



Instructional Technology  
Resource Teacher  
and  
Technology Support Positions

A Handbook  
for School Divisions

Virginia Department of Education

---

# Acknowledgements

The Handbook for Instructional Technology Resource Teacher and Technology Support Positions represents a cooperative effort between staff at the Virginia Department of Education, Virginia Commonwealth University, and Virginia school divisions.

## Virginia Department of Education

Dr. Jo Lynne DeMary  
Superintendent of Public Instruction

## Division of Technology and Human Resources

Lan Neugent, Assistant Superintendent  
Nonie H. Barnstein, Administrative Assistant

## Office of Educational Technology

Gloria K. Barber, Director

## Administrative Support Specialists

Fora Cosby  
Judy Gray

## Educational Technology Specialists

Jason Ellis, Administrative Applications  
Jean Gray, External Services  
Linda Holt, Integration  
Charlie Makela, School Media Programs  
Juliette Mersiowsky, Technology Planning  
Mark Saunders, Educational Technology Grants  
Richard Schley, Telecommunications  
Jean Weller, Integration  
Joyce White, Integration

## School Division and Higher Education Representatives

Kathleen Beane, Colonial Beach Public Schools  
D. D. Dawson, Harrisonburg City Public Schools  
Jennifer Hicks, Henrico County Public Schools  
John Littlefield, Suffolk City Public Schools  
Dr. Gary Sarkozi, Virginia Commonwealth University  
Dr. Tammy Pandina Scot, University of Virginia  
H.W. Scott, Botetourt County Public Schools  
Dana Smith, Arlington County Public Schools  
Mark Webster, Colonial Heights City Public Schools



# Table of Contents

Introduction .....	4
Instructional Technology Resource Teacher (ITRT) .....	5
Roles and Responsibilities .....	6
Qualifications .....	7
Duties and Responsibilities .....	7
Attributes of an ITRT .....	8
Time Management .....	9
Factors that Foster Successful ITRT Support .....	10
The ITRT and the.....	12
Teacher, Library Media Specialist, Resource Teacher .....	12
Central Office .....	14
Building Level Administrators .....	15
Evaluation and Supervision of the ITRT .....	16
Technology Support Position .....	17
Contract Support .....	17
The Responsibility of the Technology Support.....	18
The Role of the Technology Support Position .....	18
Interpersonal Skills .....	20
Supervision and Evaluation .....	20
Appendices .....	21
Appendix A - Superintendent's Memos .....	21
Supts. Memo No. 5, June 18, 2004 .....	22
Supts. Memo No. 204, Oct. 8, 2004 .....	26
Supts. Memo No. 1, Jan. 14, 2005 .....	28
Appendix B - Sample Job Descriptions .....	31
Arlington Public Schools, VA .....	32
Harrisonburg Public Schools, VA .....	34
Lancaster Public Schools, VA .....	35
Irving, TX Independent School District .....	37
North Carolina Dept. of Public Instruction .....	39

# Introduction

Experts and practitioners have all agreed on the importance of not just increasing technology capacity within schools, but integrating it into the curriculum. Research shows that the time spent training teachers in technology correlates to increased student performance. Adequate technological support that is readily available is a condition that has been shown to promote integration.

Virginia's educational technology plan presents a vision of the use of technology in schools and classrooms, and it serves as a blueprint for school division technology planning. The plan emphasizes the importance of integrating technology into instruction and outlines the elements essential to successful use of technology. Crucial to the effective integration of technology is an adequate support system that consists of:

- Technology Administrators: manage programs and provide educational technology leadership in their school divisions
- Technology Support: manage the school's information network
- Instructional Technology Resource Teachers: train teachers to use technology and software effectively

Many of the programs included in The No Child Left Behind Act of 2001 rely on the appropriate and effective use of technology. In addition, the act includes the Enhancing Education Through Technology program that specifically promotes initiatives that provide teachers, principals, and administrators with the capacity to integrate technology effectively into curricula and instruction.

The 2004 General Assembly passed legislation recommended by the Board of Education to amend the Standards of Quality (SOQ). The budget approved by the General Assembly includes funding for technology in the form of two positions: an instructional technology resource teacher position and a technology support position. This action represents a continued commitment to the integration of technology in instruction in Virginia public schools that began with initiatives that have provided more than \$500 million in support for educational technology infrastructure.

The purpose of this guidance document is to provide a framework for school division administrators as they fill positions and implement support services for technology integration. It is not intended to be a comprehensive document. It does include basic information such as sample job descriptions, a list of knowledge, skills, and abilities as well as responsibilities. Users also will find helpful the scenarios that describe the collaborative relationship between the instructional technology resource teacher, classroom teachers, and building administrators. The appendix includes copies of memos from the State Superintendent of Public Instruction that provide background and interpretation of the legislation.

The Department of Education appreciates the assistance of school division technology administrators in the preparation of this document. For additional information on instructional technology resource teachers or technology support positions, please contact the Office of Educational Technology.

# Instructional Technology Resource Teacher (ITRT)

As technology becomes integrated into instruction and a pervasive tool for learning and communication, schools face many challenges in providing adequate levels of technology support. Two of the often-mentioned barriers preventing technology use in classrooms are planning for and incorporating technology into lessons, and insufficient, inappropriate, or inconvenient training. Support and professional development can be considered the most critical components for effective integration of technology. Effective support focusing on curriculum and technology integration at the school site can be one-on-one, in small groups, by grade-level, by department, or by skill level by the ITRT in a coaching or mentoring role. Teachers from the Ameritech Classroom of the Future indicated that they owed their success in this technology-rich environment to the technology specialists who supported their integration and facilitation needs. Research indicates that learning is enhanced when technology tools are used appropriately and effectively. The ITRT can be a valuable asset in creating, implementing, and directing a global vision for integrating technology into classroom instruction.

Instructional technology resource teachers (ITRTs) provide on-site and on-demand assistance for fellow teachers to create different forms of learning and teaching with the help of technologies. They seek to improve student learning by showing teachers the thoughtful applications and best practices of these new tools. Indications show that ITRTs, carefully chosen and wisely used, are more effective in helping teachers incorporate technology into teaching and learning than any other form of professional development. The intent of providing funding for instructional technology resource teachers in the Standards of Quality (SOQ) is to assist teachers with the integration of technology in the classroom, to train teachers to use technology in an effective manner, and to assist with curriculum development as it relates to educational technology. An instructional technology resource teacher:

- Provides direct support to the classroom teacher coaching or modeling for the utilization of technology tools and resources to support instruction in the classroom
- Consults and collaborates directly with teachers and only works with students for the purpose of modeling or demonstrating a lesson
- Advises and assists teachers to determine what, when, and where to integrate appropriate technology tools in the curriculum to enhance teaching and learning
- Has a strong foundation in pedagogy and teaching methodologies
- Models technology usage for staff and shares the vision of integrating technological components
- Is an experienced user of technology for productivity
- Collaborates with school personnel, and administrators
- Coordinates the selection and acquisition of software



Teaching credibility, a clear vision and excellent communication skills, the ITRT can assist teachers in unlocking the power of technology in classroom instruction.

- Develops a rich library of curriculum-driven support materials and technology-enhanced resources for grade levels and subject areas for teachers
- Keeps current with updates in educational technology
- Researches and develops methods of state academic standards and curriculum with effective technology-based teaching and learning strategies to improve student achievement
- Helps schools develop and implement short-term and long-term learning goals into school improvement plans to support student achievement objectives and proficiencies
- Facilitates a school-wide technology effort
- Designs and implements high-quality professional development.
- Conducts assessment of teacher and student technology literacy and use
- Evaluates activities to determine effectiveness
- Is a liaison between the school and the school division technology office

## Roles and Responsibilities

Effective support that focuses on curriculum and technology integration is the primary goal of technology support staffing. The challenge is to provide adequate training and support to bring teachers at every point of the continuum from technophobia to technomania to an adequate level of technical expertise so learning goals can be met. Considerable consideration should be given to the roles and responsibilities of the ITRT. This individual is a valuable asset in creating, implementing, and directing a global vision for integrating technology into schools. Clear descriptions of responsibilities and precise expectations of the ITRT should be developed and agreed upon to assure the successful supervision and implementation of the support program.



The ITRT is specified as a teacher, and therefore must be a licensed teacher. The position is full-time equivalent. Instructional technology resource teachers are available throughout the school day for planning and implementation of integration activities. This avoids the challenge of finding time to provide support while meeting teaching obligations. Instructional technology resource teachers are intended to serve as resources to classroom teachers, but are not intended to serve as classroom teachers. Their primary purpose is to train teachers to use technology in an effective manner. In this role they are also agents of change and actively engaged in curriculum development and lesson planning. They use their credibility as a classroom teacher and their knowledge of teaching strategies to help design lessons and plan projects with the teachers. It is not the responsibility of the instructional technology resource teacher to evaluate a teacher's performance. The ITRT does, however, work with the teacher to assess the effectiveness of a technology-based lesson.

## Qualifications include,

but are not limited to:

- Being a licensed teacher
- Having successful teaching and classroom management experience
- Knowledge of curriculum, instructional strategies, and the Standards of Learning Program
- Knowledge and proficient user of computers and related technology
- Skill in integrating technology with curriculum
- Skill in working with others in a leadership position
- Ability to maintain a good working relationship with others
- Possessing effective interpersonal and organizational skills
- Ability to articulate and adapt communication and presentation style for various audiences
- Demonstrates oral and written communication skills

## Duties and responsibilities of an ITRT include

but are not limited to:

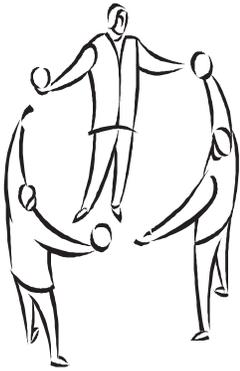
- Working collaboratively with individual or groups of teachers to integrate technology into instruction
- Assisting with curriculum and content development
- Disseminating information regarding technology resources, emerging technologies, best practices using technology, and professional development opportunities
- Facilitating or conducting technology-related professional development for school staff
- Assessing levels of teacher and student technology use and skills
- Working with appropriate division or school-based curriculum and technology staff to help school staff in integrating technology into the curriculum
- Modeling effective instructional strategies using technology
- Serving as a member of the school technology committee
- Supporting implantation of the division and state technology plan
- Researching use of newer technologies in instruction
- Using data to design technology-based instructional strategies
- Recommending hardware, software, and related resources
- Identifying trends in software, curriculum, teaching strategies, and other educational areas
- Creating learning resources for teachers, staff and students
- Serving as a strong advocate for technology integration
- Participating in software selection and use



“If the teachers see the TIS (Technology Integration Specialist) first as a teacher and second as a technologist, their partnerships are likely to be that much more productive.” ([http://curry.edschool.virginia.edu/class/edlf/589/reviews/Scot\\_Hall.doc](http://curry.edschool.virginia.edu/class/edlf/589/reviews/Scot_Hall.doc))

## Attributes of An Instructional Technology Resource Teacher

Interpersonal skills include the habits, attitudes, manners, appearance, and behaviors we use while working with people that affect how well we get along. Good interpersonal skills are a prerequisite for success as an instructional technology resource teacher. The ITRT provides assistance by consulting with other teachers, discussing and sharing teaching practices, and supporting efforts to enrich student learning through technology. Interpersonal skills, such as communication, problem solving, and teamwork abilities enable the ITRT to work with others harmoniously and efficiently. Collaboration should take place in a non-threatening and non-judgmental environment. Technical support needs to be on-site, individualized, and teacher-oriented. The ITRT needs to relate well with teachers. If this doesn't happen, the chance of successful integration is in jeopardy.



---

“The need for possessing excellent people skills, flexibility and a global perspective far outweigh the need for technological expertise.” (From, Fulfilling the Need for a Technology Integration Specialist)

### ITRTs Who Have Good Interpersonal Skills:

- Are good listeners
- Work harmoniously and efficiently with others individually and in team settings
- Manage conflict effectively by devising win-win solutions, constructively influencing the behavior of others, use effective communication and persuasive strategies
- Are able to align their goals to the goals of others during collaborative activities
- Are forthright
- Respectful of others
- Friendly
- Maintain enthusiasm
- Pleasing personality
- Helpful and patient when dealing with users
- Remain calm and polite under stress
- Are able to manage their behavior during social interactions
- Are sensitive to the needs of others and to the forces that shape the way others feel and behave
- Enhance the strengths and abilities of others
- Are approachable and interact well with others
- Provide guidance to subordinates when needed; resist controlling others by allowing autonomy when appropriate

## Time Management

As indicated in the legislation for the ITRT position, this person should be a licensed teacher who works directly with classroom teachers and the integration of technology into instruction. Time management becomes essential when such variables as the job description, number of schools served, size of staff, available technology support and resources, and the technology integration goals are to be considered.

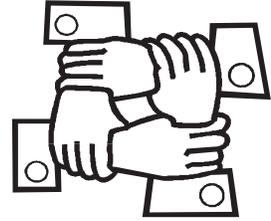
The following table outlines the amount of time ITRTs may spend on various aspects of their job. While the percentages may vary from school to school, the ITRT is, above all, the individual available throughout the school day responsible for assisting teachers with the integration of technology in the classroom.



Task	Percent of Time
1. Assist teachers with the integration of technology in the classroom, train teachers to use technology, assist with curriculum development as it relates to educational technology, modeling instructional strategies with students, providing training and professional development, collaborative teaching, researching technology-based instructional strategies, reviewing/evaluating technology software, offering direct assistance to teachers by way of classroom visitations, or similar kinds of duties and responsibilities as the school division may deem appropriate.	>=70%
2. Meet with administrators and content supervisors at the building and/or central office level to coordinate services and resources. Serve on building and/or division leadership teams relating to technology and instruction, professional organizations related to technology, and other responsibilities	<=15%
3. Create and implement a plan to communicate progress and activities to school, faculty, and administration. (i.e. newsletter, technology Web site, e-mail notifications)	<=10%
4. Minor troubleshooting of computer lab equipment, hardware or software problems.	<=4%
5. Maintain records necessary to document progress and activities.	<=1%

# Factors that Foster Successful Technology Support

Support for technology integration does not stop with the hiring of an ITRT. Filling the position is only one of the many elements that should be in place as part of a comprehensive and effective program of technology support. The following factors should be considered as part of the implementation process.



## Job Description

A clearly written statement that defines the scope of the position, qualifications, requirements, major duties, and outlines the expectations helps prospective employees gain a more accurate understanding of what they would be expected to do on the job. In addition, the job description provides a catalyst for the examination of activities.

## Communication

Clear channels of communication should be defined. Who does the position report to? When? How often? What actions need prior approval? How does the ITRT communicate with teachers, administrators and other educators?

## Technology

What technology is available for use by the ITRT? Does it support training, demonstration, and consulting needs? Is the equipment mobile? Is it current technology? Is there equipment in classrooms or labs? Are there teacher work stations?

## Fiscal Resources

Are funds available to purchase software, consumable materials, for incentives, substitutes, and acquisition of emerging technologies?

## Planning

Is there time available during the school day to plan with teachers? Meet with administrators? Are there scheduled planning times with other ITRTs? Are provisions made for training opportunities for the ITRTs?

## Time

Typically the ITRT is hired on a 10, 11, or 12-month contract. This allows time for summer training opportunities, time to develop new initiatives, and research technology-based instructional strategies. Refer to Time Management, pg. 9.

## Supervision and Evaluation

This will vary among school divisions. In some instances the ITRT reports to the principal, in others to a division administrator. In any event the following questions should be answered: Who does the position report to? When? How often? What actions need prior approval? What is the method of performance evaluation? Who will be responsible for that evaluation, building-level administrator or central office official?

## Program Evaluation

Program evaluation is carefully collecting information about a program or some aspect of a program in order to make necessary decisions about the program. Activities and processes should be examined periodically to determine their effectiveness.



---

## The Instructional Technology Resource Teacher AND THE.....

The ITRT has varied responsibilities. In order to carry them out it may be necessary to work with educators other than the classroom teacher. The principal, resource teacher, library media specialist, and central office administrators have direct or indirect responsibilities for student achievement. The ITRT works with each one of these individuals within the context of their responsibilities. The following scenarios provide an example of ways in which the ITRT communicates and interacts with various educators.

### Teacher, Library Media Specialist, Resource Teacher

The teacher-ITRT relationship is one of the most significant of all the relationships, due to the immediate impact on classroom instruction. It is not to say that it is the single most important or that the other relationships are unworthy of the time and energy of the ITRT, but with regards to impacting student performance, this is where “the rubber meets the road.” As a point of reference, when the word “teacher” is used, this would include all classroom teachers, talented and gifted (TAG), special education, librarians, and general education teachers across all grade levels and content areas.

#### Scenario #1

Mr. Jones is a sixth grade math teacher. He is about to introduce the study of plane figures to his students. He wonders how technology may be useful to help his students master this concept. He has very little experience with technology in the classroom. He does use a word processor on a regular basis and has attended a workshop on how to use a database. He is interested in using technology and approaches the ITRT for help. What approach should the ITRT take?

The ITRT must understand what goes on in the typical classroom from the teacher’s point of view, including lesson plan development and subject matter knowledge, assessment

strategies, daily scheduling constraints, classroom management challenges, and all of the professional demands for accountability that go with being a teacher. The ITRT is the bridge between the teachers' classroom world of textbooks and lessons and the technology world of software and hardware. The conversation could begin with a discussion of the SOL to be addressed, what should the students know and should be able to do once the lesson has been taught. Sometimes starting at the end and working backwards helps to clarify the task and how students will accomplish it. The ITRT may suggest that the students use a database to record information about plane figures: their characteristics, similarities, differences, purposes, and other topics. Mr. Jones may ask the ITRT to teach the lesson, as this is the first time that he's attempted to use technology as a tool in instruction. Or, it may be that the students will need instruction on using a database. In addition the ITRT may share resources such as streamed video clips or Web sites that present visual examples of planes. The ITRT could also provide examples of how the students can use technology to communicate what they have learned. A follow-up conversation should be planned to evaluate the activity. This is the time to identify what worked and what didn't; and other opportunities for technology-based lessons.

## Scenario #2

Mrs. Johnson is a veteran science teacher with 25 years experience. She teaches physics and chemistry. She knows the textbook from cover to cover. She tried using probeware once but the "thing didn't work right". She feels that there is no need to use technology in her instruction and besides using technology takes too much time to learn and use and it doesn't work! What approach should the ITRT use?

There will be many reluctant teachers, such as Mrs. Johnson, in schools. However, the ITRT will have to work with the reluctant as well as the enthusiastic teacher users of technology. The ITRT will have to exercise care and caution "converting" Mrs. Johnson to be a technology user. One approach may be a demonstration of a piece of new software before a group of science teachers, followed by individual instruction. The software could address an SOL that represents a challenge to teach. The application chosen should be very user-friendly to maximize the chances that Mrs. Jones would be successful using it. Another approach may be creating a "buddy" system, pairing Mrs. Jones with a science teacher who uses technology successfully in the classroom. This conceivably could be accomplished with a project-based lesson that involves two or more classes! As in the previous scenario, evaluation and follow-up should take place to ensure continued and appropriate use of technology.

### Scenario #3

The ITRT approaches Mrs. Brown, the library media specialist, with an idea to collaborate on a lesson with an eighth grade English teacher. The teacher is planning a unit of study on oral language where the students will analyze a variety of informational sources on a topic and present their findings. The objectives of the unit are to analyze the author's credentials, viewpoint, and impact; details for relevance and accuracy; and choice of text structure and word choice. The ITRT will assist the teacher in writing a lesson plan that involves the use of the Internet to meet the objectives. Mrs. Brown will engage the students in activities that have them examining and evaluating Web sites on the assigned topics for authenticity, accuracy, and relevancy. They decide that the students will use presentation software to communicate their findings. The library media specialist selects some Internet sites and subscription Web-based resources as examples for the students to critique. The three may take a team approach to teach the students how to use the presentation software. Together the ITRT, teacher, and Mrs. Brown decide what will be the evidence of student learning. After the lesson, the ITRT, Mrs. Brown, and the teacher evaluate the learning experience to determine if the strategies resulted in student mastery of the content.

### Central Office

The ITRT may serve as a link between the central office and the school. In this capacity, the ITRT assists with the implementation of school division technology initiatives at the building level, provides professional development that supports the vision, mission, and goals of the division technology plan, and uses integration strategies that are congruent with the division curriculum and aligned to the SOL. The ITRT regularly communicates with division administrators, attends meetings, and participates on committees to represent educational technology integration.

### Scenario #4

Dr. Mayo, the assistant superintendent of instruction, was impressed by a demonstration of a computer language arts program. She feels that the program addresses some of the remediation needs in ABC Elementary School. Dr. Mayo acquired a demo copy of the program and asks the ITRT at ABC Elementary School to take a look at the software and make a recommendation. What approach would the ITRT take?

The ITRT often reviews and evaluates software and makes purchase recommendations. Using standard criteria, the ITRT examines the software and notes its alignment with the school's curriculum and the SOL. The ITRT then prepares a written evaluation of the software that includes: the SOL addressed by the software, instructional strategies for remediation, and an outline of a process to train teachers to integrate the software in instruction. The response should also include how the use of the software will be evaluated to determine if the objectives for remediation were met. If the software is costly, the ITRT recommendations may include a pilot use of the software or the names of comparable software already owned by the school.

## Building level administrators

The ITRT keeps the principal up-to-date with the latest innovations technology has to offer for student achievement and teacher productivity; helps the schools develop and implement short-term and long-term learning strategies for student achievement objectives through the use of technology; provides technology integration staff development for the faculty; creates and demonstrates model teaching using technology. Though not an administrator, there are administrative duties allied with the position that must be carried out successfully. The ITRT prepares reports for the building administrator. The reports may be bi-monthly or quarterly. They detail progress of integration activities, number of classroom visitations, future objectives, resources needed, successes, and opportunities for growth.

### Scenario #5

Mrs. Hutcheson, the middle school principal, is concerned that all students are not having opportunities to use technology in learning. She directs the ITRT to bring her some ideas for ways that all students will have technology-based experiences. What approach does the ITRT take?

The ITRT begins by contacting the Technology Support individual to access an inventory of equipment and infrastructure capacity; making classroom visits to determine the frequency that technology-based lessons are being taught and develop an awareness of teacher and students' computer literacy level; and identifying resources that include technology-based lesson plans aligned to the curriculum and SOL. Armed with this information the ITRT begins to develop a picture of what technology-based learning experiences students do have, when they occur, under what conditions, and what software and hardware are available. Based on the information gathered, the ITRT will present to the principal a school-wide plan with a time-line for implementation

and evaluation that provides technology-based instruction for all students. The plan includes the resources that will be necessary as well as training, hardware, software, and infrastructure needs.

## Evaluation and Supervision of the ITRT

The supervision and evaluation of the instructional technology resource teacher will depend largely on the organizational structure of the school division and the number of ITRTs. Some divisions may have an ITRT in each school, while in other school divisions more than one school shares the position. In the former situation the principal may supervise the ITRT. In the latter situation a central office administrator may supervise the ITRT. In either case, some type of performance expectations should be developed and mutually agreed upon. The evaluation should be based on policies currently in place with respect to the timing and frequency. Supervision and evaluation plans should include interim conversations to assess progress, identify challenges, and if necessary reorder priorities. The evaluation may be in the form of a checklist, rubric, or modeled after an existing tool used for resource teachers.

# Technology Support Position

The Technology Support position provides centralized, school-based, and/or regional support for information networks. The position may have the title of technician, systems operator, systems administrator, network administrator, or network technician manager. Its function is to ensure the continued operation of applications used in teaching and learning and for administration and management of technology. Continuous access to reliable technology support is an important element to successful integration of technology. Educators need to have confidence that the equipment and infrastructure will respond successfully when used. The Standards of Quality were amended in 2004 to include one technology support position per 1,000 students in grades kindergarten through 12. School divisions may use contract personnel to meet this requirement so long as the contract staff provide the equivalent level of support services. In some school divisions, this means one technology support position in each school. While in others several schools share the position. Consequently, staffing patterns will vary among school divisions. Whatever the arrangement, steps must be taken to ensure that the technical support services needed by teachers, students, and administrators are available when needed; especially during high peak usage times and that tasks are performed in a suitable manner.



---

“The duties of the technology support position would not include data entry, computer programming, data collection and analysis, Web master services, or administration and management.”  
(Superintendents Memo No. 1, January 14, 2005)

## Contract Support

Some divisions have chosen to maintain control of all technology support functions; while others have found it more efficient and less costly to contract for these services with outside entities. If the latter option is selected, some points to consider include:

- Choose a company that has experience working with schools
- Make sure the company can implement and manage the services you require
- Minimize the number of service providers you work with
- Evaluate prospective firms in terms of how they will respond to your needs
- Get specific answers on costs and written guarantees on response times
- Develop and approve a list of functional goals and a time line
- Develop a detailed service-level agreement
- Involve the company in developing a long-term technology plan for the division
- Make sure the company has an effective support system
- Develop a process to manage change and implement new initiatives

<http://www.asbj.com/2003/12/1203technologyfocus.html>

## The Responsibility of the Technology Support position is to:

- Provide centralized, school-based, and/or regional support for information networks (including a school division “help desk” or “help line”)
- Provide desktop and application support
- Provide server and network support
- Support request management
- Participate in technology planning
- Budget - work to ensure cost effectiveness of services and that good practice is followed
- Provide network selection, configuration, installation, operation, repair, maintenance, software installation, troubleshooting, and security management
- Create and upgrade servers, computers, and networks
- Maintain multi-media devices, which include but are not limited to computers, telephony, monitors, and projectors

## The Role of the Technology Support Position

This position focuses on how to deliver support services that are required as determined and defined by teachers and administrators. The technology support staff is diligent in maintaining positive relationships with school staff. The technology support role may include:



- Testing and implementing new software
- Upgrading hardware
- Tracking of software licensees
- Conducting and maintaining an inventory of equipment
- Assisting with the definition of priorities for technical support
- Establishing preventative measures and contingency plans for loss of network service, server service, etc.
- Responding to work orders/repair requests and maintain a record of completed orders/requests
- Regularly reviewing support strategy to ensure that it remains responsive to infrastructure needs
- Attending regularly scheduled meetings with building and division-level administration to discuss technological needs and strategies
- Participating as a member of the building and/or division technology committee
- Maintaining school and/or division connectivity, to include activating Ethernet ports
- Installing and/or upgrading software applications and setting user privileges
- Creating and setting up new student accounts and changing student passwords
- Supplying staff with district standards, processes, and tools for equipment and software purchasing

- Coordinating with staff, faculty, and administration for technical viability of planned equipment and software before ordering
- Maintaining a current spreadsheet/log of all building technology per site and/or division, to include an inventory of all hardware and software
- Disposing of old/unused hardware according to division surplus guidelines
- Troubleshooting technology equipment and system software issues
- Coordinating pick-up and drop-off of technology equipment for repair with the repair facility/vendor
- Preparing written documentation to assist staff with technology use
- Developing and implementing checkout procedures and policies for technology equipment
- Assisting building and division administration to establish and maintain technology related building policies and procedures
- Training administrators, ITRTs, and possibly teachers to use operating system

## Competencies

The following competencies are appropriate to technology support depending on staffing configuration and may include:

- Expert user of all major hardware and detailed knowledge of operating systems
- Expert user of desktop and client/server-based application software, including awareness of version limitations
- Specialist networking skills relating to managing active equipment, including wireless technology
- Understand firewalls, disk caches, filtering systems, access policies and usage, and reporting utilities present in the server operating system
- Aware of ways in which installed applications can conflict
- Understand access rights
- Identify and categorize relevant information about changes in configuration for recording purposes
- Aware of issues relating to equipment disposal
- Understand the importance of contingency planning at different levels for elements of the school's business
- Understand the importance of balancing trouble-shooting against monitoring and scheduled maintenance
- Possess technical knowledge of a wide range of solutions
- Understand system integration risks and issues
- Develop expertise in specific user areas to provide advice and support
- Understand how the overall technical requirements of the school should support the use of technology in the teaching, learning, and management
- Ability to differentiate between standard and exception changes
- Ability to interpret regulations, laws, and policies

## Interpersonal Skills of the Technology Support Staff

Technology support personnel will maintain an ongoing relationship with the ITRT, building principals, and central office administrators. The technology support staff represents the single point of contact for users of the network. There may also be occasions when it also includes teachers and other staff and services provided by them. The technology support staff is affected by their interactions with the various users.

The Technology Support personnel should demonstrate the following interpersonal qualities:

- Patience
- Excellent listener
- Flexible
- Prioritizes the needs of others
- Work harmoniously with others
- Work in teams
- Evaluate and accept responsibilities
- Ask questions to build shared information and enhance clarity
- Maintain calm demeanor with others during high pressure situations
- Adaptable
- Sensitive to the needs of others
- Diplomacy

## Supervision And Evaluation

It is important to measure both the actual service that is provided and the effectiveness of the processes used to provide support. The ultimate goal is to assess quality. Supervision monitors performance and assures continued improvement to meet expectations. Evaluation highlights current performance and identifies potential issues and improvements that could be made. Role clarity on the part of the school board in this area is essential. Carefully designed policies and procedures guide the supervision and evaluation system. Measurements should align with current evaluation processes and must be relevant and consistent. When the role and responsibilities have been identified, they can be crafted into elements of an evaluation instrument.

# Appendices

## Appendix - A

### Superintendent's Memos



## COMMONWEALTH of VIRGINIA

### DEPARTMENT OF EDUCATION

P.O. BOX 2120

RICHMOND, VA 23218-2120

SUPTS. MEMO NO. 5

June 18, 2004

#### REGULATORY

TO: Division Superintendents

FROM: Jo Lynne DeMary  
Superintendent of Public Instruction

SUBJECT: Staffing Requirements Prescribed by the Standards of Quality

The 2004 General Assembly passed legislation recommended by the Board of Education to amend the Standards of Quality (SOQ). The budget approved by the General Assembly includes funding for elementary resource teachers; technology positions; a planning period for secondary (i.e., middle and high school) teachers; and establishing a funding formula for the prevention, intervention, and remediation program proposed by the Board of Education. In addition, the budget provides funding to increase the number of teachers in the English as a Second Language program as proposed by the Governor.

#### **SOQ Revised Standards Effective July 1, 2004**

**Prevention, intervention, and remediation program:** HB 1014 and SB 479 also amended the Standards of Quality, § 22.1-253.13:2 of the Code of Virginia, to replace the SOQ remediation program. The new language says: "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."

Language in Item 146 of the budget bill related to this program says, "The payment shall be calculated based on one hour of additional instruction per day for identified students, using the percent of students eligible for the federal Free Lunch program as a proxy for students needing such services. Fall membership shall be multiplied by the division-level Free Lunch eligibility percentage to determine the estimated number of students eligible for services. Pupil-teacher ratios shall be applied to the estimated number of eligible students to determine the number of instructional positions needed for each school division. The pupil-teacher ratio applied for each school division shall range from 10:1 for those divisions with the most severe combined failure rates for English and math Standards of Learning test scores to 18:1 for those divisions with the lowest combined failure rates for English and math Standards of Learning test scores."

The prevention, intervention, and remediation formula described above is a funding standard, not a staffing standard. Language in the SOQ previously based the funding formula on the number of students in the bottom national quartile of the Virginia State Assessment Program tests (Stanford 9) or who did not achieve a passing score on the Standards of Learning assessments. When the 2003 General Assembly eliminated the requirement for the Stanford 9 tests, the Board of Education had to revise the standard. The Board recommended changing the policy so that funding would not be reduced when the school division's tests scores improved, and so that school divisions would have maximum flexibility in designing their prevention, intervention, and remediation programs. School divisions may use the funding for after-school programs and for summer school or intersession programs not funded by state remedial summer school funds.

**English as a Second Language teachers:** HB 1014 and SB 479 did not amend the requirement for 10 full-time equivalent instructional positions for each 1,000 students identified as having limited English proficiency.

However, Item 146 of the budget bill says, "A payment of \$22,122,525 the first year and \$25,703,423 the second year from the general fund shall be disbursed by the Department of Education to local school divisions to support the state share of 17 professional instructional positions per 1,000 students for whom English is a second language. Local school divisions shall provide a local match based on the composite index of local ability-to-pay." The budget bill also says, in § 4-11.00, "Notwithstanding any other provision of law, and until June 30, 2006, the provisions of this act shall prevail over any conflicting provision of any other law, without regard to whether such other law is enacted before or after this act..." Therefore, the budget bill prevails, and the requirement for 17 professional instructional positions per 1,000 students for whom English is a second language is a Standards of Quality staffing standard beginning in fiscal year 2004-2005.

### **SOQ Revised Standards Effective July 1, 2005**

The following staffing standards do not become effective until July 1, 2005, although funding is provided effective July 1, 2004. Language in Item 146 of the budget bill passed by the General Assembly says, "Notwithstanding Chapters 939 and 955, of the Acts of Assembly of 2004, no school division shall be required to maintain instructional positions meeting the increased standards set forth in this paragraph until July 1, 2005."

**Elementary resource teachers:** HB 1014 and SB 479 (Chapters 939 and 955, 2004 Acts of Assembly) amended the Standards of Quality, § 22.1-253.13:2 of the Code of Virginia, to say: "Local school boards shall employ five positions per 1,000 students in grades kindergarten through five to serve as elementary resource teachers in art, music, and physical education."

Language in Item 146 of the budget bill, as passed by the special session of the 2004 General Assembly says, "Appropriations in this item include...the state's share of the following revisions to the Standards of Quality pursuant to Chapters 939 & 955 of the Acts of Assembly of 2004 (Senate Bill 479 and House Bill 1014): five elementary resource teachers per 1,000 students..."

When the Board of Education adopted its proposal to require five resource teachers per 1,000 students in grades kindergarten through five, it used three periods a week as part of the methodology to derive the five per 1,000 standard. However, the Board wanted to provide school divisions with maximum flexibility, and did not mandate three periods a week, nor did it mandate that the positions be equally divided between art, music, and physical education. Instead, the board proposed a division-wide standard of five resource teachers per 1,000 students in grades kindergarten through five to allow school divisions to have maximum flexibility in complying with 8 VAC 20-131-80 of the

*Regulations Establishing Standards for Accrediting Public Schools in Virginia* (the Standards of Accreditation), which says that: “In addition, each [elementary] school shall provide instruction in art, music, and physical education and health...”

These resource teachers must be in addition to those teachers counted in meeting other staffing standards in the Standards of Quality or teachers whose positions are funded with federal funds. These positions are included in the required local expenditure for the Standards of Quality, as provided in Item 146.A.5 of the budget bill, which says, “The locality’s share based on the composite index of local ability-to-pay of the cost required by all the Standards of Quality minus its estimated revenues from the state sales and use tax (returned on the basis of school age population) in the fiscal year in which the school year begins.”

Elementary resource teachers are division-wide positions, unlike other elementary positions that are in a self-contained classroom. Therefore, if the number of positions required is a partial position, it should be counted as a partial position and rounded to two decimals.

**Technology positions:** HB 1014 and SB 479 also amended the Standards of Quality, § 22.1-253.13:2 of the Code of Virginia, to say: “Local school boards shall employ two 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.”

Language in Item 146 of the budget bill says, “Appropriations in this item include...the state’s share of the following revisions to the Standards of Quality...one support technology position per 1,000 students the first year; one support technology position and one instructional technology position per 1,000 students the second year...”

The instructional technology resource teachers help teachers integrate technology into the classroom. Like other resource teachers, they may be responsible for instructing students, providing training and professional development, developing the curriculum, or performing similar kinds of duties and responsibilities as the school division may deem appropriate.

These instructional technology resource teachers must be in addition to those teachers counted in meeting other staffing standards in the Standards of Quality (including the new 21:1 pupil-teacher ratio for middle and secondary schools, and the six per 1,000 career and technical education teachers and special education teachers included in the Standards of Quality) or teachers whose positions are funded with federal funds. These positions are included in the required local expenditure for the Standards of Quality, as provided in Item 146.A.5 of the budget bill, which says, “The locality’s share based on the composite index of local ability-to-pay of the cost required by all the Standards of Quality minus its estimated revenues from the state sales and use tax (returned on the basis of school age population) in the fiscal year in which the school year begins.”

The instructional technology resource teacher is specified as a teacher, and therefore must be a licensed teacher in accordance with § 22.1-299 of the Code of Virginia, which states, “No teacher shall be regularly employed by a school board or paid from public funds unless such teacher holds a license or provisional license issued by the Board of Education or a three-year local eligibility license issued by a local school board pursuant to § 22.1-299.3...” The instructional support position does not have to be a licensed teacher.

School divisions may use contract personnel to meet the requirement of one technology support position per 1,000 students, so long as the contract staff provide the equivalent level of support services.

**Planning period for middle and secondary teachers:** HB 1014 and SB 479 also amended the Standards of Quality, § 22.1-253.13:2 of the Code of Virginia, to say: “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.”

Language in Item 146 of the budget bill says, “Appropriations in this item include...the state’s share of the following revisions to the Standards of Quality...one quarter of the daily planning period for teachers at the middle and high school level [the first year] and the full daily planning period at the middle and high school levels the second year...”

These instructional positions must be in addition to those teachers counted in meeting other staffing standards in the Standards of Quality or teachers whose positions are funded with federal funds, as provided in Item 146 of the budget bill. These positions are included in the required local expenditure for the Standards of Quality, as provided in Item 146.A.5 of the budget bill, which says, “The locality’s share based on the composite index of local ability-to-pay of the cost required by all the Standards of Quality minus its estimated revenues from the state sales and use tax (returned on the basis of school age population) in the fiscal year in which the school year begins.” They may teach any subject area, so long as they provide direct instruction in the classroom. Guidance counselors, library-media specialists, special education teachers, assistant principals, and positions funded with federal funds are not counted in meeting this requirement.

If you need additional information regarding the requirements of the Standards of Quality, please contact Anne Wescott (mailto:awescott@mail.vak12ed.edu) assistant superintendent for policy and communications at (804) 225-2403; Daniel S. Timberlake, assistant superintendent for finance, at (804) 225-2025; or Charles Finley, assistant superintendent for educational accountability, at (804) 786-9421.

JLD/ADW/jj



## COMMONWEALTH of VIRGINIA

### DEPARTMENT OF EDUCATION

P.O. BOX 2120

RICHMOND, VA 23218-2120

SUPTS. MEMO NO. 204

October 8, 2004

#### INFORMATIONAL

TO: Division Superintendents

FROM: Jo Lynne DeMary  
Superintendent of Public Instruction

SUBJECT: Transmittal of the 2004 Standards of Quality

This memorandum provides information regarding the changes to the Code of Virginia's Standards of Quality (SOQ), §§ 22.1-253.13:1 through 22.1-253.13:8, passed by the 2004 General Assembly. The revisions became effective July 1, 2004, unless otherwise noted. Attached is a copy of the SOQ, as amended.

The 2004 General Assembly revised the SOQ through the following legislation:

House Bill 1014 and Senate Bill 479 reorganized the Standards of Quality and made substantive amendments in the areas of elementary principals, assistant principals, elementary resource positions for art, music, and physical education, pupil-teacher ratios, speech language pathologist caseloads, reading specialists, technology support positions, and the current funding mechanism for remediation. However, the bills included a second enactment clause providing that any new Standard of Quality incorporated into the bills shall not become effective unless an appropriation for the standard is included in the 2004-2006 Appropriation Act. The provisions regarding principals, assistant principals, reading specialists and speech language pathologists were not funded. The following changes regarding staffing were funded in the Appropriation Act:

- Five elementary resource positions per 1,000 students in kindergarten through grade 5 for art, music, and physical education;
- One planning period per day or the equivalent, unencumbered of any teaching or supervisory duties for all middle and high school teachers;
- Two technology support positions per 1,000 students in kindergarten through grade 12 division wide.

HB 1014 and SB 479 also amended the Standards of Quality to replace the SOQ remediation program. The new language provides that in addition to the positions supported by basic aid, 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. This state funding may be used to support programs for educationally at-risk students as identified by the local school boards. See § 22.1-253.13:2 of the Code.

House Bill 769 requires that local school boards include, within the currently required career and technical education program, curricula that promote knowledge of entrepreneurship and small business ownership. The bill also requires school divisions to include dual enrollment in their plans to notify students and their parents of the availability of advanced placement classes, the International Baccalaureate program, and Academic Year Governor's School Programs. See § 22.1-253.13:1 of the Code.

House Bill 1254 requires the Board of Education to post disaggregated Standards of Learning (SOL) assessment scores and averages for each year on the Web site for the School Performance Report Card. The scores must be disaggregated for each school by gender and by race or ethnicity, reported to the public within three months of receipt, and provided in a format that allows year-to-year comparisons. The information on the School Performance Report Card may include the results from the National Assessment of Educational Progress (NAEP). See § 22.1-253.13:3 of the Code.

HB 1294 gives the Board of Education the authority to require a school division with chronically low-performing schools, as a result of failure of the school division to implement the Standards of Quality, to undergo a division-level academic review. At the completion of the review, each school board must submit a corrective action plan to raise student achievement and to achieve full accreditation status to the Board of Education for approval and also include it in the school division's six-year improvement plan. The Board of Education may petition the circuit court having jurisdiction in the school division to mandate compliance with the relevant standard and the development or implementation of the required corrective plan when it determines that a school division has failed or refused, and continues to fail or refuse, to comply with the Standards of Quality and the development or implementation in a timely manner of the corrective plan. See §S 22.1-253.13:3, 22.1-253.13:6 and 22.1-253.13:8 of the Code.

Senate Bill 416 requires the Board of Education, in consultation with the chairpersons of the eight regional superintendents' study groups, to provide for timely review of test scores by school divisions for coding and other errors and prompt reporting to the divisions by the Department of Education of the Standards of Learning test scores that will be used to determine each school's status pursuant to the provisions of the No Child Left Behind Act of 2001 (P.L. 107-110). See § 22.1-253.13:1 of the Code.

Senate Bill 438 requires local school boards to notify parents of rising eleventh and twelfth graders regarding graduation requirements, the remaining credits the students need to graduate, and the number of years students may attend school. See §22.1-253.13:4 of the Code.

I hope that you will find this information helpful. You can find a final legislative report for the 2004 General Assembly session on the department's Web site at <http://www.doe.virginia.gov> under Legislation on the Policy and Communications Web page.

For additional information, please see Superintendent's Memo No. 3, Regulatory, May 17, 2004, regarding the 2004-2006 Biennial Budget Passed by the 2004 Special Session of the General Assembly and Superintendent's Memo No. 5, Regulatory, June 18, 2004, regarding Staffing Requirements Prescribed by the Standards of Quality.

Please contact Michelle Vucci, director of policy, at (804) 371-0558 or by electronic mail at [MichelleVucci@doe.virginia.gov](mailto:MichelleVucci@doe.virginia.gov) if you need additional information.

JLD/MJP/cb

Attachment



## COMMONWEALTH of VIRGINIA

### DEPARTMENT OF EDUCATION

P.O. BOX 2120

RICHMOND, VA 23218-2120

SUPTS. MEMO NO. 1

January 14, 2005

#### INTERPRETIVE

TO: Division Superintendents

FROM: Jo Lynne DeMary  
Superintendent of Public Instruction

SUBJECT: Standards of Quality (SOQ) Technology Staffing  
Standards for the 2004-2006 Biennium

Regulatory Superintendent's Memorandum 5, issued on June 18, 2004, and Information Superintendents Memorandum 204, issued on October 8, 2004, provided information to school divisions regarding legislation passed by the 2004 General Assembly to amend the Standards of Quality (SOQ). The legislation enacted by the General Assembly implemented policy changes recommended by the Board of Education. The purpose of this memorandum is to provide further clarification of the revised staffing requirements related to technology in order to assist school divisions with the preparation of their 2005-2006 budgets.

The technology staffing standards do not become effective until July 1, 2005, although funding is provided effective July 1, 2004. Language in Item 146 of the Appropriation Act states:

"Notwithstanding Chapters 939 and 955, of the Acts of Assembly of 2004, no school division shall be required to maintain instructional positions meeting the increased standards set forth in this paragraph until July 1, 2005."

Standard Two of the SOQ (§ 22.1-253.13:2 of the Code of Virginia) states the following:

"Local school boards shall employ two 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."

Language in Item 146 of the 2004 Appropriation Act also states:

"Appropriations in this item include...the state's share of the following revisions to the Standards of Quality...one support technology position per 1,000 students the first year; one support technology position and one instructional technology position per 1,000 students the second year..."

As with the other staffing standards contained in Standard Two of the SOQ, the positions for both support technology and instructional technology are intended to be full-time equivalent positions. Revisions to the

SOQ approved by the Board of Education in November of 2004 clarify this standard by adding the term “full-time equivalent.” (The proposed revisions to the SOQ must be approved by the 2005 General Assembly in order to become effective on July 1, 2005.)

Questions have been raised regarding the use of contract personnel to meet the requirement of technology positions. Contract personnel may be used so long as the contract provides for the equivalent level of services. This would apply both to public and private contract providers. Because the use of contract personnel will vary according to the needs of the individual school divisions, school divisions contracting for these services may wish to consult their respective school board attorneys if there is any question that the proposed use of contract personnel could be problematic.

Funding for this new standard in the 2004-2006 biennium is included in the “Basic Aid” item in the entitlement sheets provided by the Department of Education Budget Office.

Please note that the funding for the revised standards outlined in this memorandum are included in the calculation of required local expenditures for meeting the local share of the cost of the SOQ.

**Instructional Technology Resource Teachers:** The intent of providing funding for instructional technology resource teachers in the SOQ is to assist teachers with the integration of technology in the classroom, to train teachers to use technology in an effective manner, and to assist with curriculum development as it relates to educational technology. These positions may be responsible for modeling instructional strategies with students, providing training and professional development, developing the curriculum, or performing similar kinds of duties and responsibilities as the school division may deem appropriate. Instructional technology resource teachers are intended to serve as resources to classroom teachers, but are not intended to serve as classroom teachers.

The instructional technology resource teacher is specified as a teacher, and therefore must be a licensed teacher, as stated in Regulatory Superintendent’s Memorandum 5.

**Technology Support:** The technology support position provides centralized, school-based, and/or regional support for information networks. School divisions need to ensure that the duties of this position provide any of the following direct services, beginning on July 1, 2005:

- Providing centralized, school-based, and/or regional support for information networks (including a school division “help desk” or “help line”).
- Providing network selection, configuration, installation, operation, repair, maintenance, software installation, troubleshooting, and security management.
- Creating and upgrading servers, computers, and networks.
- Maintaining multi-media devices, which include but are not limited to computers, telephony, monitors, and projectors.

The duties of the technology support position would not include data entry, computer programming, data collection and analysis, Web master services, or administration and management.

If you need additional information regarding the requirements of the Standards of Quality, please contact Anne Wescott (mailto:anne.wescott@doe.virginia.gov) assistant superintendent for policy and communications at (804) 225-2403 or Daniel S. Timberlake, assistant superintendent for finance, at (804) 225-2025.

JLD/MMV/cb



## Appendix - B

### Job Descriptions

## Arlington County Public Schools Instructional Technology Coordinator Job Description

This is a full-time, twelve-month position. This position may be assigned to more than one site.

### Distinguishing Features Of Work

ITCs working under the supervision of the Director, Office of Instructional Media & Technology (IMT), in cooperation with IMT staff and building principals provide leadership, training and support to teachers and instructional assistants in the integration of computer, video, information and communication technologies into the instructional programs of the school(s) to which they are assigned. ITCs also are responsible for carrying out basic hardware troubleshooting and assisting with network management and troubleshooting.

Instructional Technology Coordinators use a collaborative model in working with IMT staff, principals, teachers, Library Media Specialists, and instructional assistants.

For certain projects, ITCs will work together directly with IMT staff and with other ITCs in teams. ITCs may have flexible work schedules, and adjustable working hours, as approved by the Director of the Office of Instructional Media & Technology.

### Illustrative Examples Of Work

- Provide leadership in the development and implementation of instructional technology plans, including technology standards for students and teachers (TSIPs), in collaboration with the Instructional Media & Technology Director, IMT staff, the building principals, Library Media Specialists and the School-based Technology Planning Committee.
- Serve as liaison between IMT and the school principal and instructional staff through regular communication, including gathering and disseminating information relevant to instructional technology.
- Work with APS and school planning teams for special projects such as building renovation, exemplary projects, school renewal, and VA DOE initiatives.
- Collaborate with school-based instructional leaders, including library media specialists, exemplary project coordinators and lead teachers to facilitate effective use of instructional technology.
- Provide training and assistance in the integration of technology and TSIPs skills to building instructional staff during and outside the school day.
- Plan and conduct regularly scheduled training sessions and workshops for individuals and groups, including modeling lessons in classrooms.
- Provide use and integration workshops on new and existing computer and video technologies.
- Conduct countywide instructional technology training including participation in large-scale countywide initiatives such as the Technology for Learning Symposium.
- Train and mentor other ITCs.

- Participate in on-going training and projects related to job responsibilities, including workshops and meetings held by IMT staff.
- Collaborate with IMT and curriculum staff on specific initiatives including curriculum development, technology observations, textbook adoption, countywide software and website evaluations, video integration projects, Blackboard utilization, and piloting and testing of software.
- Set up, configure, install, and troubleshoot instructional computers, video equipment and software in collaboration with technical staff.
- Assist with basic instructional network responsibilities, including creating user accounts, making network software available and troubleshooting connectivity.
- Work with school staff to coordinate the ordering, distribution, and maintenance of computer and video equipment, software, supplies and other technologies supported and repaired by IMT.
- Conduct instructional hardware and software inventories.
- Perform other duties related to the ITC job as assigned by the Director of IMT and the IMT Leadership Team.

## Qualifications

- At least two years teaching experience delivering and integrating technology in instructional programs for PreK-12 students, including special populations.
- Bachelor's degree in education or technology related field, Master's in instructional technology preferred.
- At least two years experience training teachers or other adults in the integration of technology for instruction and productivity using the following modes: modeling, one-on-one, small group, large group.
- Experience providing leadership in planning for and integrating technology in instruction, including working collaboratively and communicating effectively with teachers, principals, and parents about technology integration in instructional programs.
- At least two years experience evaluating software and media based on curriculum, learning styles, and instructional methodologies.
- Eligible for or prior completion of the Arlington Public Schools Technology Standards for Instructional Personnel (TSIPs) certification (see [www.arlington.k12.va.us/tsips](http://www.arlington.k12.va.us/tsips)).
- Practical knowledge of instructional technologies in their assigned school(s), including troubleshooting hardware and software. Examples include:
  - Macintosh and PC computers, peripherals, operating systems, and software;
  - Computer networks;
  - Web-based instructional applications;
  - Digital and analog video technologies.
- Possess strong interpersonal and communication skills.
- Ability to work with minimum supervision and as a member of a self-directed team.
- Ability to lift, move, and connect computer and video related equipment.
- Willingness to flex work schedule as needed to fulfill job responsibilities.
- Ability to balance priorities at multiple sites.
- Valid driver's license and a vehicle to provide own transportation.

Harrisonburg City Public Schools  
**Instructional Technology Resource Teacher**  
**Job Description**  
**(10 month position)**

**Primary Function:**

Provide leadership in the ongoing development and improvement of programs and services to promote technology awareness and effective use throughout the curriculum.

**Qualifications:**

- Graduation from an accredited college or university with a minimum of a Bachelors degree.
- Collegiate Professional Certificate minimum (teaching license)
- A minimum of three years of successful teaching experience and experience in technology-related positions.

**Reports to:**

- Director of Business and Technology

**Essential Functions:**

- Coordinates the development of a technology-related curriculum.
- Promotes the use of technology in the core curriculum program.
- Serves as a resource person in technology education.
- Provides assistance to classroom teachers in effective technology integration.
- Coordinates school-community technology projects.
- Selects and prepares technology materials related to the educational program.
- Stays informed of new computer education materials and equipment.
- Examines and recommends technology materials to appropriate school personnel.
- Provides leadership in developing and promoting technology educational objectives.
- Participates in the development and implementation of special technology workshops for students and staff.
- Participates in staff development of self and others.
- Assists central office staff in evaluating the technology program.
- Communicates with parents and the community the goals of technology in the school.
- Reviews annually existing district license software for utility and cost-effectiveness.

## Lancaster County Public Schools Instructional Technology Resource Teacher Job Description

### Primary Function:

The Instructional Technology Resource Teacher infuses technology to improve communications, task efficiency, and data-driven decision making as they relate to student performance.

### Qualifications:

1. Hold a Professional License.
2. Hold an endorsement in one of the core academic areas: Language Arts, Mathematics, Social Studies, or Science.
3. Has three years of teaching experience in one of the core areas.
4. Is fluent in core software and technologies used by Lancaster County Public Schools:
  - a. MS Office (Word, Excel, Access, PowerPoint),
  - b. My Skills Tutor,
  - c. Orchard,
  - d. Success Maker Enterprise,
  - e. Inspiration/Kidspiration,
  - f. United Streaming,
  - g. My Reading Coach,
  - h. World View,
  - i. SASIxp and Integrate/Pro
  - j. Video conferencing
  - k. EIMS/Excel Data Disaggregator
  - l. Testnav
5. Has a background in data analysis as it relates to instruction; e.g., analyzing SOL test scores and other assessments to identify weaknesses in student performance.
6. Is articulate and can adapt communication and presentation style to meet the needs of all stakeholders: administrators, teachers, parents, and students.
7. Ability to maintain a good working relationship with other employees.

REPORTS TO: Assistant Superintendent and Technology Coordinator

## **Performance Responsibilities:**

1. Works directly with the Technology Coordinator, Assistant Superintendent, Principals, Guidance Counselors, and Classroom Teachers to plan and implement technology related instructional strategies which are designed to improve student performance in the core academic areas.
2. Works with instructional leaders within the schools to develop technology-based remedial and enrichment programs and suggest modifications to existing curricula.
3. Designs and conducts staff development programs to enhance classroom instruction through the use of available technology.
4. Makes frequent presentations to staff, parents, and students in an informational or instructional role.
5. Stays apprised of current trends in educational technology (both hardware and software) and informs the Technology Coordinator, Assistant Superintendent, principals, and teachers of those developments.
6. Designs, maintains, and implements an Access or SQL Server database of testing and other performance data to track student achievement and program effectiveness.

## Irving, Texas Independent School District Instructional Technology Support Job Description

### Job Goal

Facilitate the effective integration of technology into the teaching/learning process.

### Terms of Employment

The Instructional Technology Specialist reports to the building principal.  
Length of work year is 198 days. Salary is in accordance with the annual teacher salary schedule approved by the Board of Trustees.

### Qualifications

- Education/Certification
- Bachelor's Degree
- Valid Texas teacher's certificate at the appropriate level
- Special Knowledge/Skills
- Knowledge of curriculum and instruction
- Knowledge of effective design and presentation strategies for staff development
- Experience using technology to improve teaching and learning
- Excellent communication and interpersonal skills
- Excellent knowledge of computer applications (multi-platform preferred)
- Knowledge of TEKS, district curriculum, expectations, and national standards
- Experience
- At least three (3) years exceptional performance as a classroom teacher
- Proven record of improving student achievement
- Experience using effective instructional strategies
- Major Performance Responsibilities and Duties

### Instructional Management

1. Assist in planning for effective implementation of curriculum to ensure that technology is used effectively to meet student needs.
2. Demonstrate on a regular basis the use of technology in the classroom to improve teaching and learning.
3. Provide sustained, in-depth professional development for campus staff which focuses on the integration of technology and curriculum.
4. Encourage learning activities that take advantage of computer networking capabilities, i.e., using and creating Internet resources.
5. Monitor the use of instructional technology to ensure that resources and activities enhance rigorous academic content and the school's mission.
6. Make continuous improvements in key processes, techniques, and procedures related to the instructional technology program.
7. Provide frequent feedback to staff members and administrators regarding instructional technology.
8. Continually search for, evaluate, and implement use of new instructional resources including software, web sites and long-distance learning opportunities.

### **School/Organizational Climate**

9. Promote a positive, caring climate for learning.
10. Deal sensitively and fairly with persons from diverse cultural background.
11. Demonstrate effective interpersonal skills.

### **School/Organizational Improvement:**

12. Participate in collaborative processes to develop campus improvement plans and campus technology plans.
13. Assist in orienting new staff.
14. Develop and continually improve professional skills appropriate to job assignment.
15. Demonstrate behavior that is professional, ethical, and responsible.

### **School/Organizational Improvement:**

16. Articulate the school's mission to the community and solicit community support in realizing the mission.
17. Use appropriate and effective techniques for community and parent involvement.

### **Working Conditions**

#### **Mental Demands:**

Ability to communicate effectively (verbal and written); maintain emotional control under stress.

#### **Physical Demands / Environmental Factors:**

Occasional district-wide travel; occasional prolonged and irregular hours.

### **Resource:**

[http://www.irvingisd.net/technology/its\\_job\\_description.htm](http://www.irvingisd.net/technology/its_job_description.htm) as seen on 06/01/05

## North Carolina Department of Education Technology Facilitator Job Description

In North Carolina, the school's technology facilitator is the key instructional technology specialist for the school.

### **Certification:**

NC Teacher Licensure + 18079 Special Endorsement in Computer Education

### **Reports To:**

Principal and Technology Supervisor

### **Supervises:**

### **Purpose:**

This individual provides training and support to the staff on technology integration, the North Carolina Computer/ Technology Skills Curriculum, the North Carolina Technology Competencies for Educators, and administrative applications. The employee assists with identifying, acquiring, and maintaining hardware, software, and network products. This individual also assists in the implementation of the system and building-level technology plans.

### **Duties And Responsibilities**

1. MAJOR FUNCTION: Planning and Facilitating Teaching and Learning
  - Collaborates with teachers and other instructional staff to develop curriculum materials and specific lesson plans that integrate technology
  - Models the integration of technology in all curriculum areas
  - Facilitates school participation in technology programs and activities
  - Conducts staff development in the areas of technology integration, the North Carolina Computer/Technology Skills Curriculum, and the North Carolina Technology Competencies for Educators
  - Collaborates with the school library media coordinator to provide leadership in the school's use of instructional technology resources to enhance learning
  - Follows a plan for professional development and actively seeks out opportunities to grow professionally
  
2. MAJOR FUNCTION: Planning and Facilitating Information Access and Delivery
  - Implements best practices related to technology use in the school program based on research, pilot programs, and state/national standards
  - Works with the principal and school leadership team to provide access to technology resources and services of the technology facilitator at point of need
  - Works with teachers and technology staff in the selection of resources that are compatible with the school technology infrastructure
  - Assists with planning the design of the technology infrastructure so that

information resources are continually available to the school community

- Promotes family, business, and community partnerships that support the academic success, career readiness, and general well-being of all children
- Adheres to and communicates copyright as well as other laws and guidelines pertaining to the distribution and ethical use of all resources
- Assists in maintaining hardware, software, and network infrastructure
- Serves as the school contact for addressing hardware and software issues

3. MAJOR FUNCTION: Planning and Facilitating Program Administration

- Leads, in partnership with the School Library Media Coordinator, the Media and Technology Advisory Committee in effective decision making to promote the media and technology program.
- Provides leadership and collaborates with the Media and Technology Advisory Committee to develop, implement, and update a school instructional technology plan aligned with the system-level technology plan
- Collaborates with teachers, media and technology staff, and students to evaluate and select resources addressing curricular needs and learning goals
- Plays a leading role in the school's budgetary process to ensure funding for the instructional technology program to support school-wide goals
- Leads in the ongoing evaluation of the effectiveness of the instructional technology program
- Prepares and submits accurate reports as required
- Carries out non-instructional duties as assigned and/or as needed to ensure student safety

**Resource:**

<http://tps.dpi.state.nc.us/scd/techpositions/TechnologyFacilitatorJob.html> as seen on 06/01/05