words or less).	Description of PreK-12 School Needs – Briefly describe (about 50 words or less) how the partnership and collaboration meet the identified needs of the PreK-12 community.	Partners and Collaborators – Please list the names of the entities that took part in the partnership and collaboration.	Written Agreement – Is there a written agreement with the partners and collaborators? Yes or No?
		through workshops and college tours.			
5.	Dual Credit Courses for Prince George County Public Schools	Mathematics or statistics courses are offered at the Prince George High School. Students receive both high school and college credits.	This partnership allows students from Prince George County to take mathematics courses for college credit through Virginia State University.	Prince George County Public Schools, Dr. Shelley Bazemore	Yes
6.	Historically Black Colleges and Universities Undergraduate Program Science, Technology, Engineering, and Mathematics Project (HBCU UP STEM Project)	Virginia State University's High School Senior Enhancement (HSSE) program introduces rising high school seniors to Science, Technology, Engineering, and Mathematics (STEM) fields and boosts their desire to select a STEM field for further study as a potential career.	This program provides high school students exposure to engineering, mathematics, and science classes to promote exploration into STEM careers and promotes the study of STEM areas in college.	Virginia State University School of Engineering, Science, and Technology Regions 1, 5, and 8 school divisions	No

Virginia State Board of Education - Standards for Biennial Approval of Education Programs
Accountability Measurement of Partnerships and Collaborations based on PreK-12 School Needs (8VAC20-542-40.7.a)
Part 2: Education Programs Matrix (excluding Administration and Supervision Programs)

Name of Institution: Virginia State University
Contact Person: Dr. Delores R. Greene
Phone No.: 804-524-5742/or 5929 **Fax No.:** 804-524-5757 **E-mail Address:** dgreene@vsu.edu

Reporting Date: Fall 2010

Education Programs Matrix	Grade Level				Support Personnel					Foreign Language PreK-12					Career and Technical Education				
Content Areas	*Early/Priamry Education PreK-3*	*Elementary Education PreK-6*	*Middle Education 6-8*	*Adult Education*	*Math Specialist for Elem./Middle Ed.*	*Reading Specialist*	*School Counselor PreK-12*	*School Psychology*	*School Social Worker*	*French*	*German*	*Spanish*	*Latin*	*Other Foreign Language*	*Agricultural Education*	*Business and Information Technology*	*Marketing Education*	*Technology Education*	*Family and Consumer Sciences*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																			
Section B: **Partnership and Collaboration Name**	Indicate each content area approved program that took part in each named "Partnership and Collaboration" by placing an '**X**' under the appropriate column below. (Please note that the first twenty "Partnership and Collaboration" names that you entered on Part 1 are automatically transferred to this table.)																		
1. Student Teaching and Other Field Experiences																			
2. Praxis II Preparation Workshop																			
3. Provisional Mathematics Teachers Collaboration																			
4. Virginia State University Future Teacher Career Fair																			
5. Dual Credit Courses for Prince George County Public Schools																			
6. Historically Black Colleges and Universities Undergraduate Program STEM Project																			

Education Programs Matrix	PreK-12 Endorsements								Secondary Grades 6-12								Special Education							Add-on Endorsements						
Content Areas	*Visual Arts*	*Dance Arts*	*English as a Second Language*	*Health and Physical Education*	*Library Media*	*Music Education - Instrumental*	*Music Education - Vocal/Choral*	*Theatre Arts*	*Computer Science*	*English*	*History & Social Science*	*Mathematics*	*Science - Biology*	*Science - Chemistry*	*Science - Earth Science*	*Science - Physics*	*Early Childhood (Birth through Age 5)*	*Hearing Impairments PreK-12*	*Adapted Curriculum K-12*	*General Curriculum K-12*	*Speech-Language Disorders PreK-12*	*Visual Impairments PreK-12*	*Adult English as a Second Language*	*Driver Education*	*Gifted Education*	*Journalism*	*Keyboarding*	*Mathematics - Algebra I*	*Speech Communication*
Section A: *Place a **'Y'** under each content area proposed program to be offered by your institution.*																												Y	
Section B: **Partnership and Collaboration Name**																													
1. Student Teaching and Other Field Experiences																												X	
2. Praxis II Preparation Workshop																												X	
3. Provisional Mathematics Teachers Collaboration																												X	
4. Virginia State University Future Teacher Career Fair																												X	
5. Dual Credit Courses for Prince George County Public Schools																												X	
6. Historically Black Colleges and Universities Undergraduate Program STEM Project																												X	

Board of Education Agenda Item

Item: Q. **Date:** November 18, 2010

Topic: Final Review of Proposed English Language Proficiency Performance Target for Annual Measurable Achievement Objective (AMAO) 1 for 2009-2010 in Virginia's Consolidated State Application Accountability Plan under the *No Child Left Behind Act of 2001* (NCLB)

Presenter: Mrs. Shelley Loving-Ryder, Assistant Superintendent, Division of Student Assessment and School Improvement

Telephone Number: (804) 225-2102 **E-Mail Address:** Shelley.Loving-Ryder@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- _X_ State or federal law or regulation
- ____ Board of Education regulation
- ____ Other: _____

_X_ Action requested at this meeting ____ Action requested at future meeting: _____ (date)

Previous Review/Action:

____ No previous board review/action

_X_ Previous review/action

Date: January 14, 2010

Action: Final review of a proposed amendment to Virginia's NCLB Consolidated State Application to set AMAO 2 for English language proficiency at 15 percent for the 2009-2010 school year and to request a waiver from setting AMAO 1 for progress until the state has data from two administrations of the statewide English Language Proficiency (ELP) assessment, Assessing Comprehension and Communication in English State-to-State (ACCESS) for English Language Learners (ELLs)

Date: October 28, 2010

Action: First Review of Proposed English Language Proficiency Performance Target for Annual Measurable Achievement Objective (AMAO) 1 for 2009-2010 in Virginia's Consolidated State Application Accountability Plan under the *No Child Left Behind Act of 2001* (NCLB)

Background Information:

The *Elementary and Secondary Education Act* (ESEA) as amended by the *No Child Left Behind Act of 2001* (NCLB) requires all state education agencies to submit for approval to the United States Department of Education (USED) a consolidated state application accountability plan. In September 2003, the Virginia Board of Education submitted and received USED approval for its initial Consolidated State Application Accountability Plan under NCLB. States are permitted to revise the Plan by submitting requests for review and approval from USED.

The accountability plan includes establishing Annual Measurable Achievement Objectives (AMAOs) for limited English proficient (LEP) students that measure their progress in learning English (AMAO 1) and attainment of English proficiency (AMAO 2). In January 2010, Virginia requested and received approval from USED to set AMAO 2 (proficiency) at 15 percent for 2009-2010. At that time, a request was also made and approved to defer establishing a target for AMAO 1 (progress) until two data points were available from the administration of Assessing Comprehension and Communication in English State-to-State for English Language Learners (ACCESS for ELLs), adopted by the Virginia Board of Education as the state-approved English Language Proficiency (ELP) assessment. The 2009-2010 test administration provided the second data point and Virginia must now submit a revision to the accountability plan to establish the AMAO 1 (progress) target for LEP students for 2009-2010 based on the new ELP assessment.

Summary of Major Elements:
Based on a review of Virginia's current ACCESS for ELLs data, the proposed target for the percent of LEP students making progress in learning English for 2009-2010 is 64 percent. The targets based on ELP assessments administered in 2010-2011 through 2013-2014 will be established upon review of the ACCESS for ELLs data in subsequent years.

English Language Proficiency Performance Targets for AMAO 1 (Progress) and AMAO 2 (Proficiency) for 2009-2010 through 2013-2014

School Year	Percent of LEP Students Making Progress in Learning English **(AMAO 1)**	Percent of LEP Students Attaining English Proficiency **(AMAO 2)**
2009-2010	64	15*
2010-2011	TBD	TBD
2011-2012	TBD	TBD
2012-2013	TBD	TBD
2013-2014	TBD	TBD

*already approved by USED

Superintendent's Recommendation:
The Superintendent of Public Instruction recommends that the Board of Education adopt English language proficiency performance target for AMAO 1 (progress) for 2009-2010 for inclusion in Virginia's Consolidated State Application Accountability Plan.

Impact on Resources:
The provisions of the *Elementary and Secondary Education Act* (ESEA) require the Department of Education to collect and analyze data related to determining Title III AMAOs for all school divisions in the state. These requirements will continue to have an impact on the agency's resources.

Timetable for Further Review/Action:
Upon approval by the Board of Education the proposed target will be submitted to USED.

Board of Education Agenda Item

Item: R. **Date:** November 18, 2010

Topic: First Review of Recommended Cut Scores for End-of-Course History Standards of Learning Tests Based on the 2008 History Standards

Presenter: Mrs. Shelley Loving-Ryder, Assistant Superintendent, Division of Student Assessment and School Improvement

Telephone Number: (804) 225-2102 **E-Mail Address:** Shelley.Loving-Ryder@doe.virginia.gov

Origin:

____ Topic presented for information only (no board action required)

_X_ Board review required by
- ____ State or federal law or regulation
- _X_ Board of Education regulation
- ____ Other: _____

____ Action requested at this meeting ____ Action requested at future meeting: _____ (date)

Previous Review/Action:

____ No previous board review/action

_X_ Previous review/action
Date: November 2003
Action: Adoption of Cut Scores for the World History I, World History II, Virginia and U.S. History, and World Geography Standards of Learning Tests based on the 2001 History Content Standards

Background Information:
In 2010-2011 new Standards of Learning (SOL) tests measuring the 2008 history content standards will be administered. Because of the changes in the content measured by these tests, new passing scores must be adopted by the Virginia Board of Education. Consistent with the process used in 1998 and in 2003, committees of educators were convened to recommend to the Board of Education (BOE) minimum "cut" scores for the achievement levels of pass/ proficient and pass/advanced for the new tests. Committees for the four end-of-course history tests: World History I, World History II, Virginia and U.S. History, and World Geography met in early November. Standard setting committees for the remaining history tests will be convened in February.

Summary of Major Elements
Information about the range of cut scores recommended by the committees for the achievement levels of pass/proficient and pass/advanced for the SOL tests in World History I, World History II, Virginia and U.S. History, and World Geography will be presented to the Board. The Board is asked to review this information and to adopt "cut" scores for the World History I, World History II, Virginia and U.S. History, and World Geography SOL tests that represent the achievement levels of pass/proficient and pass/advanced.

Superintendent's Recommendation:
The Superintendent of Public Instruction recommends that the Board of Education accept for first review proposed cut scores representing the achievement levels of pass/proficient and pass/advanced for the end-of-course World History I, World History II, Virginia and U.S. History, and World Geography SOL tests.

Impact on Resources:
N/A

Timetable for Further Review/Action:
N/A

Board of Education Agenda Item

Item: S. **Date:** November 18, 2010

Topic: Annual Report of the State Special Education Advisory Committee

Presenter: Dr. Michael Behrmann, Chair, State Special Education Advisory Committee
Mr. H. Douglas Cox, Assistant Superintendent for Special Education and Student Services

Telephone Number: (703) 993-3670 **E-Mail Address:** mbehrman@gmu.edu
(804) 225-3252 doug.cox@doe.virginia.gov

Origin:

X Topic presented for information only (no board action required)

____ Board review required by
X State or federal law or regulation
____ Board of Education regulation
____ Other: _____

____ Action requested at this meeting ____ Action requested at future meeting: _____ (date)

Previous Review/Action:

____ No previous board review/action

____ Previous review/action
date _____
action _____

Background Information:
The State Special Education Advisory Committee (SSEAC) is a federally-mandated panel comprised of individuals with disabilities, teachers, parents, state and local officials, and local administrators. The Individuals with Disabilities Education Act (IDEA) requires that the committee submit an annual report to the state education agency.

Summary of Major Elements
The report includes (1) an overview of the SSEAC organizational structure, (2) a description of meetings conducted during the 2009-10 year, (3) an overview of issues addressed by the committee during the year, and (4) a list of future issues that the SSEAC will consider.

Superintendent's Recommendation:
The Superintendent of Public Instruction recommends that the Board of Education accept the report for consideration and disseminate to the public upon request.

Impact on Resources:
There is no anticipated impact on resources.

Timetable for Further Review/Action:
No further review or action is required unless desired by the Board.

VIRGINIA STATE SPECIAL EDUCATION ADVISORY COMMITTEE ANNUAL REPORT

JULY 2009 - JUNE 2010

INTRODUCTION

The Individuals with Disabilities Education Act (IDEA) requires that each state establish and maintain a state advisory panel for the purpose of providing policy guidance with respect to special education and related services for children with disabilities in the state. The statute specifies membership and requires that a majority of members be individuals with disabilities or parents of children with disabilities, specifically, the statute requires the following:

"(i) parents of children with disabilities (ages birth through 26);

(ii) individuals with disabilities;

(iii) teachers;

(iv) representatives of institutions of higher education that prepare special education and related services personnel;

(v) State and local education officials, including officials who carry out activities under subtitle B of title VII of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11431 et seq.);

(vi) administrators of programs for children with disabilities;

(vii) representatives of other State agencies involved in the financing or delivery of related services to children with disabilities;

(viii) representatives of private schools and public charter schools;

(ix) not less than 1 representative of a vocational community, or business organization concerned with the provision of transition services to children with disabilities;

(x) a representative from the State child welfare agency responsible for foster care; and

(xi) representatives from the State juvenile and adult corrections agencies."

In Virginia the panel is known as the State Special Education Advisory Committee (SSEAC).

COMMITTEE ORGANIZATION

The activities of the Virginia State Special Education Committee (SSEAC) are governed by the Virginia Board of Education bylaws for advisory committees. The SSEAC year commences on July 1 and ends on June 30 of the following calendar year. An executive subcommittee works with the Virginia Department of Education (VDOE) staff in establishing priorities and agenda items for future SSEAC meetings. The SSEAC delegates various subcommittees to monitor programmatic issues and future items of concern. For the 2009-2010 year, the subcommittees were structured as follows:

STANDING SUBCOMMITTEES

Executive – The Executive Subcommittee includes the Chair, the Vice-chair, the Secretary, and three At-large members. The committee establishes priorities for meeting agenda and provides overall direction to the SSEAC.

Nominating – The Nominating Subcommittee is charged with nominating a slate of officers for Executive Subcommittee vacancies.

State Operated Programs (SOP) Annual Plan Review – This subcommittee conducts a review of the annual special education plans submitted by state operated programs and the Virginia School for the Deaf and the Blind.

Policy & Regulations – This subcommittee reviews proposed regulations and prepares official comment language for consideration by the full SSEAC.

AD HOC SUBCOMMITTEES

Constituency Involvement – This subcommittee addresses ways to involve parents, students, and other community constituents in SSEAC activities as well as in local special education training and parent involvement activities.

Response to Intervention (RtI) – This subcommittee addresses the process of the RtI initiatives throughout the state and focuses on its future implementation.

Personnel – This subcommittee addresses concerns regarding the availability of fully licensed, highly qualified special education teachers and related service providers, in addition to the caseload requirements of service provision.

Staff members serve as consultants to each of the subcommittees, providing technical assistance, clarification of Department of Education procedures, and additional information.

SSEAC members are assigned a minimum of one standing and one Ad Hoc subcommittee based upon each member's expertise, interests, and concerns. Each executive committee member serves as a chair for a subcommittee. Subcommittees meet independently and make recommendations to the full committee. Such recommendations may result in further study with additional information from the VDOE, presentations to the SSEAC, or inclusion in the Annual Report to the Board of Education.

MEETINGS

The full committee meets in regular session four times each year, while subcommittees meet as necessary to fulfill their responsibilities to the SSEAC. Every effort is made to consolidate the work of subcommittees to the regular sessions. All meetings and work sessions are open to the public. The public is offered an opportunity to make comment during specified time allotments at each meeting. All regular meetings are recorded to assist with record keeping and the recordings are maintained by the VDOE in accordance with record keeping policies and procedures.

Prior to the 2009-2010 year, all of the SSEAC meetings were held in the Richmond area due to the significant VDOE staff travel involved in meeting around the state. During the 2009-2010 year, meetings were held on the following dates:

July 22-24, 2009
October 15-16, 2009
February 11-12, 2010 (meeting cancelled due to weather)
April 15-16, 2010
May 11, 2010 (Subcommittee Meeting Reviewing Annual SOP Plan)

Prior to each meeting, the SSEAC distributes a flyer to notify the constituents and stakeholders of the upcoming meeting. Members are given copies for distribution to their constituency groups. In addition, the SSEAC, in coordination with the Virginia Board for People with Disabilities, supports and assists in maintaining a database of constituents interested in special education and information sharing. The information from each flyer is distributed through this shared network, named Virginia Special Education Network (VSEN).

Historically, the SSEAC has conducted evening public forums to generate an informal exchange between the public and committee members. At the April 2009 meeting, the committee approved a motion to replace the informal forum with an evening public comment period to provide such opportunities for constituents who are unable to attend the meeting during the day. This provision was for three consecutive meetings, beginning July 2009. The committee evaluated this change in the July 2010 meeting.

The meeting schedule for the remainder of the 2010-11 year is:

July 15-16, 2010
October 14-15-16, 2010
February 10-11, 2011
April 14-15, 2011
July 14-15, 2011

Interest remains with members that meetings be held in locations other than Richmond to provide constituents an opportunity to participate with the SSEAC.

PRESENTATIONS

During the year presentations were made to the committee by members of the VDOE staff as well as members of other agencies and organizations. Topics included:

- State Performance Plan-Annual Performance Standing Report
- Restraint & Seclusion Sample Training Elements
- Restraint & Seclusion Policy Study Update
- Special Education National View
- State Personnel Development Grant: Literacy in Secondary Schools Update
- State Performance Plan-Annual Performance Report Data Update: Secondary Transition and Post Secondary Outcomes
- Instructional Resources
- Training on the revised *Regulations Governing Special Education Programs for Children with Disabilities in Virginia*
- Joint Legislative Audit Commission Study on Autism
- State Assessment: Virginia Grade Level Assessment (VGLA) Stakeholder Meeting
- State Assessment Update: Use of Alternatives & Audit Findings
- Parent Involvement Survey
- State Discipline Data
- Response to Intervention Implementation

PUBLIC COMMENTS

A public comment period was held at each meeting. The VDOE staff members responded to the comments individually according to the subject and the concern. Further, the full committee reviewed the previous meeting's comments with the actions of department staff. During the 2009-2010 year, public comments related to:

- Seclusion and Restraint
- Change in the age range for children with developmental delays
- Children with autism and training needs for parents
- More training at school and for parents at home
- Fund additional print capacity of parent information
- Suspensions and expulsions associated with students with learning disabilities
- The inclusion of Disability History into Virginia curriculum.

ISSUES ADDRESSED BY THE SUBCOMMITTEES OF THE SSEAC

PERSONNEL

Update on Braille Competence Testing

The Personnel Subcommittee discussed Chapter 202 [H2224] approved March 27, 2009, by the General Assembly, which states that the "Advisory Board on Teacher Education and Licensure, in consultation with the Department for the Blind and Vision Impaired shall make recommendations to the Board of Education and the Chairs of the House Committee on Education and the Senate Committee on Education and Health regarding certification of Braille instructors." The subcommittee discussed what this certification may look like for both pre-service and in-service teachers. The subcommittee reviewed the current licensure requirements for a teacher of visual impairments in Virginia. The Visual Impairment (VI) Consortium requires two Braille courses. The first is a foundation of Braille and the second is an advanced Braille course. These courses have been deemed appropriate for Braille instruction preparation. The subcommittee made a recommendation that these two courses may serve as the certification requirement for pre-service teachers. There was discussion regarding the feasibility of offering these consortium courses to in-service teachers who wish to expand their skills in Braille. Grant options or other payment options should be considered so that this course work would be at no cost to teachers. Additionally, it was recommended that at the time of teacher renewal, an online course-training option should be considered as a requirement to train and maintain skills in the use of Braille.

The subcommittee made the following recommendations for future issues to be added to the Annual Report:

- Under the heading of teacher licensure, the inclusion of Braille certification, as well as the number of current provisional special education licenses awarded, and continued low numbers of licensed special educators

- Under the heading of assessment issues, the inclusion of the Virginia Alternate Assessment Program (VAAP), as well as overuse of the Virginia Grade Level Assessment (VGLA)

Update on Approved Teacher Licensure Programs

- All 60 of the teacher licensure programs in special education have been approved.

- Tuition assistance for speech and language pathologists, early childhood special education teachers, for para-educators, and for teachers not yet endorsed is available. Applications are coming in and the funding is available on a first-come, first-served basis.

- The Virginia Teaching Scholarship Loan (VTSL) provides funding to colleges and universities to assist with tuition based on critical shortage areas. This is available through university nomination and is available on a first-come, first-served basis.

- The list of the top ten critical shortage teaching endorsement areas has been developed for 2009-10 and includes a number of special education areas.

Update on Autism Initiatives

After a report from the Virginia Department of Education's Director of Instructional Support and Related Services on the "State of the State on Autism Spectrum Disorders (ASD)," the committee discussed the greater need for teachers to have increased access to professional development and pre-service training in effective research-based practices for students with ASD. An outline of the Joint Legislative Action and Review Committee (JLARC) Report on ASD was presented, including how the VDOE is responding to its key recommendations. The committee discussed some of the challenges in getting teachers more skilled in the leading research-based approach of Applied Behavioral Analysis (ABA). The challenges discussed included a lack of university preparation programs with an ABA focus, the extreme costs of becoming certified in ABA, the time it takes to become certified and the lack of awareness about the benefits of this approach. The presenter noted that there are currently only 120 certified professionals in the Commonwealth with the ABA certification and many of those are only serving the adult population. The committee then discussed some suggestions and strategies for exploring the expansion of ABA services. The recommendations included: 1) Explore new funding options to assist teachers with tuition reimbursement, 2) Develop an university consortium for ABA similar to the Severe Disabilities Consortium, 3) Offer coursework online, 4) Expand the Virginia Autism Council Autism Competencies to include more of a focus on behavior services, and 5) Explore the use of a coaching/mentorship "train-the-trainer" model.

Other Personnel Committee initiatives

- Continue VDOE's initiative for the Aspiring Special Education Leaders program.

- Continue VDOE's initiatives to increase the number of Speech and Language Pathologists in the school divisions.

RESPONSE TO INTERVENTION (RtI)

In July 2009, VDOE staff provided an update on the progress with the RtI statewide pilot program. They introduced the 15 RtI pilot divisions, and the criteria for school selection. Two statewide RtI institutes for the selected school divisions met in July 2009 in Roanoke and Williamsburg. In October 2009 members were informed about additional materials posted to the Response to Intervention (RtI) Web site: http://www.doe.virginia.gov/VDOE/studentsrvcs/RTI/ . The committee requested that the Virginia Department of Education provide additional information to the entire SSEAC committee regarding the process and data collected with the pilot RtI sites.

At the April 2010 SSEAC meeting, Dr. Dale Mann, Managing Director of Interactive, Inc. gave the Year 1: Summary Report regarding RtI implementation at the 15 pilot schools. His report included:

- 10 schools reported an average of 8 fewer referrals to special education
- 10 schools reported an average of 81 fewer behavior incidents
- 7 out of the 15 pilot schools are both planning and implementing RtI.
- 3 schools are implementing RtI
- 5 schools are in the planning stage of RtI
- The divisions sponsoring the pilot schools intend to add 13 new schools to RtI

Recommendations for year two included the areas for priority attention are mathematics, behavior, and local norming.

POLICY & REGULATION

The major work of the Policy and Regulation Committee was completed during last year when the revised regulations for state implementation for IDEA were completed. The committee continued to review state progress on implementing IDEA requirements through the standing report on policy and data.

CONSTITUENCY INVOLVEMENT

The Constituency subcommittee identified challenges related to communication between regional parent representatives on the SSEAC and the chairs of local special education advisory committees in their regions to determine if there are concerns or issues that need to be brought to the state special education advisory committee. Since e-mail is the most efficient and cost effective way to communicate with local advisory committee chairpersons, it was suggested that the Department secure both telephone numbers and e-mail addresses for all local advisory committee chairpersons to distribute to each regional parent representative. This information has not been included as a part of the information collected through the Annual Plan process. The Office of Dispute Resolution and Administrative Services has been assigned the responsibility for technical assistance and communication with local special education advisory committees and has requested local e-mail information. Once this information is collected, the parent representatives on the SSEAC will be provided with the contact information for those local special education advisory committees in their respective regions. Once the regional parent representatives have this information, they will forward the information announcing quarterly meetings of the SSEAC, as well as other relevant information that they receive both locally and at state meetings to their local special education advisory committee counterparts. The Constituency subcommittee also recommends that the Office of Dispute Resolution and Administrative Services communicate to all local special education advisory committee chairs the name and contact information for the SSEAC parent representatives from their respective regions. Due to the importance of effective communication between SSEAC parent representatives and their local counterparts, they recommend that an operational template be developed to guide their interactions and follow-up appropriately with information they receive.

STATE OPERATED PROGRAMS

The subcommittee met May 11, 2010, to review the annual plans submitted by the state operated programs (SOP) and the Virginia School for the Deaf and the Blind.

The SOP representatives reported that they will submit assurances that indicate the necessary changes in their policies and procedures to be in compliance with state and federal guidelines. They also reported on the extent to which the current plan has been implemented. Other information specific to each facility is listed below.

Hospital Education Programs

The hospital education programs provide services to over 3,000 students with special education needs and 4,000 general education students with an average age of ten years. The average length of stay is 4-7 days. In addition to making the required changes in procedures to reflect federal

and state guidance, the hospital education programs are evaluated at various times for adherence to federal and state laws, program effectiveness, and other audits. IDEA Part B funds are used for technology improvement, data collection, and staff development including research-based practices. Early childhood funds are used for assistive technology, "Reach Out and Read" programs, instructional materials and adaptive toys. Issues raised about least restrictive environment (LRE) have been resolved. School divisions are providing transportation from the hospital to public schools where appropriate.

State Mental Health Facilities

The four mental health facilities serve over 2,000 students each year that are hospitalized on an acute basis. The southwestern facility will no longer be serving children under age 18 years old. The education manuals are designed to be in compliance with IDEA. The education programs offer an array of courses including art, music and speech and language services. They use research-based instructional techniques and students are assessed on academic progress. The facilities continue to address challenges in providing the state Standards of Learning (SOL) tests with the shifting student population. Federal funds are used for updating the materials used to prepare students for taking the General Educational Development (GED) test, technology and staff development.

State Facilities for Intellectual Disabilities

The five state facilities for intellectual disabilities are operated under the Virginia Department of Behavioral Health and Disabilities. Four of the five state facilities for intellectual disabilities are currently serving school-age children with intellectual disabilities and have education manuals designed to be consistent with IDEA and the guidance document provided by the Virginia Department of Education. The northern Virginia facility does not have children in the education program. The southeastern facility is undergoing renovation to include neighborhood housing, which is scheduled to be open in September 2011. Services to students in the school divisions are determined on an individual basis. At this time, these education programs have very few children. The decrease in the size of these programs over the past few years reflects success in local public school programs addressing the needs. Federal funds are used for educational materials.

Woodrow Wilson Rehabilitation Center

Virginia's Woodrow Wilson Rehabilitation Center (WWRC) is one of seven comprehensive rehabilitation centers in the United States. All clients/students attending WWRC have already been identified with a disability. The WWRC serves approximately 500-600 students a year.

Approximately 60 percent of the clients are 18 to 22 years of age and are participating in transition. The WWRC assures that all applicable requirements are followed. Funds are used primarily to support materials and technology.

***Department of Correctional Education* (DCE)**

DCE has 29 facilities. On average 1,500 students are served each year. Approximately 40 percent of the population is identified as needing special education (approximately 42 percent emotional disability, 25 percent learning disability, 20 percent other health impairment, 6 percent intellectual disability). The DCE functions as a public school and students with disabilities are primarily integrated with non-disabled peers in classes. There is a Board that oversees the DCE, which also reviews the Annual Plan. The education program offers the diploma options and was fully accredited this year showing an average 86 percent pass rate on the state Standards of Learning (SOL) tests. Federal funding is used to support personnel to provide special education and/or support services and staff development activities.

Regional & Local Detention Homes

The detention homes are not required to submit an Annual Plan; however, they were included in this review process. The detention homes operate under a policy and procedure manual, which is designed to be in compliance with IDEA. The average length of stay varies according to predisposition (15-20 days) or post-disposition, which could range from 4-6 months. During the past few years, the facilities have seen more girls and younger children. Literacy coaches are being used in the school programs. Two of the centers (Shenandoah and northern Virginia) are participating in a federal program that provides for English language learners through the federal Office of Refugee Resettlement Division of Unaccompanied Children's Services. There are challenges to complete ESL testing and teaching of English along with the regular instruction.

OTHER ISSUES

RESTRAINT & SECLUSION

The SSEAC continues to be concerned about policies across the state regarding the use of restraint and seclusion of students with disabilities and has continued to work collaboratively with the VDOE to remind superintendents of the guidelines document issued in 2006.

VIRGINIA SCHOOL FOR THE DEAF AND THE BLIND

Through reports from department staff, the SSEAC monitored the transition of students from the closed Hampton school to the Staunton campus or to their local divisions. The committee was also apprised of the renovations of the Staunton campus.

ASSESSMENT AND ACCOUNTABILITY

The Virginia Modified Achievement Standard Test (VMAST) was introduced to the committee and continues to be monitored as completion and pilot testing proceed. The SSEAC is represented on the steering committee of this new assessment tool. The SSEAC continues to study the reports of the State Performance Plan/Annual Performance Report (SPP/APR), specifically the indicators related to results of assessment for students with disabilities and supports the changes to the Virginia Grade Level Assessment (VGLA) that are planned for next year. The committee will continue to monitor testing results for students with disabilities.

VIRGINIA ACCESSIBLE INSTRUCTIONAL MATERIALS CENTER (AIM-VA)

The SSEAC was informed of Virginia's initiative to address the federal NIMAS (National Instructional Materials Accessibility Standards) for students with disabilities who require alternate print, Braille, or audio instructional materials. The center at George Mason University processes textbooks and other instructional materials requested by school divisions into various formats including electronic books and Braille and regularly reports on productivity. The SSEAC continues to follow the activities of the center during the year.

FUTURE ISSUES

Listed below are areas on which the SSEAC will continue to monitor and advise the Virginia Department of Education and the Board of Education as they work for the families and students of Virginia.

SPECIAL EDUCATION REGULATIONS

The Policy and Regulations subcommittee will be charged to monitor the implementation of the new regulations as the next academic year commences. Specifically, the SSEAC will continue to focus efforts towards parent education and training on the new regulations, in addition to the new Parent's Guide to Special Education. Reauthorization of the *No Child Left Behind Act of 2001* (NCLB) will be monitored as well.

BULLYING AND DISABILITY HARASSMENT

As a result of the changes in the new *Regulations Governing Special Education Programs for Children with Disabilities in Virginia* that require LEAs to have policies that prohibit disability harassment, the SSEAC will be reviewing programs that have been implemented in Virginia and across the country. This has become a national issue and has received much press recently.

RESTRAINT AND SECLUSION

The SSEAC will continue to monitor the implementation of restraint and seclusion policies and procedures.

SECONDARY TRANSITION AND SELF-ADVOCACY

The SSEAC will continue to monitor self-advocacy initiatives throughout the Commonwealth and encourage expansion of such programs. The committee will also monitor secondary transition programs and receive reports from the statewide postsecondary outcomes survey conducted by the VDOE as part of the SPP/APR requirements. The SSEAC will follow developments from provisions in the Higher Education Act of 2008 that made students with Intellectual and Developmental Disabilities eligible for Pell grants and work study.

ACCESSIBLE INSTRUCTIONAL MATERIALS

The SSEAC is planning to review and monitor potential expansion of the statewide library AIM-VA services to children under 504 plans as well as students needing accessible instructional materials under their IEPs.

SPECIAL EDUCATION TEACHER SHORTAGES

Due to the continued need for licensed special education teachers and the fact that they continue to be the top shortage area in the state, the SSEAC plans to research alternatives available in other states to addressing the critical shortage of special education teachers.

AUTISM

The SSEAC will continue to monitor the educational issues related to instructional strategies for students with Autism Spectrum Disorders (ASDs). The committee will request periodic updates from VDOE staff, review updated information, and assist in Virginia's future plans for addressing the educational needs of students with ASD.

ASSESSMENT ISSUES

Based upon the variety of assessment options that have been developed in Virginia for students with disabilities, the SSEAC will study the use of the Virginia Grade Level Alternative Assessment (VGLA) and the Virginia Substitute Evaluation Program (VSEP) in order to address issues that have appeared as a result of public comments and the data presented by VDOE. The SSEAC will also provide feedback to VDOE on the development of the new Virginia Modified Achievement Standard Test.

Virginia State Special Education Advisory Committee (SSEAC)

Eva Aikins
209 Cherry Lane
Danville, VA 24541
(Parent, Region 6 – Roanoke Area)

Judy M. Averill
4003 Cogbill Road
Richmond, VA 23234
(Transition/Vocational Education)

Michael M. Behrmann
Chairman, Kellar
Professor of Special Education
110A Krug Hall (MS1F2)
George Mason University
4400 University Drive
Fairfax, VA 22030
(Higher Education)

Suzanne Bowers
2402 Glengyle Drive
Vienna, VA 22181
(Parent, Region 4 – N. Virginia)

Robert T. Chappell
Division Superintendent
Rappahannock Co. Public schools
6 Schoolhouse Road
Washington, VA 22747
(Local Education Official)

Mary Anne Discenza
Part C Coordinator, Child/Family Services
Department of Behavioral Health
and Developmental Services
Infant & Toddler Connection
1220 Bank Street – Richmond VA 23219
(State Agency)

Christina Draper
P.O. Box 84
Fieldale, VA 24089
(Person with Disability)

Frances B. Goforth
Gloucester County Public Schools
6489 Main Street, Building Two
Gloucester, VA 23061
(Special Education Director)

Melodie M. Henderson
5132 Lavelle Road
Richmond, VA 23234
(Teacher)

Sandra A. Hermann
3625 Crofts Pride Drive
Virginia Beach, VA 23453
(Parent, Region 2 – Lower Tidewater)

Mona Holmes
5264 James Madison Highway
Fork Union, VA 23055
(Parent, Region 5 –Shenandoah Valley)

Lori Jackson
P. O. Box 259
Cobbs Creek, VA 23035
(Parent, Region 3 –Middle Peninsula)

Bernadette Jones
15941 Genito Road
Amelia, VA 23002
(Parent, Region 8 – Southside)

Jackie Fagan Myal
5550 Thornspring Heights Lane
Pulaski, VA 24301
(Parent, Region 7 – Southwest)

Jacqueline Nelson
Assistant Superintendent of Accountability
Department of Correctional Education
101 N. 14th Street, 7th Floor
Richmond, VA 23219
(Correctional (DCE))

Jennifer O'Berry-Ham
Minnick Educational Center
Program Manager/Principal
775 Dent Road
Roanoke, VA 24019
(Private Schools)

Peter Squire
1220 Wilkes Street
Alexandria, VA 22314
(Person with Disability)

Tamara Temoney
Virginia Dept. of Social Services
Family Engagement Project Manager
7 North 8th Street, Sixth Floor
Richmond, VA 23219
(Foster Care (DSS))

Carletta Pittman Wilson
1414 Winchell Street
Richmond, VA 23231
(Parent, Region 1 – Richmond Area)

Board of Education Agenda Item

Item: T. **Date:** November 18, 2010

Topic: Report on the Virginia College and Career Readiness Initiative

Presenter: Dr. Deborah Jonas, Executive Director for Research and Strategic Planning

Telephone Number: (804) 225-2067 **E-Mail Address:** Deborah.Jonas@doe.virginia.gov

Origin:

X Topic presented for information only (no board action required)

____ Board review required by

____ State or federal law or regulation

____ Board of Education regulation

____ Other: _____

___ Action requested at this meeting ____ Action requested at future meeting: _____

(date)

Previous Review/Action:

____ No previous board review/action

X Previous review/action

Date: January 14, 2010

Action: The Board of Education accepted a report for informational purposes.

Date: April 21, 2010

Action: The Board of Education received a report that described the progress and activities conducted by the Virginia Department of Education toward meeting the Board of Education objectives.

Background Information:

In January 2007, the Board of Education authorized the Virginia Department of Education (VDOE) to conduct studies of key indicators of college readiness that may be used to develop measures that identify students as likely prepared for postsecondary educational programs. Since that time, the Department has been engaged in several analytic efforts to identify indicators that suggest graduates are academically prepared for postsecondary educational success. The primary goal of the studies was to understand the associations between achievement as measured end-of-course Standards of Learning (SOL) assessments and postsecondary success. These studies included:

- Analysis of the association between SOL scores and Scholastic Aptitude Test (SAT) scores.
- Analysis of the association between SOL scores and postsecondary enrollment and persistence.
- Analysis of the association between SOL scores and postsecondary academic outcomes, including participation on postsecondary developmental coursework and course grades in postsecondary educational programs.

Through this research, VDOE has identified indicators of college readiness that are independently associated with a high probability of enrollment and persistence in four-year postsecondary institutions from across the country. The Virginia-specific indicators identified thus far are:

- Earning advanced proficient scores on mathematics, reading, and writing SOL assessments;
- Earning an advanced studies diploma;
- Participating in a college preparatory curriculum that includes Algebra II and chemistry; and
- Participating in the Virginia Early College Scholars program.

Other indicators of students' preparedness for credit-bearing courses in postsecondary education include:

- Participation in Advanced Placement, International Baccalaureate, and dual-enrollment courses; and
- Earning college ready scores on placement tests such as the SAT and ACT.

A detailed description of the research results is provided in Attachment A, Virginia's College and Career Readiness Initiative.

In January 2007, the Board of Education also authorized the Virginia Department of Education to request the College Board, ACT, and the American Diploma Project to conduct alignment studies of their respective college and career readiness standards with the *Standards of Learning* (SOL). All alignment studies found that Virginia's mathematics and English standards showed strong alignment with their respective postsecondary readiness standards. In 2009 and 2010, respectively, the Virginia Board of Education adopted revised SOL in mathematics and English that reflect the input and recommendations provided by the studies and substantial input from Virginia stakeholders.

In April 2010, the Board of Education received an update on progress towards meeting the Board objectives for postsecondary readiness including the major elements of the Virginia College and Career Readiness Initiative (CCRI).

Summary of Major Elements

Virginia has moved forward to conduct a variety of additional activities that focus on increasing the number of high school graduates who meet or exceed college and career readiness benchmarks. The initiative is continuously supported by research that is aimed at identifying, validating, and updating the state's understanding of the high school courses and achievement

levels that support students' preparation for success in entry-level, credit-bearing courses in college.

VDOE's CCRI research is currently focused on understanding the associations among outcomes in secondary and postsecondary education. The study that is underway relies on de-identified data from both VDOE and the State Council of Higher Education for Virginia (SCHEV) that follows individual students from high school and into public and private nonprofit colleges in Virginia. The data permit VDOE to link secondary outcomes of high school students, such as SOL test scores, diploma earned, attendance, and dual enrollment, to students' course placement in their first year of college, grades in mathematics and English courses, and persistence into their second year. The initial results support prior information learned from studies focused on enrollment in four year institutions, and provide more information about course enrollment for students enrolled in Virginia's two-year institutions of higher education—where the vast majority of developmental education is provided in Virginia.[1] Specifically, the initial[2] results of the studies of students who completed high school in 2008 and enrolled in either two- or four-year institutions of higher education in Virginia in the subsequent year show that:

- Nearly 60 percent of high school graduates and completers who enrolled in two-year institutions in Virginia after high school participated in developmental mathematics or English courses within one year, with a larger percentage of students enrolled in mathematics courses relative to English courses.

- Students who earned advanced studies diplomas had a low probability of enrolling in developmental education courses.[3]
    - Approximately 6 percent of students who graduated high school with an advanced studies diploma enrolled in developmental English courses.
    - Approximately 8 percent of students who earned advanced studies diplomas enrolled in developmental mathematics courses.
    - Approximately 11 percent of students who earned advanced studies diplomas enrolled in developmental courses in mathematics or English.

- Students who earned standard diplomas had comparatively higher rates of enrollment in developmental education courses. Of the students who earned standard diplomas:
    - Approximately 35 percent enrolled in developmental English courses.
    - Approximately 42 percent enrolled in developmental mathematics courses.
    - Approximately 54 percent enrolled in developmental courses in mathematics or English.

- Students who earned advanced proficient scores on the SOL assessments and earned advanced studies diplomas have the lowest rates of enrollment in developmental courses.

---

[1] Some four-year, private nonprofit institutions offer and enroll students in developmental courses.

[2] These studies are ongoing. Results presented here are the first available. Additional results and complete reports will be made available as they are completed.

[3] The results presented here are based on data from two- and four-year institutions. Relatively few students participate in developmental education in four-year colleges in Virginia; and those who do, attend private, nonprofit institutions.

    - Approximately 3 percent of the students who achieved advanced proficient scores on their Algebra I SOL and earned an advanced studies diploma enrolled in a developmental mathematics course.
    - Approximately 2 percent of students who scored advanced proficient on the Reading SOL and earned an advanced studies diploma enrolled in a developmental English course.

- Students who earned standard diplomas and scored advanced proficient on their SOL assessments also had low rates of enrollment in developmental education courses.
    - Approximately 14 percent of standard diploma earners who scored advanced proficient on the English reading assessment enrolled in developmental education courses.
    - Approximately 20 percent of standard diploma earners who scored advanced proficient in Algebra I enrolled in developmental education courses. This was a relatively small group of students in the data set, comprising only 647 students whose data were accurately matched between secondary and postsecondary data sets.

- Nearly all students (97 percent) who earned advanced proficient scores on the Algebra I SOL participated in Algebra II,[4] and 85 percent of students who achieved a proficient score on the Algebra I assessment enrolled in Algebra II.

As part of the research, statistical models were developed to identify factors that predict, with a high degree of accuracy, the factors that impact the likelihood that students will enroll in developmental education courses. The following summarizes key results from the predictive analysis.

- Scoring advanced proficient on the Algebra I assessment was associated with a low likelihood of enrolling in developmental mathematics courses. The model predicts that 5 percent of students who earn advanced proficient (500 or above) on the Algebra I assessment will enroll in developmental education courses.

- Scoring advanced proficient on the English reading assessment was associated with a low chance of enrolling in developmental English courses. Statistically, 3.5 percent of students who scored in the advanced proficient range (500 or above) were expected to enroll in developmental English courses.

- Participation in Algebra II and Chemistry were statistically significant predictors of enrollment in credit-bearing versus developmental mathematics courses, with course participation further reducing the likelihood that students will participate in developmental education courses in college.

- Ten percent or less of students who participated in dual enrollment and Advanced Placement courses were enrolled in developmental education courses.

[4] This information uses test participation as a proxy for enrollment.

- Placement in developmental education courses varied systematically across two-year institutions in Virginia. Students with similar academic achievement as measured by SOL test outcomes and diploma type had different chances of participating in developmental courses depending on the institution in which they enrolled. Recognizing that current placement practices vary by institution, VDOE will work with representatives from the Virginia Community College System to better understand these results.

Moving forward, VDOE plans to continue examining interactions among student outcomes, and determine how other factors, such as whether students are economically disadvantaged, are English language learners, or have disabilities, are associated with postsecondary enrollment, placement, and course outcomes. VDOE will update the Board periodically as new information becomes available.

CCRI Development and Implementation

The Virginia Department of Education (VDOE) has worked in close collaboration with the Virginia Community College System (VCCS), and the State Council of Higher Education for Virginia (SCHEV) to fully develop and begin implementing the initiative. Through the continuing work on the initiative, Virginia is in the process of:

1) Defining college and career readiness performance expectations aligned to national and international college and career ready standards.
    - Using the Standards of Learning and other validated state and national college and career readiness standards, including the Common Core State Standards, department staff drafted a preliminary set of English and mathematics performance expectations for external review.
    - Faculty at two- and four-year institutions of higher education provided feedback about the importance of each of the draft college and career ready performance expectations via an online survey. With assistance from VCCS and SCHEV in recruitment, more than 100 respondents participated in each of the English and mathematics surveys.
    - English and mathematics consensus/review teams composed of two- and four-year higher education institution staff and secondary content area experts analyzed the data and made recommendations to the Department on which performance expectations reached the level of "important" or "critical" for college and career readiness.
    - The recommended *Virginia English College and Career Readiness Performance Expectations* and a correlation crosswalk between the expectations and the *Common Core State Standards, College and Career Readiness* are provided as Attachment B. Similar documents for mathematics are in preparation.

2) Developing elective "capstone courses" to support students who need additional instruction to meet college and career ready performance expectations before leaving high school.

- Department staff members are currently developing preliminary course descriptions, program objectives, sample teaching strategies, and delivery options to define the grade-12 capstone courses. Course codes have been identified.
- The Department has requested support from the National High School Center and Appalachia Regional Comprehensive Center (ARCC)/Edvantia to identify specific content support materials for the capstone courses. The request is part of the ARCC's annual plan for services to Virginia, and is under review by the U.S. Department of Education.
- The Department has surveyed school divisions to determine which ones are developing capstone-like support materials and course designs and which are interested in piloting capstone programs for the 2011-2012 school year.

3) Providing technical assistance and professional development to Virginia's educators to support implementation of the revised English and mathematics standards and the college and career ready performance expectations.
    - The Department is in the process of negotiating pilot professional development centers at certain state universities to provide coursework and ongoing teacher support for the content on the performance expectations. This will be accomplished through federal teacher training funds. Part of this professional development process will be the development of sample capstone course materials so that teachers can teach secondary courses more effectively and be ready to teach the capstone courses when their divisions implement the programs.
    - The State Council of Higher Education for Virginia has agreed to support teacher professional development on the performance expectations through its next cycle of federal Title IIa grant awards to four-year institutions, funded by the *Elementary and Secondary Education Act*.

4) Aligning the state assessments to measure student mastery of the more rigorous mathematics and English standards adopted in 2009 and 2010. VDOE is developing certain high school end-of-course tests to support the establishment of a college ready scale score. When the Board establishes cut scores for these new tests, the Department anticipates proposing minimum cut scores that demonstrate proficiency to verify course credit, and minimum scores that represent academic preparedness for success in introductory, credit-bearing English and mathematics courses in college. The college ready achievement level will replace advanced proficiency on certain end-of-course tests.

5) Identifying accountability measures and incentives for schools to increase the percentage of students who graduate high school having demonstrated the academic and career skills needed to be successful in postsecondary education programs.
    - The Department is in the process of identifying incentives for high schools to increase the number of students who graduate having demonstrated that they have met college and career ready performance expectations. The current Virginia Index of Performance (VIP) is already in place and provides an example of the types of incentives that can be used to increase achievement. The award gives significant weight towards increasing advanced proficient scores on SOL assessments, which supports the CCRI goals. Other incentives could be provided

through the VIP or similar recognition programs.

- The Department has started a crucial dialogue with its partners in the higher education community and policy makers to determine whether it is appropriate to provide additional incentives to schools that make gains in increasing students' preparation for college. As well, there might be incentives available directly to students who meet or exceed Virginia's CCR Performance Expectations, with a particular focus on student groups who have been underrepresented in postsecondary education and training programs. For example, SREB has recommended that Virginia's public postsecondary institutions adopt a policy that would permit direct enrollment in entry-level, credit-bearing college courses for students who meet or exceed the readiness performance standards on the eleventh-grade English reading and writing assessments and the Algebra II end-of-course assessment. The policy would exempt these students from additional placement or readiness testing, thereby reducing the costs and time associated with such testing. Further, this policy would afford more students the opportunity to earn credits towards college graduation.

Superintendent's Recommendation:
The Superintendent of Public Instruction recommends that the Board of Education accept the Report on the Virginia College and Career Readiness Initiative.

Impact on Resources:
The work to date has been completed with existing Department resources, including two federal statewide longitudinal data system grants and consulting staff support from the Southern Regional Education Board through a grant from the Bill and Melinda Gates Foundation. Funding for the SREB grant will end December 31, 2010. Additional responsibility related to this activity may affect other services.

Timetable for Further Review/Action:
The Department will update the Board of Education as related research is completed and additional components of Virginia's College and Career Readiness Initiative are developed.

Virginia's College and Career Readiness Initiative

In 1995, Virginia began a broad educational reform program that resulted in revised, rigorous content standards, the Virginia Standards of Learning (SOL), in the content areas of English, mathematics, science, and history and social science. These grade-by-grade and course-based standards were developed over 14 months with revision teams including K-12 teachers and administrators, higher education representatives, community and agency partners, and citizen groups. The four sets of standards were revised in two recent revision windows, 2001-2003 and again in 2008-2010, as required by legislation of the Virginia General Assembly. In addition to the standards in the four core subjects, Virginia has Standards of Learning for all of its content areas, including foreign languages, fine arts, health, physical education, driver education, and computer technology.

In January 2007, the Board of Education authorized the Virginia Department of Education to conduct studies to determine factors contributing to success in postsecondary education. As part of that effort, the Department of Education requested Achieve, the American Diploma Project (ADP), the College Board, and ACT to conduct studies comparing their respective standards for postsecondary readiness to the Virginia Standards of Learning in English/Reading and Mathematics. In 2009 and 2010, respectively, the Virginia Board of Education adopted revised Standards of Learning in mathematics and English. The revised standards reflect the substantial input and recommended changes provided by college faculty and other experts from the College Board, ACT, the American Diploma Project, and the business community. These groups support Virginia's revisions and have validated the standards as college and career ready.

The Virginia College and Career Readiness Initiative builds on the revised standards and is designed to:

1) Ensure that college and career ready learning standards in reading, writing, and mathematics are taught in every Virginia high school classroom; and
2) Strengthen students' preparation for college and the work force before leaving high school.

As part of the initiative, Virginia has been engaged in a research program designed to understand the associations between performance on Virginia's statewide assessments and enrollment and performance in postsecondary education. Through this research, VDOE has identified indicators of college readiness that are independently associated with a high probability of enrollment and persistence in four-year postsecondary institutions from across the country. The Virginia-specific indicators are:

- Participating in a college preparatory curriculum that includes Algebra II and chemistry.
- Earning advanced proficient scores on mathematics, reading, and writing SOL assessments.
- Earning an advanced studies diploma.

Other indicators of students' preparedness for credit-bearing courses in postsecondary education include:

- Participation in Advanced Placement, International Baccalaureate, and dual-enrollment courses.
- Participating in the Virginia Early College Scholars program.[1]
- Earning college ready scores on placement tests such as the SAT and ACT.[2]

Building on this work, Virginia is moving forward to implement the revised English and mathematics Standards of Learning and to conduct a variety of activities that focus on increasing the number of high school graduates who meet or exceed college and career ready benchmarks. The Virginia Department of Education (VDOE) leads the initiative and works in close collaboration with leaders in the Virginia Community College System (VCCS) and the State Council of Higher Education for Virginia (SCHEV). Through the work in the initiative, Virginia is in the process of:

1) Defining college and career ready performance expectations aligned to national and international college and career ready standards;[3]
2) Developing elective "capstone courses" to support students who need additional instruction to meet college and career ready performance expectations before leaving high school;
3) Providing technical assistance and professional development to Virginia's educators to support implementation of the revised English and mathematics standards and the college and career ready performance expectations;
4) Aligning the state assessments to measure student mastery of the more rigorous mathematics and English standards adopted in 2009 and 2010. Certain high school end-of-course tests will include quantitative indicators of whether students have met or exceeded the achievement levels needed to be successful in introductory mathematics and English courses in college; and
5) Identifying accountability measures and incentives for schools to increase the percentage of students who graduate high school having demonstrated the academic and career skills needed to be successful in postsecondary education programs.

This document was developed to describe the Virginia College and Career Readiness Initiative and to provide results of research conducted thus far that inform the process. VDOE will provide updated information as it becomes available via the Web at: http://www.doe.virginia.gov/instruction/college_career_readiness/.

---

[1] The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma or an Advanced Technical Diploma. More information is available at: http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/.

[2] The College Board and ACT have developed scores on their respective tests that represent the minimum required to have a high probability of success in the first year of college.

[3] This work is supported by the Virginia's participation in the Southern Regional Education Board's college readiness initiative, funded by the Bill and Melinda Gates Foundation.

Why College and Career Ready?

America's students are facing increasing competition for meaningful employment from candidates around the world as more people in more countries are becoming more highly educated. At the same time, employers' expectations for the level of education and training needed for entry level jobs have increased. For example, Achieve reported that 35 years ago, only 12 percent of U.S. jobs required some postsecondary training or an associate's degree, and only 16 percent required a bachelor's degree or higher. Estimates suggest that in the next decade, nearly eight in 10 job openings will require postsecondary education or training[4].

As a Commonwealth, increasing citizens' educational attainment levels will also lead to economic growth throughout the state—by increasing income and reducing the number of children living in poverty. Research conducted by VCCS shows that quarterly wages increased as a function of earning more college credit among students who left a VCCS college in 2007. Two years later, students who had earned 60 credits or more (or had graduated), earned on average approximately $10,000 more per year than students who had earned fewer than 15 credit hours from Virginia's community colleges.[5] Children whose parents do not have any college education are increasingly likely to be living in poverty as employer expectations for education increases. Research shows that between 1986 and 2006, the percent of children living in poverty has increased by 12 percent for children whose parents are employed full-time, have a high school diploma, but do not have any college education. During the same time period, there was nearly no change in the percent of children living in poverty for children of parents who had some college education.[6]

As we move through the second decade of the 21st century, the prospects for future generations' success will greatly improve if the Commonwealth succeeds in meeting Governor McDonnell's goal of increasing by 100,000 the cumulative number of associate's and bachelor's degrees earned in Virginia over the next 15 years. Virginia's College and Career Readiness Initiative can directly support the Governor's goal by increasing students' preparedness for postsecondary education and training—leading to more credits earned, more graduates, and stronger economic conditions throughout the Commonwealth.

Components of the College and Career Readiness Initiative

The Virginia CCRI is comprised of the five components noted above:

1) Defining college and career ready performance expectations aligned to national and international college and career ready standards;[7]
2) Developing elective "capstone courses" to support students who need additional instruction to meet college and career ready performance expectations before leaving high school;

---

[4] http://www.achieve.org/files/CollegeandCareerReady.pdf

[5] http://www.vccs.edu/Portals/0/ContentAreas/AcademicServices/StudentSuccess/StudentSuccessSnapshot_12PPT-02182010.pdf

[6] Douglas-Hall, A. & Chau M. (2007). Parents' Low Education Leads to Low Income, Despite Full-Time Employment. National Center for Children in Poverty, Columbia University Mailman School of Public Health. http://www.nccp.org/publications/pub_786.html.

[7] This work is supported by the Virginia's participation in the Southern Regional Education Board's college readiness initiative, funded by the Bill and Melinda Gates Foundation.

3) Providing technical assistance and professional development to Virginia's educators to support implementation of the revised English and mathematics standards and the college and career ready performance expectations;
4) Aligning the state assessments to measure student mastery of the more rigorous mathematics and English standards adopted in 2009 and 2010. Certain high school end-of-course tests will include quantitative indicators of whether students have met or exceeded the achievement levels needed to be successful in introductory mathematics and English courses in college; and
5) Identifying accountability measures and incentives for schools to increase the percentage of students who graduate high school having demonstrated the academic skills needed to be successful in postsecondary education programs.

Defining Standards-Based College and Career Ready Performance Expectations

Virginia developed and implemented a standards-based school accountability system in the 1990s. The Virginia Standards of Learning describe the Commonwealth's expectations for student learning and achievement in grades K-12 in English, mathematics, science, history/social science, technology, the fine arts, foreign language, health and physical education, and driver education. Students are tested on mastery of the standards in four core content areas: English, mathematics, science, and history/social science. Assessment results are used to determine school accountability ratings, and in high school, the Board of Education has prescribed the number of tests in specific content areas that students must pass to earn standard and advanced studies diplomas.

In 2009 and 2010, respectively, the Virginia Board of Education approved revised Standards of Learning in mathematics and English. These updated standards were implemented following reviews and input from Achieve, the College Board, and ACT, all of which validated the revised standards as college and career ready. The CCRI extends this work to define, both qualitatively and quantitatively, the level of performance students must reach to be academically prepared to enter and successfully complete credit-bearing courses in English and mathematics in college.

Virginia has leveraged support available from SREB to develop standards-based college and career ready performance expectations in mathematics and English. The performance expectations are designed to define the content and level of achievement students must reach to be prepared for success in entry-level credit-bearing courses in mathematics and English. VDOE coordinates the development of the performance expectations, working closely with representatives from the higher education community.

To develop the *Virginia College and Career Ready (CCR) Performance Expectations*, Virginia's educators are drawing from several sources of learning standards that have already been developed, vetted, and validated by educators and the business community:

- Virginia's Standards of Learning in mathematics and English
- The Common Core State Standards (CCSS) developed through a national collaboration led by the Council of Chief State School Officers and the National Governors Association

- The Virginia Community College System's learning goals and student outcomes[8]
- Career and Technical Education competencies
- Other standards identified as important or critical for success by faculty at Virginia's two- and four-year colleges.

Using these standards, VDOE developed a survey to ask higher education faculty and other stakeholders to determine how important each expectation is to students' college and career readiness. VDOE sent the survey to educators and other relevant stakeholders identified by VCCS, SCHEV, the career and technical education community, and high school educators. The results of the survey will be used by VDOE, VCCS, and SCHEV leaders to finalize the Virginia College and Career Ready (CCR) Performance Expectations.

The CCR Performance Expectations, when final, will identify the performance expectations from grades nine through twelve that are considered important or essential for students to master to be academically prepared to succeed in entry-level credit-bearing English and mathematics courses in college. The skills in English and mathematics would also support student success in college courses in other subject areas such as science and history. The expectations are being developed through a process that includes faculty from Virginia's two- and four-year colleges and universities; members of the business community; and high school English and mathematics educators.

Virginia began developing the performance expectations in the spring of 2010, and plans to finalize the work during the 2010-2011 school year.

Virginia's Capstone Courses in English and Mathematics

Virginia is working to establish quantitative measures that indicate whether a student has sufficiently mastered the college and career ready performance expectations such that they would have a high probability of enrolling and being successful in entry-level credit-bearing courses in college. For example, indicators such as outcomes on Virginia SOL assessments, SAT, and ACT tests would be available by the end of students' junior year in high school. With these quantitative indicators, schools can identify students who have participated in a college-preparatory curriculum but have not met the achievement levels in English and mathematics needed to be successful in entry-level credit-bearing courses in postsecondary education.

VDOE is in the process of developing capstone courses that are focused on providing these students with the additional instruction they need to meet or exceed college and career ready performance expectations. The courses are being developed to provide students with applied and relevant instruction that supports students' attainment of the rigorous CCR Performance Expectations. VDOE plans to work with at least two school divisions to develop course materials with the goal of piloting the capstone courses in the 2011-2012 school year.

Technical Assistance and Professional Development

A significant component of VDOE's work is to provide technical assistance and professional development to Virginia's educators to support implementation of the college and career ready

[8] Available at: http://www.lfcc.edu/files/documents/about/pie/assessment/VCCS-Gen-Ed-Goals-and-SLO---Approved-May-2006.pdf.

performance expectations in Virginia's high schools. For the CCRI to be successful, VDOE must be proactive in supporting school divisions' ability to implement the revised SOL and to provide appropriate students with the capstone course experience. As part of the work to implement the revised SOL in mathematics and English,[9] and the college and career ready performance expectations, VDOE and its partners will focus on providing professional development that enables teachers to have a better understanding of the knowledge and skills required for more students to meet or exceed the CCR Performance Expectations. This will be done by working with teachers and administrators to align and improve instruction so that it is focused on the CCR Performance Expectations, and those foundational standards that directly support college and career readiness. As well, VDOE will continue to support educators by providing ongoing technical assistance to ensure that high quality instruction is delivered to improve all students' preparation for success in college and careers. VDOE will also work with its partners throughout the Commonwealth to identify opportunities for others—such as institutions of higher education and professional associations—to support the implementation of the CCRI.

Implementing More Rigorous Mathematics and English Standards and Defining Quantitative Indicators of College and Career Readiness

Virginia first implemented an assessment-based accountability system in 1998. The tests developed for this system were designed to assess student mastery of the content standards in English, mathematics, science, and history and social science. Passing scores were based on whether a student met the minimum level of achievement needed to pass the course or class associated with the Standards of Learning. Since that time, Virginia has revised the standards; with each revision, the tests were aligned to measure whether students demonstrated mastery of the revised content standards.

The most recent revision to Virginia's mathematics and English SOL resulted in significant changes to the standards that increased the rigor of the content that students are expected to master. The revisions were completed following significant input from Achieve, the College Board, and ACT. These organizations reviewed the SOL and assessed how well they aligned to college and career ready standards of their respective organizations. With results from these alignment studies, the Virginia Board of Education adopted revised mathematics and English SOL (in 2009 and 2010, respectively) that are more rigorous than previous versions and are supported by Achieve, the College Board, and ACT as college and career ready.

With the adoption of these revised standards, VDOE is developing new tests that will measure students' mastery of the more rigorous content standards. The new assessments will be administered online, and include technology-enhanced items that require students to demonstrate content mastery in ways that were not possible with multiple-choice tests. The result of the standards revision, therefore, will be that students will have to demonstrate mastery of more rigorous content in order to pass the revised SOL tests.

VDOE is developing the new tests to provide a college ready achievement level on certain end-of-course assessments in English and mathematics. The test development process will be

[9] New tests that measure mastery of the revised mathematics and English SOL will be implemented in the 2012 and 2013 school years, respectively.

informed by previous research focused on the associations between student achievement measured by SOL assessments and postsecondary enrollment and persistence. Further, the results of a survey in which higher education faculty identified the SOL in mathematics and English that are essential for student success in introductory, credit-bearing English and mathematics courses in college will be considered in the test development process. In addition to adopting minimum cut scores that demonstrate proficiency to verify course credit, the Board of Education will adopt minimum scores that represent academic preparedness for success in introductory, credit-bearing English and mathematics courses in college. The college ready achievement level will replace advanced proficiency on certain end-of-course tests.

On the whole, this information will provide students, families, school counselors, and educators with a description of the level of preparation students need to be successful in postsecondary education and training programs. It will also provide student-level indicators of such achievement.

Continued Research on the Associations between Secondary Achievement and Postsecondary Outcomes

VDOE will continue to collaborate with VCCS and SCHEV on a research program designed to identify and validate quantitative indicators of postsecondary readiness and to understand the achievement levels and other factors that are associated with a high probability of:

1) Enrolling and persisting in four-year postsecondary institutions; and
2) Enrolling in and being successful in completing credit-bearing, nondevelopmental education courses in both two- and four-year colleges.

Beginning with the high school graduating class of 2006, Virginia has the ability to link data from students' postsecondary experiences to their enrollment in institutions of higher education across the country using data acquired from the National Student Clearinghouse. Having this link has allowed VDOE to conduct extensive analyses of the associations between high school indicators and postsecondary enrollment. In Virginia's institutions of higher education, approximately 45 percent of students who attend two-year schools enroll in one or more developmental (non-credit bearing) courses; in four-year schools, approximately three percent of students require developmental education before enrolling in credit-bearing courses.[10] As well, the State Council of Higher Education for Virginia (SCHEV) indicates that in four-year schools, students who persist into their second year of college are associated with a high probability of graduating.[11]

With this knowledge, VDOE has conducted analyses of the postsecondary enrollment data with the assumption that students who enroll in four-year schools and persist into their second year are prepared for success in college. Appendix A provides a summary of research conducted thus far, much of which was conducted by the Center for Assessment, Evaluation, and Educational Programming at Virginia Tech on behalf of VDOE. Key findings suggest the following:

[10] In Virginia, the community colleges are expected to provide developmental coursework.
[11] State Council of Higher Education for Virginia. (2009). The four-year college pipeline in Virginia. Presentation to the Virginia P-16 Council, October 6, 2009, Richmond, VA.

- Students who earn advanced proficient scores on Virginia's end-of-course mathematics and English SOL assessments have a high probability of enrolling in four-year colleges and persisting into their second year, with students who earn advanced proficient in reading, writing, and Algebra II having the highest probability of success.
- Students who score proficient on reading, writing, and mathematics end-of-course assessments have a relatively low probability of enrolling and succeeding in four-year institutions. These students' probability for success in two-year institutions requires further study.
- Students who earn advanced studies diplomas in Virginia, including International Baccalaureate (IB) diplomas, have a high probability of enrolling in four-year colleges and persisting into their second year. Students who earn other diplomas have a low probability of enrolling in four-year institutions. These students' degree of preparation for success in two-year institutions requires further study.
- Students who participated in Virginia's Early College Scholar Program[12] had high rates of enrollment (greater than 85 percent) in four-year institutions within three years of graduating from high school.
- Consistent with national trends, significant work must be done in Virginia to support particular groups of students to enroll and be successful in postsecondary education. Of particular note are students who are economically disadvantaged, male, Hispanic, or African American. VDOE's analysis showed that students in these groups generally have lower rates of enrollment and persistence. This was true even when their state assessment results suggest they were well prepared.
- Enrollment in two- and four-year colleges varies by Virginia's Superintendents' Regions, with northern Virginia enrolling the largest percent of students in two- and four-year colleges (see Appendix for details).

Starting with the high school graduating class of 2008, VDOE and SCHEV have the technical capability to link de-identified student-level records across state agencies, and analyses of these data are underway. The first analyses available will estimate the associations between secondary outcomes and course enrollment and grades in postsecondary education programs in Virginia. The initial analyses are focused on identifying outcomes and course-taking patterns that are associated with:

1) Participation in nondevelopmental coursework in postsecondary institutions, including in the Virginia Community College System;
2) Student attainment of a grade of C or better in credit-bearing, entry-level coursework; and
3) Student persistence into the second year of college.

[12] The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma or an Advanced Technical Diploma. More information is available at: http://www.doe.virginia.gov/instruction/graduation/early_college_scholars.

Incentives for Schools to Increase College and Career Ready Preparation

VDOE is interested in identifying incentives for high schools to increase the number of students who graduate having demonstrated that they have met college and career ready performance expectations. The current Virginia Index of Performance (VIP) is already in place and provides an example of the types of incentives that can be used to increase achievement. The VIP program recognizes schools and school divisions that have made significant progress towards achieving specific measurable goals and objectives established by the Board of Education. The award gives significant weight towards increasing advanced proficient scores on SOL assessments, which supports the CCRI goals. Other incentives could be provided through the VIP or similar recognition programs.

VDOE considers it critical to work with its partners in the higher education community and policy makers to determine whether it is appropriate to provide additional incentives to schools that make gains in increasing students' preparation for college. As well, there might be incentives available directly to students who meet or exceed Virginia's CCR Performance Expectations, with a particular focus on student groups who have been underrepresented in postsecondary education and training programs. For example, SREB has recommended that Virginia's public postsecondary institutions adopt a policy that would permit direct enrollment in credit-bearing college courses for students who meet or exceed the readiness performance standards on the eleventh-grade English reading and writing assessments and the Algebra II end-of-course assessment. The policy would exempt these students from additional placement or readiness testing, thereby reducing the costs and time associated with such testing. Further, this policy would afford more students the opportunity to earn credits towards college graduation.

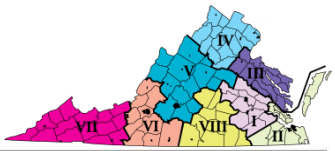
Appendix: Associations Between Student Achievement and Postsecondary Enrollment in Virginia: Highlights of Recent Analyses

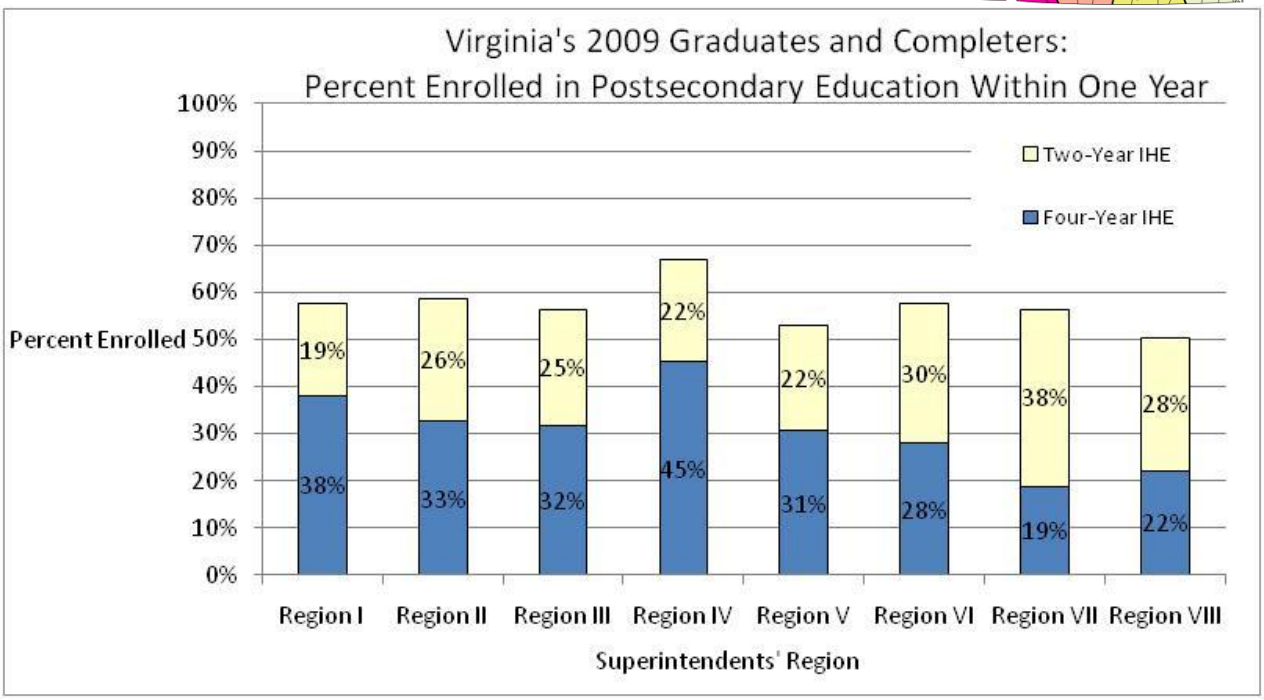
From June 2009-June 2010, the Center for Assessment, Evaluation, and Educational Programming at Virginia Tech studied the associations between academic indicators available from the VDOE and postsecondary enrollment as documented by data from the National Student Clearinghouse. Data were analyzed from students who graduated high school or earned other completion credentials in the 2005-2006 and 2006-2007 school years. Postsecondary enrollment data were available through February 2009. The project resulted in two technical reports that focus on: 1) factors associated with initial enrollment in postsecondary institutions, and 2) the utility of the SOL assessments in predicting postsecondary enrollment. These detailed reports are available at: http://www.doe.virginia.gov/instruction/college_career_readiness/.

Taken together with the knowledge that approximately 3 percent of students in Virginia's four-year institutions participate in developmental education classes, whereas nearly half of students enrolling in Virginia community colleges participate in developmental education, the results of this study, with a few additional results from work conducted by VDOE, suggest that:

- Students who earn advanced proficient scores on Virginia's mathematics and English SOL assessments have a high probability of enrolling in four-year colleges and persisting into their second year, with students who earn advanced proficient in reading, writing, and Algebra II having the highest probability of success.
- Students who score proficient on reading, writing, and mathematics end-of-course assessments have a relatively low probability of enrolling and succeeding in four-year institutions. These students' probability of success in two-year institutions requires further study.
- Students who earn advanced studies diplomas in Virginia, including International Baccalaureate (IB) diplomas, have a high probability of enrolling in four-year colleges and persisting into their second year. Students who earn other diplomas have a low probability of enrolling in four-year institutions. These students' degree of preparation for success in two-year institutions requires further study.
- Students who participated in Virginia's Early College Scholar Program had high rates of enrollment (greater than 80 percent) in four-year institutions within three years of graduating from high school.
- Significant work must be done to support particular groups of students to enroll and be successful in postsecondary education. Of particular note are students who are economically disadvantaged, male, Hispanic, or African American. Students in these groups generally have lower rates of enrollment and persistence. This is true even when their state assessment results suggest they are well prepared.

- Enrollment in two-year and four-year colleges varies by Virginia's Superintendents' Regions, as shown in the map below.





The following summarizes analytic results from the studies conducted by researchers at Virginia Tech as well as results of some additional analyses conducted by VDOE.

Initial Enrollment in Four-Year Institutions

1) Of the 77,458 high school graduates in the 2006 cohort, 29,216 or 37.7 percent were enrolled at a four-year institution in the fall of academic year 2006-2007.

2) Approximately 68 percent of students who earned advanced studies diplomas and nearly 89 percent of students who earned International Baccalaureate (IB) diplomas enrolled in four-year institutions after graduating, suggesting that these credentials are associated with high probability of enrollment and persistence in four-year institutions.

3) More than 85 percent of students who graduated in 2006 or 2007 and participated in Virginia's Early College Scholars program were enrolled in four-year institutions by the spring of 2009.

4) Approximately 13 percent of students who earned standard diplomas enrolled in four-year institutions; students who earned other credentials had small chances of enrolling in four-year schools. This suggests that these credentials are not adequately preparing students for enrollment and success in four-year institutions.

5) The average SOL scores for each of the SOL subject areas were higher for those enrolling in four-year institutions in the fall of 2006 than those who did not enroll.

6) Those scoring in the advanced proficiency category in each SOL subject area had the highest predicted and actual rates of enrollment.

7) A statistical model that used SOL proficiency levels to predict enrollment in four-year institutions for all subject areas correctly classified students into enrolled and non-enrolled categories 76.5 percent of the time.

Disadvantaged Student Status, Gender, Race, and Initial Four-Year Enrollment

1) Students who were not classified as economically disadvantaged enrolled at higher rates than students who were classified as economically disadvantaged.

2) Females enrolled at higher rates than males for all groups except American Indians and those who did not specify race.

3) In considering students of different race/ethnicity, Asians and American Indians had the highest rates of enrollment followed by those who did not specify their race and whites. Hispanics had the lowest rate of initial enrollment at four-year institutions.

4) African-Americans and American Indians enrolled at four-year institutions at higher rates than predicted based on statistical models that used student outcomes on SOL tests to predict enrollment; all other groups enrolled at rates lower than predicted.

Persistence in Four-Year Institutions

1) Among those enrolling at four-year institutions, 87.4 percent persisted to fall 2007. Eighty percent of those initially enrolling persisted to the fall of 2008.

2) Statistical models use SOL outcomes were not effective in predicting persistence in four-year institutions. Other factors should be investigated to better understand persistence.

Disadvantaged Student Status, Gender, Race, and Persistence in Four-Year Institutions

1) Economically disadvantaged students were less likely to persist than those students who were not economically disadvantaged.

2) Females were more likely to persist than males.

3) In considering students of different race/ethnicity, Asians had the highest persistence rates going from the second to third years; African Americans had the lowest persistence rates.

4) Across racial groups, males who were economically disadvantaged had persistence rates lower than their economically disadvantaged female counterparts. However, the difference between economically disadvantaged males and females is minimal in two racial groups (Asians and Hispanics).

Initial Enrollment in Two-Year Institutions

1) Of the 77,458 high school graduates in the 2006 cohort, 15,678 or 20.2 percent were enrolled at a two-year institution in either the summer or fall immediately following high school graduation, and approximately 59 percent of these students had earned standard diplomas and 36 percent had earned advanced diplomas in high school. The remaining five percent earned other credentials in high school.

2) The average SOL scores for each of the SOL-tested subject areas were *lower* for those enrolling in two-year institutions in the fall of 2006 compared to those who enrolled in four-year institutions but *higher* on average than the scores of those not attending any postsecondary institution.

3) Of Virginia's major racial and ethnic subgroups, Asian, Hispanic, and white students had similar enrollment rates at two-year colleges of 22.8, 22.8, and 21.0 percent, respectively. African Americans had the lowest enrollment rate of 16.8 percent.

4) Students who were economically disadvantaged enrolled at similar rates to those who were not economically disadvantaged. However, among Asians, those who were economically disadvantaged enrolled in two-year institutions at substantially higher rates than those who were not economically disadvantaged.

5) Overall, female enrollment was only slightly higher than male enrollment in two-year institutions (20.3 percent versus 20.1 percent). For Asians who were economically disadvantaged, male enrollment exceeded female enrollment (33 percent versus 29.5 percent). This may be explained in part by the higher enrollment of Asian females in four-year institutions.

Transferring to a Four-Year Institution

1) Of the 15,375 students from the 2006 cohort enrolling at a two-year institution initially, 19.3 percent transferred to a four-year institution.

2) The average SOL scores for each of the SOL-tested areas were higher for those transferring to four-year institutions compared to those who did not transfer.

3) Those who were economically disadvantaged transferred at a lower rate than those who were not; females transferred at a higher rate than males for most racial and ethnic groups. The exceptions were for economically disadvantaged African Americans and Whites.

4) The ethnic group with the highest transfer rate was the group whose members did not specify their race; Asians were the group with the next highest transfer rate. African Americans and Hispanics had the lowest transfer rate to four-year institutions.

5) In considering race, gender, and economic status together, Asian females who were not economically disadvantaged transferred at the highest rate. Hispanic males who were economically disadvantaged transferred at the lowest rate.

Degree or Certificate Attainment in Two-Year Institutions

1) Of the 15,375 students from the 2006 cohort enrolling at a two-year institution initially, 10.5 percent earned a degree or certificate.

2) The average SOL scores for each of the SOL-tested subject areas were higher for those earning a degree or certificate compared to those who did not earn a degree or certificate.

3) Those who were economically disadvantaged attained a degree or certificate at a lower rate than those who were not; females earned degrees or certificates at a higher rate than males except in the case of economically disadvantaged African Americans.

Two-Year Success

1) Of the 48,242 students from the 2006 cohort enrolling at a two-year institution initially, 23.3 percent met a criterion for success. These students either earned a certificate or degree or transferred to a four-year institution before the end of the study period, three years.

2) Those who were economically disadvantaged were less successful than economically advantaged students.

3) The ethnic group with the highest rate of success was the group that did not specify their race.

4) In considering race and gender the group with the highest success rate was females who did not specify their race.

5) The group with the highest success rate when considering race, gender, and economically disadvantaged status were Asian females who were economically advantaged.

College Enrollment and Persistence Patterns of Advanced Proficient Students in Language Arts and Mathematics

1) The group achieving advanced proficiency in English and in Algebra II had the highest rate of four-year enrollment (81.9 percent).

2) The group failing to achieve advanced proficiency in English and mathematics had the lowest rate of four-year enrollment (22.5 percent).

3) Those achieving advanced proficiency in English and Algebra II had the highest persistence rates in both 2007 and 2008, 94.8 percent and 90.9 percent respectively.

4) Those failing to achieve advanced proficiency in English and mathematics had the lowest persistence rates in both 2007 and 2008, 81.9 percent and 72.2 percent respectively.

English College and Career Readiness Performance Expectations
Consensus Recommendations
October 28, 2010

Reading

VOCABULARY

1. Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words.
2. Apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts.
3. Demonstrate understanding of word relationships and nuances in word meanings.
4. Discriminate between connotative and denotative meanings and interpret the connotation.
5. Use context, structure, and connotations to determine meanings of words and phrases.
6. Expand general and specialized vocabulary through speaking, reading, and writing.

NONFICTION READING

7. Read and analyze a variety of nonfiction texts.
8. Use reading strategies throughout the reading process to monitor comprehension.
9. Identify author's main idea and purpose.
10. Summarize text relating supporting details.
11. Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts.
12. Interpret and use data and information in maps, charts, graphs, timelines, tables, and diagrams.

LITERARY READING

13. Read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama.
14. Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme.
15. Explain the influence of historical context on the form, style, and point of view of a written work.

READING ANALYSIS and CRITICAL READING

16. Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions.
17. Draw conclusions and make inferences on explicit and implied information using textual support.
18. Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias.
19. Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose.
20. Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion.
21. Critically evaluate the accuracy, quality, and validity of the information.

Writing

COMPOSING

22. Write clear and varied sentences, clarifying ideas with precise and relevant evidence.
23. Arrange paragraphs into a logical progression.
24. Clarify and defend a position with precise and relevant evidence.
25. Draw evidence from literary or informational texts to support analysis, reflection, and research.
26. Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose.
27. Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions.
28. Analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product.
29. Synthesize information to support the thesis and present information in a logical manner.
30. Develop narrative, expository, and persuasive writings for a variety of audiences and purposes.
31. Develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis.
32. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

REVISION and EDITING

33. Write and revise correspondence to a standard acceptable both in the workplace and in postsecondary education.
34. Revise writing for clarity of content, depth of information and technique of presentation.
35. Self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.
36. Apply grammatical conventions to edit writing for correct use of language, spelling, punctuation, and capitalization.
37. Use computer technology to plan, draft, revise, edit, and publish writing.

DOCUMENTATION and ETHICS

38. Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA).
39. Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information.

Communicating

SPEAKING

40. Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose.
41. Use details, illustrations, statistics, comparisons, and analogies to support the presentation.
42. Present evidence clearly and convincingly.
43. Use media, visual literacy, and technology skills to create and support the presentation.

LISTENING

44. Use a variety of listening strategies to analyze relationships among purpose, audience, and content of presentations.
45. Monitor listening and use a variety of active listening strategies to make evaluations.
46. Analyze, produce, and examine similarities and differences between visual and verbal media messages.
47. Determine the author's purpose and intended effect on the audience for media messages.
48. Analyze and interpret others' presentations.

COLLABORATING

49. Participate in, collaborate in, and report on small-group learning activities.
50. Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.
51. Demonstrate the ability to work effectively with diverse teams to accomplish a common goal.

College and Career Readiness Performance Expectations Crosswalk

Common Core State Standards College and Career Readiness Anchor Standards-
Virginia College and Career Readiness Performance Expectations

Common Core State Standards College and Career Readiness Anchor Standards Reading	**Virginia College and Career Readiness Performance Expectations**
1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	Draw conclusions and make inferences on explicit and implied information using textual support. (SOL 12.5f) (#17)* **Indicates the ordinal number of the performance expectation.* Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, point of view or bias. (SOL 11.8e) (#18)
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	Identify author's main idea and purpose. (SOL 9.4a) (#9) Summarize text relating supporting details. (SOL 9.4b) (#10)
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.	Explain the relationships between and among elements of literature: characters, plot, setting, tone, point of view, and theme. (SOL 9.4e) (#14)
4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.	Apply knowledge of word origins, derivations, and figurative language to extend vocabulary development in authentic texts. (SOL 12.3) (#2) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose. (SOL 10.4h) (#19) Discriminate between connotative and denotative meanings and interpret the connotation. (SOL 12.3c) (#4)

Common Core State Standards **College and Career Readiness Anchor Standards** **Reading**	**Virginia College and Career Readiness Performance Expectations**
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.	Use reading strategies throughout the reading process to monitor comprehension.* (SOL 10.5h) (#8) **Common Core Anchor Standard 5 represents <u>one of several</u> reading strategies that should be mastered and applied by the college and career ready student. Additional reading strategies are described in the SOL Curriculum Framework for standard 10.5.*
6. Assess how point of view or purpose shapes the content and style of a text.	Explain the influence of historical context on the form, style, and point of view of a written work. (SOL 9.4i) (#15)
7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.	Evaluate sources including advertisements, editorials, blogs, Web sites, and other media for relationships between intent, factual content, and opinion. (SOL 11.2c) (#20) Determine the author's purpose and intended effect on the audience for media messages. (SOL 11.2d) (#47) Interpret and use data and information in maps, charts, graphs, timelines, tables, and diagrams. (SOL 10.5e) (#12)
8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.	Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose. (SOL 10.4h) ((#19) Critically evaluate the accuracy, quality, and validity of the information. (SOL 12.8c) (21)

Common Core State Standards College and Career Readiness Anchor Standards Reading	Virginia College and Career Readiness Performance Expectations
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.	Analyze two or more texts addressing the same topic to identify authors' purpose and determine how authors reach similar or different conclusions. (SOL 12.5c) (#16)
10. Read and comprehend complex literary and informational texts independently and proficiently.	Read, comprehend, and analyze a variety of literary texts including narratives, narrative nonfiction, poetry, and drama. (SOL 9.4) (#13) Read and analyze a variety of nonfiction texts. (SOL 12.5) (#7)

Common Core State Standards College and Career Readiness Anchor Standards Writing	Virginia College and Career Readiness Performance Expectations
1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions. (SOL 11.6b) (#27) Clarify and defend position with precise and relevant evidence elaborating ideas clearly and accurately. (SOL 11.6d) (#24)
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.	Write clear and varied sentences, clarifying ideas with precise and relevant evidence. (SOL 10.6d) (#22) Arrange paragraphs into a logical progression. (SOL 9.6f) (#23) Develop a variety of writing to persuade, interpret, analyze, and evaluate with an emphasis on exposition and analysis. (SOL 10.6) (#31) Synthesize information to support the thesis and present information in a logical manner. (SOL 12.8d) (#29)
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	Develop narrative, expository, and persuasive writings for a variety of audiences and purposes. (SOL 9.6) (#30)
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	Generate, gather, plan, and organize ideas for writing to address a specific audience and purpose. (SOL 10.6a) (#26)

Common Core State Standards College and Career Readiness Anchor Standards Writing	Virginia College and Career Readiness Performance Expectations
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	Self- and peer-edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing. (SOL 11.7) (#35) Revise writing for clarity of content, depth of information and technique of presentation. (SOL 12.6g) (#34)
6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.	Use computer technology to plan, draft, revise, edit, and publish writing. (SOL 12.6h) (#37)
7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	Analyze, evaluate, synthesize, and organize information from a variety of sources to produce a research product. (SOL 11.8) (#28)
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.	Critically evaluate the accuracy, quality, and validity of the information. (SOL 12.8c) (#21) Cite sources for both quoted and paraphrased ideas using a standard method of documentation, such as that of the Modern Language Association (MLA) or the American Psychological Association (APA). (SOL 12.8e) (#38) Define the meaning and consequences of plagiarism and follow ethical and legal guidelines for gathering and using information. (SOL 12.8h) (#39)

Common Core State Standards College and Career Readiness Anchor Standards Writing	**Virginia College and Career Readiness Performance Expectations**
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.	Draw evidence from literary or informational texts to support analysis, reflection, and research.* (CCSS-Writing 9) (#25) **This performance expectation is addressed directly and holistically in the Virginia English Standards of Learning Curriculum Framework 12.6 and 12.8.*
10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.* (CCSS-Writing 10) (#32) **This performance expectation is fully elaborated as a strategy in the Virginia English Standards of Learning Curriculum Framework, 12.6, which states, "Students should have practice writing for shorter time frames as well as extended time frames." Purpose and audience are fully addressed in other writing performance expectations including 12.7 and 10.6.*

Common Core State Standards College and Career Readiness Anchor Standards Speaking and Listening	**Virginia College and Career Readiness Performance Expectations**
1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	Participate in, collaborate in, and report on small-group learning activities. (SOL 10.1) (#49) Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems. (SOL 10.1f) (#50) Demonstrate the ability to work effectively with diverse teams to accomplish a common goal. (SOL 10.1e) (#51)
2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.	Analyze, produce, and examine similarities and differences between visual and verbal media messages. (SOL 10.2) (#46)
3. Evaluate a speaker's point of view, reasoning, and use of evidence and rhetoric.	Analyze and interpret other's presentations. (SOL 10.1j) (#48) Monitor listening and use a variety of active listening strategies to make evaluations. (SOL 11.1f) (#45)
4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	Present evidence clearly and convincingly. (SOL 11.1b) (#42) Use details, illustrations, statistics, comparisons, and analogies to support the presentation. (SOL 12.1c) (#41) *(In addition, see expectations 12.1d and 12.1e below)*
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.	Use media, visual literacy, and technology skills to create and support the presentation. (SOL 12.1d) (#43)

Common Core State Standards College and Career Readiness Anchor Standards Speaking and Listening	Virginia College and Career Readiness Performance Expectations
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.	Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose. (SOL 12.1e) (#40)

Common Core State Standards College and Career Readiness Anchor Standards Language	Virginia College and Career Readiness Performance Expectations
1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Use grammatically correct language, including vocabulary appropriate to the topic, audience, and purpose. (SOL12.1e) (#40) Write and revise correspondence to a standard acceptable both in the workplace and in postsecondary education. (SOL 11.6h) (#33)
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Apply grammatical conventions to edit writing for correct use of language, spelling, punctuation, and capitalization. (SOL 12.7) (#36) Write and revise correspondence to a standard acceptable both in the workplace and in postsecondary education. (SOL 11.6h) (#33)
3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.	Use knowledge of the evolution, diversity, and effects of language to comprehend and elaborate the meaning of texts. (SOL 12.3f) (#11) Use a variety of listening strategies to analyze relationships among purpose, audience, and content of presentations. (SOL 12.1h) (#44)

Common Core State Standards College and Career Readiness Anchor Standards Language	**Virginia College and Career Readiness Performance Expectations**
4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.	Use context, structure, and connotations to determine meanings of words and phrases. (SOL 12.3b) (#5) Use structural analysis of roots, affixes, synonyms, antonyms, and cognates to understand complex words. (SOL12.3a) (#1) Discriminate between connotative and denotative meanings and interpret the connotation. (SOL 12.3c) (#4)
5. Demonstrate understanding of word relationships and nuances in word meanings.	Demonstrate understanding of word relationships and nuances in word meanings.* (CCSS-Language 5) (#3) Evaluate how an author's specific word choices, syntax, tone, and voice shape the intended meaning of the text, achieve specific effects and support the author's purpose. (SOL 10.4h) (#19) **This is described in similar terms and elaborated in the Virginia English Standards of Learning Curriculum Framework, 12.3, which states, "Recognize that words have nuances of meaning and that understanding the connotation may be necessary to determine the appropriate meaning."*
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.	Expand general and specialized vocabulary through speaking, reading, and writing. (SOL 12.3e) (#6)