

# Board of Education Agenda Item

Item: J.

Date: May 19, 2011

Topic: First Review of Proposed State Approved Textbooks for K-12 Mathematics

Presenter: Dr. Linda Wallinger, Assistant Superintendent for Instruction

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## Origin:

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: July 28, 2011

## Previous Review/Action:

No previous board review/action

Previous review/action

date March 18, 2010

action Granted approval for the Department of Education to proceed with the review of K-12 mathematics textbooks

## Background Information:

The Board of Education's authority for approving textbooks and other instructional materials is prescribed in the Virginia Constitution and in the *Code of Virginia*.

*Virginia Constitution, Article VIII, § 5 (d)*

It [the Board of Education] shall have authority to approve textbooks and instructional aids and materials for use in courses in the public schools of the Commonwealth.

*Code of Virginia, § 22.1-238*

- A. The Board of Education shall have the authority to approve textbooks suitable for use in the public schools and shall have authority to approve instructional aids and materials for use in the public schools. The Board shall publish a list of all approved textbooks on its website and shall list the publisher and the current lowest wholesale price of such textbooks.
- B. Any school board may use textbooks not approved by the Board provided the school board selects such books in accordance with regulations promulgated by the Board.
- C. For the purposes of this chapter, the term "textbooks" means print or electronic media for student use that serve as the primary curriculum basis for a grade-level subject or course.

The Board of Education’s current textbook regulations specify the types of materials that may be adopted.

*Regulations Governing Textbook Adoption, 8 VAC 20-220-30*

Only those materials which are designed to provide basic support for the instructional program of a particular content area at an appropriate level will be adopted.

The Board of Education approved the list of current state-approved K-12 mathematics textbooks on January 12, 2005, following revisions to the *Mathematics Standards of Learning* in 2001 and to the *Mathematics Curriculum Framework* in 2002. The Board’s 2007-2012 Comprehensive Plan indicated as priorities, revisions to the standards and curriculum frameworks, as well as review of textbooks. On January 10, 2008, the Board approved a schedule to continue this work through 2015. As such, the *Mathematics Standards of Learning* were revised in 2009, followed by revisions to the *Mathematics Curriculum Framework* the same year. The revised standards and curriculum framework then prompted the need to review textbooks for correlation to the revised content.

On March 18, 2010, the Board of Education authorized the Department to begin the process of the K-12 mathematics textbooks review using a timeline approved by the Board. The Department of Education used the approved process and criteria to conduct the textbook review. In June 2010, committees of Virginia educators received the mathematics textbook samples along with K-12 *Mathematics Standards of Learning* textbook correlations from publishers. Members of these committees conducted individual analyses of the materials prior to meeting with the full committee. In July 2010, the committees convened in Richmond to reach consensus on their reviews of the submitted materials. The consensus evaluations were shared with publishers, and publishers were given an opportunity to respond to the committees’ reviews and recommendations. Requests by publishers for reconsideration were examined carefully by Department of Education staff, and staff members began preparing the list of proposed approved mathematics textbooks for presentation to the Board.

As a result of errors subsequently identified in two approved history and social science textbooks, in January 2011, the Virginia Board of Education directed Department staff to prepare a proposal to revise the Board’s process for approving textbooks to ensure that all textbooks approved are factually accurate. On March 24, 2011, the Virginia Board of Education approved a revised textbook review process that became effective for future textbooks brought to the Board for approval, including the mathematics textbooks that had not yet been presented to the Board. The new process places primary responsibility on publishers to ensure the accuracy of their textbooks. Publishers must certify that textbooks they have submitted for review have been thoroughly examined for content accuracy and agree that if factual or editing errors are identified, the publisher will submit a corrective action plan to the Department of Education for review and approval by the Board of Education or the superintendent of public instruction if so delegated by the Board.

### **Summary of Major Elements**

The Department of Education began the process to review mathematics textbooks as described earlier following the Board of Education’s approval to do so on March 18, 2010. In late fall 2010, further action was deferred as questions about the review process arose, and the Board indicated interest in revising the textbook review and approval process in January 2011. In order to conform

with the revised process approved on March 24, 2011, that required additional information from publishers, publishers of the reviewed mathematics textbooks were asked to complete Publisher's Certification and Agreement forms for each textbook being considered for approval by the Board. Attachment A contains a sample Publisher's Certification and Agreement form. Department of Education staff members have reviewed all textbook publishers' certifications and agreements to ensure they have been completed correctly, sufficient information has been provided, and they are signed by an appropriate representative of the publishing company.

The list of 61 proposed recommended mathematics textbooks, including the status of the Publisher's Certification and Agreement forms for each, is included as Attachment B. There were 34 textbooks that did not have sufficient correlations to the *Mathematics Standards of Learning*, and they were withdrawn from consideration by the publishers. An additional 8 textbooks were withdrawn by publishers for other reasons.

Following first review of the proposed textbooks, the Department of Education will conduct a 30-day public comment period, with the intent to bring to the Board a final list of proposed approved textbooks for K-12 mathematics in July 2011.

**Superintendent's Recommendation:**

The Superintendent of Public Instruction recommends that the Board of Education accept for first review the attached list of proposed recommended textbooks for K-12 mathematics.

**Impact on Resources:**

This responsibility can be absorbed by the agency's existing resources at this time. If the agency is required to absorb additional responsibilities related to this process, other services will be impacted.

**Timetable for Further Review/Action:**

Upon acceptance of the list of proposed K-12 mathematics textbooks for first review by the Board of Education, a 30-day public comment period will be announced. The mathematics textbooks submitted for review may be reviewed at any of the following eight sites around the state: The College of William and Mary, George Mason University, James Madison University, Radford University, The University of Virginia's College at Wise, Longwood University, Old Dominion University, and J. Sargeant Reynolds Community College. The list of recommended K-12 mathematics textbooks will be presented to the Board of Education for final review on July 28, 2011.

**Publishers' Submission Forms for Virginia's  
Textbook Approval Process**

Virginia Department of Education

Approved by the Virginia Board of Education  
March 24, 2011

## Introduction

The Virginia Board of Education's authority for approving textbooks and other instructional materials is prescribed in the *Virginia Constitution* and in the *Code of Virginia*.

- *Virginia Constitution, Article VIII, § 5 (d)*

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- *Code of Virginia, § 22.1-238*

- A. The Board of Education shall have the authority to approve textbooks suitable for use in the public schools and shall have authority to approve instructional aids and materials for use in the public schools. The Board shall publish a list of all approved textbooks on its website and shall list the publisher and the current lowest wholesale price of such textbooks.
- B. Any school board may use textbooks not approved by the Board provided the school board selects such books in accordance with regulations promulgated by the Board.
- C. For the purposes of this chapter, the term "textbooks" means print or electronic media for student use that serve as the primary curriculum basis for a grade-level subject or course.

This document, including all attachments, provides textbook publishers with the required information and forms for submitting textbooks for review by the Virginia Department of Education (VDOE) and approval by the Virginia Board of Education. By submitting textbooks for evaluation, publishers agree to follow the procedures set forth in this document. Failure to comply with all procedures may result in disqualification of the textbook as a part of the review and approval process.

### Primary Material Submitted for Review

As noted in Section 22.1-238.C of the *Code of Virginia* above, the term textbook refers to print or electronic media for student use that serves as the primary curriculum basis for a grade-level subject or course.

For the remainder of this document, such instructional media will be referred to as "primary material." Primary material contains the core curriculum that is the basis for the grade-level subject or course. VDOE review committees will review the material selected by the publisher as the "primary material." This is typically the student edition of the textbook or the primary material that students will use to gain access to the content, although there may be exceptions according to the content area and grade level of the textbooks (e.g., teacher's editions may

need to be included in the review at elementary grades for English/reading). Ancillary and supplemental materials will not be considered for review.

Submitting primary material in digital format is encouraged. However, publishers may submit primary material in either digital or print format, or in a format combining both media. VDOE review committees will review only the material selected as the primary material by the publisher. If a print program is submitted as the primary material to be reviewed, a digital version of this material must also be available to students. Any duplicate or similar version of the primary material submitted will not be reviewed by the VDOE review committees as a part of the textbook approval process. If a publisher submits digital primary material and this material is also available in print, the review committee will review only the digital version of the primary material. In submitting their materials for review, publishers must provide an explanation of if and how the content in the primary material medium (digital or print) is different from or comparable to that offered in the other medium. Digital primary material may contain items such as embedded video clips or content that is delivered through an interactive format.

### **Submission Forms**

Publishers must complete the Textbook Publisher's Certification and Agreement listing all primary materials submitted for review consideration at the time it signals intent to submit textbooks for review as part of Virginia's textbook approval process.

# Textbook Publisher's Certification

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Publishing Company)

Name of Primary Contact: \_\_\_\_\_

Phone Number, including area code: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

The publishing company indicated above submits the following primary materials to the Virginia Department of Education for consideration in Virginia's textbook approval process.

Title	ISBN	Copyright	Grade Level or Course	Is this primary material submitted as digital, print, or combination?*

\*Only one version of the primary material will be reviewed by VDOE committees. If the primary material is available in more than one format, provide an explanation of how they differ or are comparable.

The publisher certifies the following:

1. Each textbook has been thoroughly examined and reviewed by at least three qualified content experts for factual accuracy in the subject matter and the textbooks are free from any factual or editing errors. The credentials of the author(s) and/or editor(s) and content review experts are provided on the attached forms.
2. Each textbook has been thoroughly examined and reviewed by qualified editors to identify any typographical errors.
3. Any duplicate version (i.e., print or digital) of the primary material that is available to Virginia school divisions contains at least the same content included in the primary material selected by the publisher for review. Any additional content, above that

contained in the primary material reviewed is accurate and free of errors. If the content of the print and digital versions of the same primary material varies, those variations are outlined in an attachment to the certification.

4. The Quality Assurance and Editing Process described below was followed for all primary materials submitted by the publisher for review.

**Quality Assurance and Editing Process:** Please describe, *in three pages or less*, the internal process used to ensure accuracy and lack of bias including:

- the quality assurance and workflow steps used to ensure accuracy of content;
- the quality assurance and workflow steps used to eliminate editing and typographical errors, including errors in grammar, written expression, spelling, formatting, and other substantive elements that may affect student learning;
- the fact-back-up guidelines (i.e., what is an acceptable source for a fact and what is not) used by the authors, editors, and outside content experts;
- the review by outside content experts, other than the authors, to verify accuracy and ensure freedom from bias; and
- the process used to reach consensus on information with divergent interpretations.

Enter the description here. (Additional information will not be considered or reviewed.)

## ***Textbook Publisher's Agreement***

The PUBLISHER agrees to the following:

1. After submission of a textbook to the Department of Education for consideration in the textbook approval process, the PUBLISHER will promptly inform the Department in writing of any changes made in the textbook prior to its approval by the Board of Education.
2. If any factual or editing errors are identified in a PUBLISHER's textbook following its approval by the Board of Education, the PUBLISHER will submit a corrective action plan to the Department of Education within 30 days of being notified by the Department of the errors. All corrective action plans must be approved by the Board of Education, but the Board hereby delegates the approval of corrective action plans not involving significant errors to the Superintendent of Public Instruction. Each corrective action plan must be tailored to the materiality of the errors identified and must be implemented in the manner most conducive to and least disruptive of student learning. Corrective action plans may include, but are not limited to: a) corrections upon reprinting of the textbook; b) corrective edits to an online textbook; c) electronic errata sheets posted on the PUBLISHER's and the Department of Education's Web sites; d) print errata sheets provided to schools for insertion into textbooks; e) replacement books; and f) return of the textbook and refund of any payment made for the textbook. Upon approval of the corrective action plan, the PUBLISHER will implement the plan at the PUBLISHER's expense.
3. If, upon being notified by the Department of factual or editing errors in an approved textbook, the PUBLISHER disputes that the textbook contains such errors, the PUBLISHER must submit a written explanation of its position to the Department within 30 days of receiving notice from the Department of the error. Upon request, the PUBLISHER may meet with the Department. The Board of Education reserves to itself the right to make a final determination of whether the textbook contains a factual or editing error. If the Board determines that the textbook contains such an error, the PUBLISHER will submit a corrective action plan to the Department within 15 days after receiving notice of the Board's determination.
4. If numerous and/or significant errors are identified in a textbook on the Board of Education's approved list, the Board of Education may, in its sole discretion, withdraw the textbook from the approved list. The Board of Education must notify the PUBLISHER in writing before it removes its textbook from the approved list. The PUBLISHER will have 30 days to respond in writing and the right to meet with the Department of Education before removal. A "significant error" is a factual or editing error that the Board of Education or Department of Education determines within the context of the intended use of the textbook will substantially interfere with student learning. A change in knowledge that occurs subsequent to publication shall not constitute a significant error.
5. If the PUBLISHER makes updates/revisions to textbooks after they have been approved by the Board of Education, the PUBLISHER will ensure that the updated/revised material has been vetted through the same quality assurance process for accuracy and editing outlined in the signed certification. The PUBLISHER will notify the Department and any school division that has purchased this material of the updates/revisions that have been made.

Please check here if this submission includes an attachment that outlines if and how duplicate versions (print or digital) of primary materials vary. (Item #3 in the certification)

\_\_\_\_\_  
(Signature of President of the Company or Designee)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Name and Title of Person Signing)

### ***Author(s)/Editor(s) and Content Review Expert Information***

This attachment must be completed for each primary material submitted for review. Please insert additional copies for each primary material.

#### **Primary Material (printed book or digital submission)**

Please list name and edition of the textbook, or series submitted as a primary material.

**Publisher:** \_\_\_\_\_  
**Product Name:** \_\_\_\_\_  
**Author(s):** \_\_\_\_\_  
**Edition:** \_\_\_\_\_ **ISBN:** \_\_\_\_\_

#### **Author/Editor Information**

Please complete the table below. Include each author and/or editor associated with the development of the primary material. Please insert copies of the table for additional authors/editors.

<b>Author/Editor:</b>	<b>Role of the author/editor in writing the textbook (include references to specific sections, chapters, pages, etc.)</b>
Education and professional background:	
Related published works:	
Professional qualifications and specific areas of expertise:	
Did the author/editor review the final copy of his/her work before publication? <input type="checkbox"/> Yes <input type="checkbox"/> No	

<b>Author/Editor:</b>	<b>Role of the author/editor in writing the textbook (include references to specific sections, chapters, pages, etc.)</b>
Education and professional background:	
Related published works:	
Professional qualifications and specific areas of expertise:	
Did the author/editor review the final copy of his/her work before publication? <input type="checkbox"/> Yes <input type="checkbox"/> No	

<b>Author/Editor:</b>	<b>Role of the author/editor in writing the textbook (include references to specific sections, chapters, pages, etc.)</b>
Education and professional background:	
Related published works:	
Professional qualifications and specific areas of expertise:	
Did the author/editor review the final copy of his/her work before publication? <input type="checkbox"/> Yes <input type="checkbox"/> No	

## Content Review Expert Information

Please include each content review expert associated with the quality assurance process for accuracy and editing for the primary material listed. At least three content review experts must be included with at least 1) two experts with a graduate degree in the content area being reviewed; and 2) at least one teacher with recent experience teaching the content in the appropriate grade level or course. Please insert copies of the table for additional content review experts.

Reviewer:	Role the reviewer had in the review process (entire book or include references to specific sections, chapters, pages, etc.)
Education and professional background:	
Related published works:	
Professional qualifications and specific areas of expertise:	

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Education and professional background:	
Related published works:	
Professional qualifications and specific areas of expertise:	

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Education and professional background:	
Related published works:	
Professional qualifications and specific areas of expertise:	

## Proposed Mathematics Textbooks Recommended for Approval

May 19, 2011

Course	Publisher	Title	Satisfactory Completion of Publisher's Certifications and Agreements	
			Yes	No
<b>Kindergarten</b>				
	Houghton Mifflin Harcourt	Math Expressions, Kindergarten	✓	
	Pearson Education, Inc., publishing as Scott Foresman	enVisionMATH, Kindergarten	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects, Kindergarten	✓	
<b>Grade 1</b>				
	Houghton Mifflin Harcourt	Math Expressions, Grade 1	✓	
	Pearson Education, Inc., publishing as Scott Foresman	enVisionMATH, Grade 1	✓	
	The McGraw-Hill Companies School Education Group	Virginia Everyday Mathematics, Grade 1	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects, Grade 1	✓	
<b>Grade 2</b>				
	Houghton Mifflin Harcourt	Math Expressions, Grade 2	✓	
	Pearson Education, Inc., publishing as Scott Foresman	enVisionMATH, Grade 2	✓	
	The McGraw-Hill Companies School Education Group	Virginia Everyday Mathematics, Grade 2	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects, Grade 2	✓	

Course	Publisher	Title	Satisfactory Completion of Publisher's Certifications and Agreements	
			Yes	No
<b>Grade 3</b>				
	Houghton Mifflin Harcourt	Math Expressions, Grade 3	✓	
	Pearson Education, Inc., publishing as Scott Foresman	enVisionMATH, Grade 3	✓	
	The McGraw-Hill Companies School Education Group	Virginia Everyday Mathematics, Grade 3	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects, Grade 3	✓	
<b>Grade 4</b>				
	Houghton Mifflin Harcourt	Math Expressions, Grade 4	✓	
	Pearson Education, Inc., publishing as Scott Foresman	enVisionMATH, Grade 4	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects, Grade 4	✓	
<b>Grade 5</b>				
	Houghton Mifflin Harcourt	Math Expressions, Grade 5	✓	
	Pearson Education, Inc., publishing as Scott Foresman	enVisionMATH, Grade 5	✓	
	The McGraw-Hill Companies School Education Group	Virginia Everyday Mathematics, Grade 5	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects, Grade 5	✓	

Course	Publisher	Title	Satisfactory Completion of Publisher's Certifications and Agreements	
			Yes	No
<b>Grade 6</b>				
	Big Ideas Learning, LLC	Big Ideas Math 6 Virginia Edition	✓	
	Houghton Mifflin Harcourt	Holt McDougal Mathematics Course 1 Virginia Edition	✓	
	Pearson Education, Inc., publishing as Scott Foresman	enVisionMATH, Grade 6	✓	
	Pearson Education, Inc., publishing as Prentice Hall	Mathematics, Course 1 Virginia Edition	✓	
	The McGraw-Hill Companies School Education Group	Virginia Everyday Mathematics, Grade 6	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects Course 1	✓	
<b>Grade 7</b>				
	Big Ideas Learning	Big Ideas Math 7, Virginia Edition	✓	
	Houghton Mifflin Harcourt	Holt McDougal Mathematics Course 2 Virginia Edition	✓	
	Houghton Mifflin Harcourt	McDougal Littell Pre-Algebra	✓	
	Pearson Education, Inc., publishing as Prentice Hall	Mathematics, Course 2 Virginia Edition	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects Course 2	✓	

Course	Publisher	Title	Satisfactory Completion of Publisher's Certifications and Agreements	
			Yes	No
<b>Grade 8</b>				
	Big Ideas Learning	Big Ideas Math 8, Virginia Edition	✓	
	Carnegie Learning, Inc.	Bridge to Algebra, Virginia Edition	✓	
	CORD Communications, Inc.	Bridges to Algebra and Geometry	✓	
	Houghton Mifflin Harcourt	Holt McDougal Mathematics Course 3 Virginia Edition	✓	
	Houghton Mifflin Harcourt	McDougal Littell Pre-Algebra	✓	
	Pearson Education, Inc., publishing as Prentice Hall	Mathematics, Course 3 Virginia Edition	✓	
	The McGraw-Hill Companies School Education Group	Virginia Math Connects Course 3	✓	
	The McGraw-Hill Companies School Education Group	Virginia Pre-Algebra	✓	
<b>Algebra I</b>				
	Houghton Mifflin Harcourt	Holt McDougal Algebra 1 (Burger et al)	✓	
	Houghton Mifflin Harcourt	Holt McDougal Algebra 1 Concepts and Skills	✓	
	Houghton Mifflin Harcourt	Holt McDougal Algebra 1 (Larson et al)	✓	
	Key Curriculum Press	Discovering Algebra 1	✓	
	The McGraw-Hill Companies School Education Group	Virginia Algebra 1	✓	
	Pearson Education, Inc., publishing as Prentice Hall	Algebra 1 Virginia Edition	✓	

Course	Publisher	Title	Satisfactory Completion of Publisher's Certifications and Agreements	
			Yes	No
<b>Geometry</b>				
	Carnegie Learning, Inc.	Geometry, Virginia Edition	✓	
	CORD Communications, Inc.	Geometry	✓	
	Houghton Mifflin Harcourt	Holt McDougal Geometry (Burger et al)	✓	
	Houghton Mifflin Harcourt	Holt McDougal Geometry Concepts and Skills	✓	
	Houghton Mifflin Harcourt	Holt McDougal Geometry (Larson et al)	✓	
	Key Curriculum Press	Discovering Geometry	✓	
	Pearson Education, Inc., publishing as Prentice Hall	Geometry Virginia Edition	✓	
	The McGraw-Hill Companies School Education Group	Virginia Geometry	✓	
<b>Algebra II</b>				
	Carnegie Learning, Inc.	Algebra II, Virginia Edition	✓	
	Houghton Mifflin Harcourt	Holt McDougal Algebra 2 (Burger et al)	✓	
	Houghton Mifflin Harcourt	Holt McDougal Algebra 2 (Larson et al)	✓	
	Pearson Education, Inc., publishing as Prentice Hall	Algebra 2 Virginia Edition	✓	
	The McGraw-Hill Companies School Education Group	Virginia Algebra 2	✓	
<b>Algebra, Functions, and Data Analysis</b>				
	Pearson Education, Inc., publishing as Prentice Hall	Algebra, Functions, and Data Analysis: A Virginia Course	✓	