

Technology Standards for Instructional Personnel

TSIP



Demonstrating Proficiency

Charlottesville City Schools
1562 Dairy Road • Charlottesville VA 22903 • 804-245-2400



Technology Standards for Instructional Personnel Demonstrating Proficiency

TSIP Certification Process.....	1
Technology Ethics.....	1
Technology Application.....	1
Technology Skill Development.....	1
Professional Development and Proficiency Demonstration.....	2
Proficiency Demonstration Process.....	2
The Division Commitment.....	2
Demonstrated Proficiency Targets.....	3
Target: 2001.....	3
Target: 2002.....	4
Target: 2003.....	4
Target: New Hires.....	4
TSIP Project Mentors.....	4
Points to Ponder.....	5
Division Responsibilities.....	5
Staff Responsibilities.....	6
Terms and Definitions (Virginia Board of Education).....	6
Administration of Technology Standards (Virginia Board of Education).....	6
Questions, Comments, Concerns, and Contacts.....	6
TSIP Task List.....	7
Professional Ethics.....	7
Communication.....	7
Information Management.....	8
Data Collection.....	8
Professional Application.....	9
Basic Technology Skills vs. TSIP Proficiency Certification.....	11
Glossary of Technology and TSIP Terms.....	13
TSIP Training Session Descriptions.....	15
Skill Sessions.....	15
TSIP Task Sessions.....	19
Technology Bibliography (IMS).....	29
Video Tapes: Media Technology Use and Application.....	29
Books: Professional Technology Use and Application.....	33
TSIP Proficiency Certification Form.....	Back Cover

Technology Standards for Instructional Personnel (TSIP) Charlottesville City Schools—TSIP Certification Process

In 1998, the Virginia Board of Education adopted *Technology Standards for Instructional Personnel* (TSIP). Provisions within the standards require that school divisions, by 2002, certify their instructional personnel to have demonstrated proficiency in the use of technology.

Effective July 1, 1999, state law directs the Virginia Board of Education to include in its licensure regulations a requirement that on and after July 1, 2003, persons seeking initial licensure or license renewal as teachers demonstrate minimum proficiency in the use of technology.

The Virginia Board of Education has identified and adopted eight technology standards in which instructional staff must demonstrate proficiency. The Board left it to each school division to define the tasks by which staff members will demonstrate proficiency. Charlottesville has organized these standards into three main areas of focus: *Technology Ethics*, *Technology Application*, and *Technology Skill Development*.

Technology Ethics

- Instructional personnel shall demonstrate knowledge of ethical and legal issues relating to the use of technology. (TSIP VIII.)

Technology Application

- Instructional personnel shall be able to use educational technologies for data collection, information management, problem solving, decision making, communication, and presentation within the curriculum. (TSIP VI.)
- Instructional personnel shall be able to apply computer productivity tools for professional use. (TSIP III.)
- Instructional personnel shall be able to identify, locate, evaluate, and use appropriate instructional hardware and software to support Virginia's Standards of Learning and other instructional objectives. (TSIP V.)
- Instructional personnel shall be able to plan and implement lessons and strategies that integrate technology to meet the diverse needs of learners in a variety of educational settings. (TSIP VII.)

Technology Skill Development

- Instructional personnel shall be able to demonstrate effective use of a computer system and utilize computer software. (TSIP I.)
- Instructional personnel shall be able to apply knowledge of terms associated with educational computing and technology. (TSIP II.)
- Instructional personnel shall be able to use electronic technologies to access and exchange information. (TSIP IV.)

Throughout each area of focus the individual standards overlap to create an educational environment that promotes learning and efficient operation within our schools. Because of this overlap, it is possible for staff members, in some situations, to perform one identified task that demonstrates proficiency

across a number of TSIP areas. Charlottesville has organized TSIP Tasks in such a way as to minimize unnecessary duplication of technology proficiency demonstration and certification requirements.

Professional Development and Proficiency Demonstration

Participation in a course, a training session, peer observation, or other opportunities does not automatically certify TSIP proficiency. **An experience unto itself is not grounds for proficiency certification.** Such activities, however, may lead to a staff member's becoming proficient within a TSIP area.

Not all staff members, however, need to participate in structured professional development activities. Through either previously attended activities or personal initiative, these staff members are already proficient within a number of the TSIP areas. These staff members, therefore, need only the opportunity to demonstrate their proficiency.

Proficiency Demonstration Process

Some TSIP proficiency demonstration requirements may be met through completing simple tasks; others may require a more complex endeavor to demonstrate a particular TSIP proficiency. Staff members must demonstrate proficiency as it is defined within the Charlottesville City Schools' *TSIP Task List*. The list contains an array of tasks that lead to TSIP Demonstrated Proficiency Certification (DPC). Staff members meet proficiency requirements by self-selecting, within categories, those tasks which most suit their areas of job responsibility. The *TSIP Task List* specifies the required number of tasks within individual categories, describes each task, cites the applicable standard(s), outlines each task's verification process, and identifies categories of individuals who can verify a staff member's task proficiency for each task.

The Division Commitment

The division recognizes that Charlottesville instructional staff members, like our students, have a variety of learning styles. Staff gain technology skills through readings, instructional media, university and college level courses, personal hands-on exploration, division sponsored training, building sponsored training, peer observation, peer-mentor sharing, and other opportunities where circumstance and situation provide a technology application learning environment. Acceptable technology professional development, therefore, must take many forms.

To support an environment that recognizes the value of staff technology proficiency, the division will continue a number of existing approaches.

- The division will continue to provide partial tuition reimbursement to staff members who successfully complete college level courses that relate to the use of technology as a tool in the instructional setting.
- The division will continue to support staff member participation in conferences and workshops that offer training in and insightful experience with the use of technology as a tool in the instructional setting.
- The division will continue to offer recertification points to staff members who view video/CD-ROM training media that provide instruction in the use of technology as a tool in the instructional setting.
- The division will continue to offer recertification points to staff members who participate on curricular committees that focus on the use of technology as a tool in the instructional setting.

- The division will continue to offer opportunities to staff members to participate in peer observations of colleagues using technology as a tool in the instructional setting.
- The division will continue to endeavor to make technology tools readily available to staff members and students across the division.

The *Technology Standards for Instructional Personnel* emphasize the need for focused technology staff development. The division, therefore, will provide *TSIP Task Training Sessions* throughout the school year and during the summer. The division will offer the sessions at a number of locations...in individual schools and at central sites. The sessions will offer a division certified curriculum that includes opportunities for staff members to gain and demonstrate proficiency with identified TSIP Tasks. Individual sessions will be repeated several times during the year. Sessions will include opportunities for staff members to demonstrate proficiency with identified *TSIP Tasks*. Sessions offering verification of demonstrated proficiency will be lead by a division certified *TSIP Task Mentor*. The division will provide a calendar and schedule of these sessions at the beginning of each semester.

In addition to division sponsored TSIP Task Training Sessions, individual schools may also provide technology training. However, in order for the session to offer verification of proficiency with TSIP Tasks it must meet two criteria: the session must follow the division defined TSIP curriculum and must be lead by a certified TSIP Task Mentor. School sponsored sessions that do not meet *both* of these requirements provide valuable insight into the use of technology as a tool in the instructional setting. However, in order for participants in these sessions to earn TSIP Task proficiency certification, the participants must follow verification methods cited within the TSIP Task List.

Demonstrated Proficiency Targets

The division encourages all instructional staff members to achieve, in a timely fashion, technology Demonstrated Proficiency Certification (DPC) status. With such an accomplishment, the benefits from having a technology proficient staff will accrue more quickly and easily. There are, therefore, a number of target dates that will affect staff members who may have difficulty achieving DPC status.

Target: 2001

Staff members who fail to earn DPC status by May 1, 2001 will need to focus more carefully on gaining the skills needed to use technology in their areas of responsibility. Any staff member who has not earned DPC status by May 1, 2001 will work with his/her immediate supervisor to devise a Technology Application Improvement Plan. The staff member and supervisor must agree on the provisions of the Technology Application Improvement Plan by May 31, 2001. The plan must include measures the staff member will undertake in order to earn DPC status by March 15, 2002. The staff member may request help from building and division technology support staff throughout the Technology Application Improvement Plan planning and execution process.

Target: 2002

The division must certify, by 2002, instructional staff members to have demonstrated proficiency in each of the eight standard areas. Staff members who, by March 15, 2002, fail to earn DPC status as required in their Technology Application Improvement Plan will operate under two conditions. First, the staff member and his/her immediate supervisor will update the staff member's Technology Application Improvement Plan to reflect skills gained and skills needing additional focus. Second, the staff member's immediate supervisor will notify the Office of Human Resources to place the staff member on a frozen salary designation. The staff member will receive no increase in salary (actual gross dollar amount) until such time as s/he earns DPC status. At the time that the staff member does earn DPC

status, the staff member's salary will be adjusted (with no provisions for back pay and at an amount prorated to the actual date of DPC status) to that position on the appropriate salary scale and to include any subsequently earned stipends and adjustments.

Target: 2003

Beginning with July 1, 2003, earning DPC status will be a requirement of the Virginia Board of Education for licensure and licensure renewal. Staff members wishing to be employed by or to continue employment with the Charlottesville City Schools must possess a valid license issued by the Virginia Board of Education. If the staff member has not achieved DPC status by July 1, 2003, the non-DPC status salary freeze provisions of *Target: 2002* will apply to those staff members who hold a valid license issued prior to and extending beyond July 1, 2003.

Target: New Hires

Charlottesville will recognize Demonstrated Proficiency Certification from other school divisions in Virginia. Newly hired staff members who assume their responsibilities after July 1, 2002 and who have been employed by another Virginia school division or who are newly graduated from a Virginia college or university but lack DPC status, must attain DPC status by July 1, 2003; failure, by these individuals, to earn DPC status by that time will be grounds for termination of employment.

The policy adopted by the Virginia Board of Education provides that staff members new to Charlottesville and hired from out of state will have a maximum three-year probationary period in which to earn DPC status.

TSIP Project Mentors

The task of drafting Charlottesville's approach to certifying instructional staff demonstrated technology proficiency fell to the TSIP Project Mentors. TSIP Project Mentors were selected from a number of applicants from across the division. The mentors met during second semester 1998-1999 and summer 1999. They were diligent in their efforts to ensure the proficiency demonstration process to be fair, useful, and appropriate within the guidelines and definitions provided by the Virginia Department of Education. Charlottesville TSIP Project Mentors recognized the different applications of technology skills that span the variety of job responsibility areas both inside and outside classroom instruction. The Mentors structured TSIP Tasks which allow instructional staff members, no matter what their job classification, to demonstrate proficiency with technology in a way that is pertinent to their actual job responsibilities. This approach recognizes the Virginia Board of Education definition of *instructional personnel* as being anyone who is "required to hold a license issued by the Virginia Board of Education for instructional purposes" and not to be limited to those staff members who are classroom teachers.

The TSIP Project Mentors are:

Harley Miles	Director of Assessment and Accountability
Judy Rood	Division Coordinator of Instructional Media Services
Maria J. Lewis	Division Coordinator of Technology Integration
Paula Culver-Dickinson	ITRT - Middle & Upper Elementary
Jenine Pendleton	ITRT - High School
Eric Stauffer	ITRT - Elementary
Julie Weaver	ITRT - Elementary

Points to Ponder

At first glance, the information in this document may appear overwhelming and confusing. In order to focus staff members' attention on the essence of the requirements placed on the division and each instructional staff member, listed below are a number of essential points of focus.

Division Responsibilities

1. Identify the scope and depth of tasks that staff members must perform in order to demonstrate proficiency in each of the eight *Technology Standards for Instructional Personnel*.
2. Inform instructional staff of the *Technology Standards for Instructional Personnel* and the process through which they gain and demonstrate proficiency.
3. Offer an ample array of opportunities for staff members to gain and demonstrate proficiency in the use of technology in the instructional setting.
4. Provide support and guidance for those staff members who may have difficulty demonstrating proficiency in all of the eight *Technology Standards for Instructional Personnel*.
5. Certify that an instructional staff member has demonstrated proficiency in each of the eight *Technology Standards for Instructional Personnel*.

Staff Responsibilities

1. Become familiar with the *Technology Standards for Instructional Personnel*.
2. Become familiar with the process by which you may demonstrate proficiency with the various tasks outline with the *Technology Standards for Instructional Personnel*.
3. Take advantage, as needed, of TSIP Training Sessions.
4. Maintain the *TSIP Proficiency Certification Form* with a cumulative record of TSIP Task proficiency verification. Maintain a file of task documentation that supports proficiency verification.
5. Register your completed TSIP Portfolio with your immediate supervisor.

Terms and Definitions (Virginia Board of Education)

- **Demonstrated proficiency** means a demonstrated level of competence of the technology standards as determined by school administrators.
- **Electronic technologies** means electronic devices and systems to access and exchange information.
- **Instructional personnel** means all school personnel required to hold a license issued by the Virginia Board of Education for instructional purposes.
- **Productivity tools** means computer software tools to enhance student learning and job performance.

Administration of Technology Standards (Virginia Board of Education)

- School divisions shall incorporate the technology standards for instructional personnel into their division-wide technology plans by December 1998.
- School divisions shall develop implementation plans for in-service training for instructional personnel. The implementation plan shall provide the requirements for demonstrated proficiency of the technology standards.
- School divisions shall ensure that newly-hired instructional personnel from out of state demonstrate proficiency in the technology standards during the three-year probation period of employment.

Questions, Comments, Concerns, and Contacts

Staff members who have questions, comments, or concerns about the Charlottesville City Schools' TSIP Proficiency Demonstration process should contact one of the TSIP Project Mentors. Staff members may also contact their immediate supervisor as a source of information and guidance within the process.

Technology Standards for instructional Personnel Charlottesville City Schools TSIP Task List

Professional Ethics:

Complete the following.

#	Task	Applicable Standard	Verification	Verified by
PE-1	Understand responsible, ethical, and legal use of information and instructional media and technology.	8	Attend a division sponsored copyright and professional ethics session. Receive copies of the division's Acceptable Use Policy and Copyright/Fair Use Guidelines and Policy Statements. Sign the Staff Technology Use Agreement.	TM

IS = Immediate Supervisor MS = Media Specialist TM = TSIP Task Mentor

Communication

Complete two (2) of the following four (4):

#	Task	Applicable Standard	Verification	Verified by
C-1	Use e-mail to correspond with another educator.	1, 2, 4, 6, 8	Include a printout of your e-mail correspondence; include both a message that you sent and the response that you received.	IS or TM
C-2	Participate in a professional listserv.	1, 2, 4, 6	Include a printout of a thread or correspondence; indicate the name of the listserv and the subscription address.	IS or TM
C-3	Send a fax.	1, 2, 4, 6, 8	Include a copy of the document you faxed and a fax confirmation slip from the fax machine.	IS or TM
C-4	Have your students use e-mail to correspond, about a topic of curricular concern or interest, with field experts or other students in an educational setting.	1, 2, 4, 6, 7, 8	Include a printout of the e-mail correspondence; include both a message that your students sent and the response that they received.	IS or TM

Complete one (1) of the following three (3):

#	Task	Applicable Standard	Verification	Verified by
C-5	Develop and teach an SOL focused lesson plan that uses <i>at least one</i> of the following technologies: a WebQuest, teleconferencing, e-mail, the Internet, and/or a teacher or student generated web page.	1, 2, 4, 5, 6, 7, 8	Include a copy of the lesson plan, the date(s) you used the plan, and samples of student work OR include an activity observation form signed by your immediate supervisor.	IS or TM
C-6	Develop and present a professional presentation (<i>not to a K-12 class</i>) that uses <i>at least one</i> of the following technologies: teleconferencing, e-mail, the Internet, and/or a staff or student generated web page.	1, 2, 4, 6, 7, 8	Include a copy of the presentation outline and the date(s) and location at which you gave the presentation OR include an activity observation form signed by your immediate supervisor.	IS or TM
C-7	Develop and post a web page that focuses on your area of responsibility.	1, 2, 4, 6, 7, 8	Include printout of the page and a copy of the URL.	IS or TM

IS = Immediate Supervisor MS = Media Specialist TM = TSIP Task Mentor

Information Management:

Complete each of the following (3):

#	Task	Applicable Standard	Verification	Verified by
IM-1	Create a database to generate a list for professional use. (e.g. a class list, staff list, student biographical information, inventory, etc.)	1, 2, 3, 6	Include a printout of one of the layouts from your database.	IS or TM
IM-2	Create a spreadsheet to generate a report for professional use (e.g. seating chart, gradebook, budget, etc.)	1, 2, 3, 6	Include a printout of your spreadsheet.	IS or TM
IM-3	Create a word processing document for professional use (e.g. a newsletter, a form letter, a permission form, etc.)	1, 2, 3, 6, 8	Include a printout of the document.	IS or TM

IS = Immediate Supervisor MS = Media Specialist TM = TSIP Task Mentor

Data Collection:

Complete three (3) of the following six (6):

#	Task	Applicable Standard	Verification	Verified by
DC-1	Electronically generate a topic specific bibliography of sources available in your school library.	1, 2, 4, 6	Include a printout of the bibliography.	IS, MS, or TM
DC-2	Electronically generate a topic specific bibliography of sources available at an area library (i.e., JMR Library, UVA) on a topic of interest to you and/or your class.	1, 2, 4, 6	Include a printout of the bibliography.	IS, MS, or TM
DC-3	Retrieve information from the web for instructional/professional use (e.g. resource information for students about a subject you are presenting).	1, 2, 4, 6, 8	Include a printout of the information.	IS, MS, or TM
DC-4	Organize search strategies to access specific information from the Web.	1, 2, 4, 6	Include a printout of the strategy with key words, path, final URL, and information gained.	MS or TM
DC-5	Organize search strategies to access specific information from an information database (i.e. SIRS, Grolier's, Infotrac, EBSCO, ERIC, etc.)	1, 2, 4, 6	Include a printout of the strategy with key words, path, and information gained.	MS or TM
DC-6	Use the Local Area Network (LAN) to save and retrieve information.	1, 2, 4, 6, 8	Include a printout of the information.	IS or TM

IS = Immediate Supervisor MS = Media Specialist TM = TSIP Task Mentor

Professional Application:

Complete five (5) of the following twelve (12):

#	Task	Applicable Standard	Verification	Verified by
PA-1	Use a digital camera to take a picture.	1, 2, 5, 6	Include a printout of a document that incorporates the picture.	IS or TM
PA-2	Use a scanner to scan and save an image.	1, 2, 5, 6	Include a printout of a document that incorporates the scanned image.	IS or TM
PA-3	Use a paint program (<i>e.g.</i> PhotoShop, PhotoDelux, ClarisWorks–Paint, <i>etc.</i>) to enhance a scanned image or digital camera picture.	1, 2, 3, 5, 6	Include a printed copy of both the original and the enhanced graphic; include an explanation of the instructional/professional application for the changes you made.	IS or TM
PA-4	Use a camcorder in a professional or instructional setting.	1, 2, 5, 6, 7, 8	Include a copy of a lesson plan or presentation outline along with the date(s) you used the plan or gave the presentation.	IS or TM
PA-5	Use the school division's software evaluation form to evaluate two (2) instructional software/media programs.	1, 2, 5	Include a copy of the completed evaluation forms.	IS or TM
PA-6	Use the school division's web site evaluation form to evaluate two (2) web sites.	1, 2, 5	Include a copy of the completed evaluation forms.	IS or TM
PA-7	Use the Internet in a curriculum-related activity.	1, 2, 4, 5, 6, 7, 8	Include an outline of the activity with relevant URL(s), title(s) of the site(s), and the rationale for selecting the site(s) for the specific grade level or professional purpose.	IS or TM
PA-8	Present a lesson using a computer connected to a television, large screen monitor, or projection system.	1, 2, 5, 6, 7	Include a copy of the lesson plan and the date(s) you used the lesson presentation OR include an activity observation form signed by your immediate supervisor.	IS or TM
PA-9	Present a professional presentation (<i>not to a K-12 class</i>) that uses a computer connected to a television, large screen monitor, or projection system.	1, 2, 5, 7	Include an outline of the presentation with purpose and the date(s) presentation OR include an activity observation form signed by your immediate supervisor.	IS or TM
PA-10	Present an SOL focused lesson that incorporates at least one of the following: videotaped/live satellite programs, instructional videotapes, CD-ROM or laser disc programs, and/or curriculum specific instructional software.	1, 2, 5, 6, 7, 8	Include a copy of the lesson plan with a list of media used and date presented.	IS or TM
PA-11	Create a lesson that uses <i>at least one</i> of the following technologies: a scanner, a graphing calculator, and/or scientific probes.	1, 2, 5, 6, 7	Include a copy of the lesson plan and the date(s) you used the lesson.	IS or TM
PA-12	Create a professional presentation (<i>not for a K-12 class</i>) that uses <i>at least one</i> of the following technologies: a scanner, a graphing calculator, and/or scientific probes.	1, 2, 5, 7	Include an outline of the presentation and the date(s) you gave the presentation.	IS or TM

IS = Immediate Supervisor MS = Media Specialist TM = TSIP Task Mentor

Professional Application: (continued)

Complete one (1) of the following two (2):

#	Task	Applicable Standard	Verification	Verified by
PA-13	Develop and present an SOL focused lesson that uses <i>at least one</i> of the following multimedia or hypermedia technologies: CD-ROMs, multimedia equipment, and/or multimedia software (e.g. ClarisWorks/AppleWorks slide show, HyperStudio, DigitalChisel, PowerPoint, mPower, Astound, etc.)	1, 2, 5, 6, 7	Include a copy of the lesson plan, a notation of the software/media used, and the date(s) on which you gave the lesson; you may also include samples of student work.	IS or TM
PA-14	Develop and give a professional presentation (<i>not to a K-12 class</i>) that uses <i>at least one</i> of the following multimedia or hypermedia technologies: CD-ROMs, multimedia equipment, and/or multimedia software (e.g. ClarisWorks/AppleWorks slide show, HyperStudio, DigitalChisel, PowerPoint, mPower, Astound, etc.)	1, 2, 5, 7	Include a copy of the presentation outline, a notation of the software/media used, and the date(s) and location at which you gave the presentation.	IS or TM

IS = Immediate Supervisor MS = Media Specialist TM = TSIP Task Mentor

Basic Technology Skills vs. TSIP Proficiency Certification

The TSIP Task and Verification process includes activities that allow staff members to demonstrate facility with basic technology skills. Such skills cross boundaries defining the individual Technology Standards for Instructional Personnel. Proficiency with these skills leads to staff members being more easily able to apply and incorporate technology into their job responsibility areas. TSIP Task Training Sessions will not focus on learning prerequisite technology skills; TSIP Task Training will assume staff member facility with these skills. Staff members who feel they need to refine their abilities with basic technology skills should take advantage of skill focused training sessions. Skill sessions do not, by themselves, lead to TSIP proficiency certification.

Listed below are basic technology skills that can lead to basic technology proficiency. Not all staff members need facility with each of these skills.

Area	Basic Skills
Computer Trouble Shooting	Check cable connections (mouse, keyboard, printer, and peripherals). Select the appropriate printer. Cancel print job(s). Clean mouse, keyboard, and monitor screen. Use a cold/warm/soft boot.
Word Processing	Create a new document by entering text. Cut, copy, and paste text. Change text fonts, style, and size. Print a document. Save a document. Open an existing document. Insert a graphic/object into a document.
Spreadsheet	Create a new document by setting up at least a 3-column document. Format row/column size, font style, and border to suit the material to be entered. Insert/delete columns and rows. Set up formulas and functions Enter data. Save the spreadsheet. Retrieve/edit the spreadsheet. Print the spreadsheet.
Database	Create a new document by setting up at least 3 fields with one being a summary or calculation field. Enter data. Sort data. Change tab order. Create and print reports. Save the database.
Presentation	Select a slide template. Enter information into slide templates. Use the outline mode. Select slide transitions. Print a handout.
Internet	Correspond with an e-mail account. Send and retrieve e-mail. Use a web browser to find information on a topic of interest. Use bookmarks to archive links to useful sites. Cut, copy, paste, save, and print information from the Internet.
Graphics	Use a draw program to combine shapes to create a graphic. Use a paint program to create a graphic. Use a paint program to alter a graphic.
Imaging	Use a scanner to save a digital copy of a graphic or picture. Use a digital camera to capture an image. Use a camcorder to record an event. Use a VCR to display videotaped materials. Use projection devices for large group activities.
Curriculum-Specific Equipment	Use a graphing calculator to analyze mathematical functions and relationships. Use scientific probes to explore related data and phenomena.

Glossary of Technology and TSIP Terms

format	Prepare a storage medium, usually a disk, for reading and writing information.
applications	Applications software (also called end-user programs) includes database programs, word processors, and spreadsheets.
AUP	Appropriate Use Policy A contract specifying what a subscriber can and cannot do while using an ISP's service or an organizations network and equipment.
auxiliary storage devices	Various techniques and devices for storing large amounts of data. These include floppy disks, tape drives, zip drives, hard disks, and optical disks.
backup	Copy files to a second medium (a disk or tape) as a precaution in case the first medium fails and the files are lost.
CD-ROM	Compact Disk – Read Only Memory A round silver colored disk that comes with a large amount of information embedded and ready to use.
cold boot	Start-up a computer from a powered-down state (when the computer is not already on.)
CPU	Central Processing Unit The brain of the computer that processes instructions and manages the flow of information through computer systems.
desktop	A desktop is the metaphor used to portray file systems. Such a desktop consists of pictures, called icons, which show files, folders, and various types of documents. You can arrange the icons on the electronic desktop to suit your particular needs.
download	The process of transferring software/information from the Internet to your computer.
e-mail	Electronic Mail The transmission of message over communications networks.
FAQs	Frequently Asked Questions A listing of questions typically asked along with the answers to the questions. These lists are frequently prepared to help beginners to use computer software.
firewall	A mechanism to keep unauthorized users from accessing parts of a network or host computer.
folders	A folder is an object that can contain multiple documents. Folders are used to organize information
FTP	File Transfer Protocol A process that lets you transfer data from an Internet server to your computer.
GUI	Graphical User Interface Software that simplifies the use of computers by letting the user interact with the system through icons on the screen rather than coded commands.
hard disk	A magnetic disk on which you can store computer data. Hard disks hold more data and are faster than floppy disks. A hard disk, for example, can store anywhere from 10 megabytes to several gigabytes, whereas most floppies have a maximum storage capacity of 1.4 megabytes.

HTML	HyperText Markup Language The language in which World Wide Web documents are written.
Internet	A global network connecting millions of computers.
LAN	Local Area Network A group of computers and other devices dispersed over a relatively limited area and connected by a communications link that enables any device to interact with any other device on the network.
LCD	Liquid Crystal Display A type of display used in digital watches and many portable computers.
listserv	An electronic mailing list used to deliver messages to the e-mail addresses of people interested in a particular topic.
modem	An acronym for modulator-demodulator. A device or program that enables a computer to transmit data over telephone lines.
multimedia	Multiple forms of communication including sound, video, video-conferencing, graphics, and text.
newsgroup	The Internet version of an electronic discussion group in which people can leave messages or post questions
operating system	The most important program that runs on a computer. Every general-purpose computer must have an operating system to run other programs. Operating systems perform basic tasks, such as recognizing input from the keyboard, sending output to the display screen keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and printers.
RAM	Random Access Memory A type of computer memory that can be accessed randomly.
scanner	A device that can read text or illustrations printed on paper and translate the information into a format that the computer can use.
surf	Move from place to place on the Internet searching for topics of interest.
URL	Universal Resource Locator The global address of documents and other resources on the World Wide Web.
virus	Destructive computer program that invades by means of a normal program and damages the computer system.
WAN	Wide Area Network A communications network that connects geographically separated areas.
warm boot	Resetting (restarting) a computer that is already turned on. Resetting it returns the computer to its initial state; any data or programs in main memory are erased. A warm boot is sometimes necessary when a computer has crashed or “locked-up”.
WWW	World Wide Web A hypertext-based collection of computers on the Internet that lets you travel from one linked document to another, even if those documents reside on many different servers.

TSIP Training Session Descriptions

Skill Sessions

Skill Sessions provide basic training opportunities. Participation in a Skill Session does not, unto itself, yield TSIP Task Verification. Application of the skills gained from such basic training, however, can lead to verification.

Title	<i>Trouble Shooting Basics</i>	Time (minutes)	30
Prerequisite Skills	None	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Check cable connections for mouse, keyboard, printer, and peripherals. 2. Select the appropriate printer. 3. Cancel print job(s). 4. Use a cold/warm/soft boot. 5. Discuss methods of cleaning the mouse, keyboard, and monitor screen. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Word Processing Basics</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Create a new document by entering text. 2. Cut, copy, and paste text. 6. Change text fonts, style, and size. 7. Print a document. 8. Save a document. 9. Open an existing document. 10. Insert a graphic/object into a document. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Spreadsheet Basics</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Create a new document by setting up at least a 3-column document. 2. Format row/column size, font style, and border to suit the material to be entered. 3. Insert/delete columns and rows. 4. Set up formulas and functions. 5. Enter data. 6. Save the spreadsheet. 7. Retrieve/edit the spreadsheet. 8. Print the spreadsheet. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Database Basics</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Create a new document by setting up at least 3 fields with one being a summary or calculation field. 2. Enter data. 3. Sort data. 4. Change tab order. 5. Create and print records. 6. Save the file. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Presentation Basics</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Select a slide template. 2. Enter information into slide templates. 3. Use the outline mode. 4. Select slide transitions. 5. Print a handout. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Internet Basics</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Correspond with an e-mail account. 2. Send and retrieve e-mail. 3. Use a web browser to find information on a topic of interest. 4. Use bookmarks to archive links to useful sites. 5. Cut, copy, paste, save, and print information from the Internet. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Paint/Draw Basics</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Use a draw program to combine shapes to create a graphic. 2. Use a paint program to create a graphic. 3. Use a paint program to alter graphics. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Imaging Equipment: The Scanner</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Check scanner connections. 2. Scan an image. 3. Rotate a scanned image. 4. Crop a scanned image. 5. Resize a scanned image. 6. Adjust settings (resolution and color scale) of a scanned image. 7. Select an appropriate format and save a scanned image to disk. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Imaging Equipment: The Digital Camera</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Replace batteries in the camera. 2. Connect an external power supply (if available.) 3. Review the camera controls. 4. Adjust the camera settings. 5. Take a picture. 6. Transfer camera images (either directly or via camera software) to a computer. 		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	<i>Imaging Equipment: The Camcorder and VCR</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: <ol style="list-style-type: none"> 1. Replace batteries in the camcorder. 2. Connect an external power supply (if available.) 3. Insert a videocassette into the camera. 4. Adjust the settings on the camera. 5. Record some video. 6. Remove the cassette. 7. Insert the cassette into a VCR. 8. Use the functions of the VCR. 		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Imaging Equipment: Projection Devices</i>	Time (minutes)	60
Prerequisite Skills	An understanding of basic trouble shooting techniques.	TSIP Verification Certification	No
Description	Participants will: 1. Connect the device to a computer. 2. Adjust the settings (focus, angle, etc.)		
Materials Participants are expected to bring with them to the session	none	Enrollment Limit	25

TSIP Task Sessions

TSIP Task Sessions usually provide opportunities for immediate proficiency verification. In some instances, however, verification will be made at a later date upon completion of a described project/lesson/presentation.

Title	Ethics and The Technology Environment		Task Number	PE-1
Task	Understand responsible, ethical, and legal use of information and instructional media and technology.		Time (minutes)	30
Prerequisite Skills	None		Verification Certification Available	At end of session
Description	Participants will receive information on copyright and fair use guidelines. Each will receive a copy of the Charlottesville City Schools Policy on Appropriate Use of Technology. Each participant will complete the Technology Use Agreement Form.			
Materials Participants are expected to bring with them to the session	None		Enrollment Limit	25

Title	<i>Using e-mail</i>		Task Number	C-1
Task	Use e-mail to correspond with another educator.		Time (minutes)	30
Prerequisite Skills	Sending/retrieving e-mail		Verification Certification Available	At end of session
Description	Participants will explore ideas for using e-mail as a communication tool. They will review e-mail capabilities including setting up a directory of e-mail addresses and attaching documents. They will review e-mail etiquette. They will send and receive an e-mail message.			
Materials Participants are expected to bring with them to the session	Personal e-mail account log-in and password		Enrollment Limit	25

Title	<i>Using a Listserv</i>		Task Number	C-2
Task	Participate in a professional listserv.		Time (minutes)	60-90
Prerequisite Skills	Sending/retrieving e-mail		Verification Certification Available	After subsequent activity
Description	Participants will receive information about listservs and how they can be used. They will learn how to subscribe and unsubscribe to a listserv. Participants will use subsequent activities to explore interesting threads of information, respond to the information, and print out the thread and their responses.			
Materials Participants are expected to bring with them to the session	None		Enrollment Limit	25

Title	<i>Sending a Fax</i>	Task Number	C-3
Task	Send a fax.	Time (minutes)	30
Prerequisite Skills	Ability to use a telephone	Verification Certification Available	At end of session
Description	Participants will complete a cover sheet, operate a fax machine, and send a fax.		
Materials Participants are expected to bring with them to the session	Document to be faxed.	Enrollment Limit	10

Title	<i>Students, e-mail, and the Curriculum</i>	Task Number	C-4
Task	Have your students use e-mail to correspond, about a topic of curricular concern or interest, with field experts or other students in an educational setting.	Time (minutes)	30
Prerequisite Skills	Sending/retrieving e-mail	Verification Certification Available	After activity is completed
Description	Participants will develop ideas for using e-mail as a teaching tool. (Participants will not send e-mail messages during the session.)		
Materials Participants are expected to bring with them to the session	none	Enrollment Limit	25

Title	Developing an SOL Focused Lesson Plan (A)	Task Number	C-5
Task	Develop and teach an SOL focused lesson plan that uses <i>at least one</i> of the following technologies: a WebQuest, teleconferencing, e-mail, the Internet, and/or a teacher or student generated web page.	Time (minutes)	60
Prerequisite Skills	Facility with Internet Basics	Verification Certification Available	After activity is completed
Description	Participants will gain a basic understanding of the available technologies and will draft a rough outline of a lesson plan using one or more of the technologies presented.		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	Developing an SOL Focused Lesson Plan (B)	Task Number	C-5
Task	Develop and teach an SOL focused lesson plan that uses <i>at least one</i> of the following technologies: a WebQuest, teleconferencing, e-mail, the Internet, and/or a teacher or student generated web page.	Time (minutes)	60
Prerequisite Skills	Facility with Internet Basics	Verification Certification Available	After activity is completed
Description	Participants will receive information about WebQuests and how to apply the WebQuest approach in the classroom.		
Materials Participants are expected to bring with them to the session	Floppy disk	Enrollment Limit	25

Title	Developing an SOL Focused Lesson Plan (C)		Task Number	C-5
Task	Develop and teach an SOL focused lesson plan that uses <i>at least one</i> of the following technologies: a WebQuest, teleconferencing, e-mail, the Internet, and/or a teacher or student generated web page.		Time (minutes)	60
Prerequisite Skills	Facility with Internet Basics and an understanding of WebQuests.		Verification Certification Available	After activity is completed
Description	Participants will create a rough draft of a lesson plan that uses the WebQuest approach.			
Materials Participants are expected to bring with them to the session	Floppy disk		Enrollment Limit	25

Title	<i>Developing Professional Presentations</i>		Task Number	C-6
Task	Develop and give a professional presentation that uses <i>at least one</i> of the following technologies: teleconferencing, e-mail, the internet, and/or a staff or student generated web page.		Time (minutes)	60
Prerequisite Skills	Internet and e-mail facility		Verification Certification Available	After activity is completed
Description	Participants will explore available technologies and will draft a rough outline of a presentation using those technologies.			
Materials Participants are expected to bring with them to the session	Floppy disk		Enrollment Limit	25

Title	Developing a Web Page		Task Number	C-7
Task	Develop and post a web page that focuses on your area of responsibility.		Time (minutes)	60
Prerequisite Skills	Internet, e-mail, and word processing facility		Verification Certification Available	After activity is completed
Description	Participants will explore using web page development software to create a web page. Discussion will center on types of web pages, web page information that is appropriate to the school setting, and basics of good web page design.			
Materials Participants are expected to bring with them to the session	Floppy disk		Enrollment Limit	25

Title	<i>Data Base Applications</i>	Task Number	IM-1
Task	Create a database to generate a list for professional use. (e.g. a class list, staff list, student biographical information, inventory, etc.)	Time (minutes)	60
Prerequisite Skills	Database basics	Verification Certification Available	At end of session
Description	This session will offer opportunities for participants to explore various applications for data bases in a professional setting: registration information, class demographics, etc. Participants will be given an opportunity to create a database that they can use in their work assignment.		
Materials Participants are expected to bring with them to the session	Floppy disk; related data for a data base	Enrollment Limit	25

Title	<i>Spreadsheet Applications</i>	Task Number	IM-2
Task	Create a spreadsheet to generate a report for professional use (e.g. seating chart, gradebook, budget, etc.)	Time (minutes)	60
Prerequisite Skills	Spreadsheet basics	Verification Certification Available	At end of session
Description	The session will offer opportunities for participants to explore various applications for spreadsheets in a professional setting: seating charts, gradebooks, budgets, attendance records, etc. Participants will be given an opportunity to create a spreadsheet that they can use in their work assignment.		
Materials Participants are expected to bring with them to the session	Floppy disk; related data for a spreadsheet	Enrollment Limit	25

Title	<i>Word Processing Applications</i>	Task Number	IM-3
Task	Create a word processing document for professional use (e.g. a newsletter, a form letter, a permission form, etc.)	Time (minutes)	60
Prerequisite Skills	Word processing basics	Verification Certification Available	At end of session
Description	This session will focus on components of a form letter and the process by which this letter can be <i>personalized</i> to individuals.		
Materials Participants are expected to bring with them to the session	Floppy disk; information to be included in a form letter	Enrollment Limit	25

Title	<i>Sources Available in the School Library</i>	Task Number	DC-1
Task	Electronically generate a topic specific bibliography of sources available in your school library.	Time (minutes)	60
Prerequisite Skills	None	Verification Certification Available	At end of session
Description	This session will present search strategies and processes. Participants will have an opportunity to complete the search and print the results.		
Materials Participants are expected to bring with them to the session	A topic of focus for the search	Enrollment Limit	2 persons per search station

Title	<i>Sources Available in Area Libraries</i>	Task Number	DC-2
Task	Electronically generate a topic specific bibliography of sources available at an area library (e.g. JMR Library, UVa) on a topic of interest to your and/or your class.	Time (minutes)	60
Prerequisite Skills	Internet basics	Verification Certification Available	At end of session
Description	This session will present search strategies and processes. Participants will have an opportunity to complete the search and print the results.		
Materials Participants are expected to bring with them to the session	A topic of focus for the search	Enrollment Limit	25

Title	<i>Internet Research and Resources</i>	Task Number	DC-3
Task	Retrieve information from the Web for instructional use (e.g. resource information for students about a subject you are presenting.)	Time (minutes)	60
Prerequisite Skills	Internet basics	Verification Certification Available	At end of session
Description	This session will include a demonstration of how to copy, save, and paste text and graphics from sites on the Web. Participants will practice in a structured assignment and will have opportunity to retrieve information concerning the research topics they have brought to the session.		
Materials Participants are expected to bring with them to the session	A research topic	Enrollment Limit	25

Title	<i>Organizing Web Search Strategies</i>	Task Number	DC-4
Task	Organize search strategies to access specific information from the Web.	Time (minutes)	60
Prerequisite Skills	Internet basics	Verification Certification Available	At end of session
Description	This session will present information about the various search engines and databases that are available on the Web. Participants will explore various ways to focus search parameters.		
Materials Participants are expected to bring with them to the session	Topic applicable to their area of instruction or responsibilities.	Enrollment Limit	25

Title	Organizing Search Strategies within Information Data Bases	Task Number	DC-5
Task	Organize search strategies to access specific information from in information database (e.g. SIRS, Grolier's, Infotrac, EBSCO, ERIC, etc.)	Time (minutes)	60
Prerequisite Skills	Basic computer skills	Verification Certification Available	At end of session
Description	This session will present search strategies for using various information database systems.		
Materials Participants are expected to bring with them to the session	Topic to be searched	Enrollment Limit	25

Title	<i>Using the Local Area Network</i>	Task Number	DC-6
Task	Use the Local Area Network (LAN) to save and retrieve information.	Time (minutes)	60
Prerequisite Skills	Basic computer skills	Verification Certification Available	At end of session
Description	This session will provide instruction in the use of the division's Local Area Network to access and save information.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Using Images from a Digital Camera</i>	Task Number	PA-1
Task	Use a digital camera to take a picture.	Time (minutes)	60
Prerequisite Skills	Imaging Equipment: The Digital Camera (See Skill Sessions.)	Verification Certification Available	At end of session
Description	This session will offer a discussion of the various issues related to using images from a digital camera in print, Web, and presentation projects.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Using Scanned Images</i>	Task Number	PA-2
Task	Use a scanner to scan and save an image.	Time (minutes)	60
Prerequisite Skills	Imaging Equipment: The Scanner (See Skill Sessions.)	Verification Certification Available	At end of session
Description	This session will offer a discussion of the various issues related to using scanned images in print, Web, and presentation projects.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Enhancing Digital Images</i>	Task Number	PA-3
Task	Use a paint program (e.g. PhotoShop, PhotoDelux, ClarisWorks (paint), AppleWorks (paint), etc.) to enhance a scanned image or digital camera picture.	Time (minutes)	60
Prerequisite Skills	Paint/Draw Basics (See Skill Sessions.)	Verification Certification Available	At end of session
Description	This session presents examples of various methods of enhancing digital images for print, Web, and presentation use.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Camcorder Applications</i>	Task Number	PA-4
Task	Use a camcorder in a professional or instructional setting.	Time (minutes)	60
Prerequisite Skills	Basic use of a camcorder	Verification Certification Available	After activity is completed
Description	This session includes an opportunity for participants to brainstorm about activities that could be video taped and the ways in which camcorder generated tapes could be used. Participants will begin work on a video tape storyboard to focus on using the tape for a particular purpose.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	Evaluating Instructional Software/Media Programs	Task Number	PA-5
Task	Use the school division's software evaluation form to evaluate two (2) instructional software/media programs.	Time (minutes)	60
Prerequisite Skills	None	Verification Certification Available	At end of session
Description	Participants will have an opportunity to use the school division's evaluation form to review a variety of software/media programs.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Evaluating Web Sites</i>	Task Number	PA-6
Task	Use the school division's web site evaluation form to evaluate two (2) web sites.	Time (minutes)	60
Prerequisite Skills	Internet Basics	Verification Certification Available	At end of session
Description	Participants will have an opportunity to use the school division's evaluation form to review various web sites.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Using the Internet in the Classroom</i>	Task Number	PA-7
Task	Use the Internet in a curriculum-related activity.	Time (minutes)	60
Prerequisite Skills	Internet Basics	Verification Certification Available	After activity is completed
Description	This session will present a number of useful sites that offer collections of Internet resources. Participants will have the opportunity to begin forming a lesson/professional plan for using the Internet.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	<i>Presenting Lessons Via Projection Devices</i>	Task Number	PA-8
Task	Present a lesson using a computer connected to a television, large screen monitor, or projection system.	Time (minutes)	30
Prerequisite Skills	None	Verification Certification Available	After activity is completed
Description	This session will offer examples of using various projection devices to present lessons.		
Materials Participants are expected to bring with them to the session	Materials related to the presentations that they wish to plan.	Enrollment Limit	25

Title	Professional Presentations Using Projection Devices	Task Number	PA-9
Task	Give a professional presentation that uses a computer connected to a television, large screen monitor, or projection system.	Time (minutes)	60
Prerequisite Skills	Basic knowledge of word-processing; basic trouble shooting skills.	Verification Certification Available	After activity is completed
Description	This session will offer examples of using projection devices in a professional presentation. The session will include a discussion of variations in application.		
Materials Participants are expected to bring with them to the session	Materials related to the presentations that they wish to plan.	Enrollment Limit	25

Title	<i>SOL Focused Lessons Using Instructional Media</i>	Task Number	PA-10
Task	Present an SOL focused lesson that <i>incorporates at least one</i> of the following: videotaped/live satellite programs, instructional videotapes, CD-ROM or laser disc programs, and/or curriculum specific instructional software.	Time (minutes)	60
Prerequisite Skills	None	Verification Certification Available	After activity is completed
Description	This session will offer examples of instructional media resources and their use in SOL focused lessons.		
Materials Participants are expected to bring with them to the session	None	Enrollment Limit	25

Title	Planning Lessons That Use Digital and/or Curriculum Specific Equipment (A)	Task Number	<i>PA-11</i>
Task	Create a lesson that uses <i>at least one</i> of the following technologies: a scanner, a graphing calculator, and/or scientific probes.	Time (minutes)	60
Prerequisite Skills	Working knowledge of the graphing calculator	Verification Certification Available	After activity is completed
Description	Participants will explore ways of integrating the graphing calculator into instruction. (This session is designed for middle and high school mathematics and science teachers.)		
Materials Participants are expected to bring with them to the session	Calculators and curriculum related to the lessons that they wish to plan.	Enrollment Limit	25

Title	Planning Lessons That Use Digital and/or Curriculum Specific Equipment (B)	Task Number	<i>PA-11</i>
Task	Create a lesson that uses <i>at least one</i> of the following technologies: a scanner, a graphing calculator, and/or scientific probes.	Time (minutes)	60
Prerequisite Skills	Working knowledge of a scanner	Verification Certification Available	After activity is completed
Description	Participants will explore ways of integrating scanned images into instruction.		
Materials Participants are expected to bring with them to the session	Curriculum related to the lessons that they wish to plan.	Enrollment Limit	25

Title	Planning Lessons That Use Digital and/or Curriculum Specific Equipment (C)	Task Number	<i>PA-11</i>
Task	Create a lesson that uses <i>at least one</i> of the following technologies: a scanner, a graphing calculator, and/or scientific probes.	Time (minutes)	60
Prerequisite Skills	Working knowledge of scientific probes	Verification Certification Available	After activity is completed
Description	Participants will explore ways of integrating scientific probes into instruction. (This session is designed for middle and high school mathematics and science teachers.)		
Materials Participants are expected to bring with them to the session	Calculators and curriculum related to the lessons that they wish to plan.	Enrollment Limit	25

Title	Developing Professional Presentations That Use Digital and/or Curriculum Specific Equipment	Task Number	PA-12
Task	Create a professional presentation that uses <i>at least one</i> of the following technologies: a scanner, a graphing calculator, and/or scientific probes.	Time (minutes)	60
Prerequisite Skills	Working knowledge of scientific probes	Verification Certification Available	After activity is completed
Description	This session focuses on using scientific probes in a professional presentation.		
Materials Participants are expected to bring with them to the session	Material related to the presentations that they wish to plan	Enrollment Limit	25

Title	<i>Planning a Multimedia, SOL Focused Lesson</i>	Task Number	PA-13
Task	Develop and present an SOL focused lesson that uses <i>at least one</i> of the following multimedia or hypermedia technologies: CD-ROMs, multimedia equipment, and/or multimedia software (e.g. ClarisWorks/AppleWorks slide show, HyperStudio, DigitalChisel, PowerPoint, mPower, Astound, etc.)	Time (minutes)	60
Prerequisite Skills	Word processing basics	Verification Certification Available	After activity is completed
Description	This session provides examples of SOL focused lessons that use multimedia/hypermedia technologies.		
Materials Participants are expected to bring with them to the session	Material related to lessons they wish to plan	Enrollment Limit	25

Title	Developing a Multimedia Professional Presentation	Task Number	PA-14
Task	Develop and give a professional presentation that uses <i>at least one</i> of the following multimedia or hypermedia technologies: CD-ROMs, multimedia equipment, and/or multimedia software (e.g. ClarisWorks/AppleWorks slide show, HyperStudio, DigitalChisel, PowerPoint, mPower, Astound, etc.)	Time (minutes)	60
Prerequisite Skills	Basic computer skills	Verification Certification Available	After activity is completed
Description	The session will present the basic characteristics of good presentations and a demonstration of some of the capabilities of presentation software.		
Materials Participants are expected to bring with them to the session	Floppy Disk	Enrollment Limit	25

Technology Bibliography

The following resources are available through Instructional Media Services (IMS) at 245-2408. Please contact Judy Rood or anyone from the IMS staff to request these materials.

Videotapes: Media Technology Use and Application

At Home with Technology: Application with Technology (Gr. 3-4)

Computer Skill for the Classroom:

1 & 2—Introduction to Word Processing/Desktop Publishing (Parts 1 & 2)

3 & 4—Introduction to Databases (Parts 1 & 2)

5 & 6—Introduction to Spreadsheet (Parts 1 & 2)

7 & 8—Introduction to Telecomputing (Parts 1 & 2)

Copyright: Why Can't I?

2—Copyright: Computer Applications

Creating Critical TV Viewers

Cruising the Internet: An Educator's Guide

Developing Your Internet Presence

Discovery Interactive Videodisc Promo

Division of Technology Update: 1997-98

Division of Technology Update: 1998-99

Division of Technology Year-End Report: Six Year Plan Implementation & The Technology Initiatives

EduQuest: The Journey Begins

E-Mail

e-Rate: From Funding Letter Through Payday, Parts 1 & 2

Exploring the Internet:

1—Exploring the Internet

2—E-Mail for Kids

3—Net Surfing for Kids

4—Electronic Mail for Teachers

5—Net Surfing for Teachers

Future is Now, The Ruffner Middle School—Norfolk Public Schools

Future of Memories

Global Quest: The Internet in the Classroom

Good, Better, Best—Evaluating Websites as Instructional Resources

Image Processing in the Science Classroom (Parts 1, 2, & 4)

Imagine 11:

- 1—How Computers are Changing the Way We Teacher and Learn
- 2—Enhancing Curriculum with Technology
- 3—Technology for Enhancing Language Skills and Literacy
- 4—Multimedia—Exploring the Possibilities
- 5—Networking—Beyond the Classroom Walls
- 6—Cyberclassroom—Now and in the Future

Implementing Universal Service (E-Rate) Program (DOE/VSEN/Satellite)

Inspiration: A Technology Tool for the English SOL

Integration of Technology into Physical Education

Internet Explained

Internet Guide for Everyone

Internet Show: Drivers Education for the Information Superhighway

Introducing Multimedia: Out of the Box:

- 1—VCR
- 2—Videodisc
- 3—CD-ROM
- 4—Telecommunications
- 5—Virginia's PEN

Introduction to Microsoft Internet Explorer

Introduction to the World Wide Web

Jumpstarting Teachers Effective Use of the Network

Know It All:

- 1—Asking the Right Questions
- 2—Knowing What to Do
- 3—Choosing the Right Information
- 4—Thinking Up Ideas
- 5—Saying It Another Way
- 6—Getting It All Together
- 7—Sharing Your Results
- 8—Thinking About What You Did
- 9—Thinking About How You Did
- 10—In-Service: Grades K-2
- 11—In-Service: Grades 3=5
- 12—In-Service: The Collaborative Process

Learning with Technology

Madam Know-It-All and The Media Center

Media Literacy: Mass Media Technology

Methods of Teaching Elementary Keyboarding (1-4)

Micorsoft Internet Explorer: An Introduction

National Forum—Media Literacy Workshop (1-3)

NDN Experience: Child Awareness—Computers Helping Instruction and Learning Development

Netfiles:

- 1—E-Mail
- 2—Election Sites
- 3—Multicultural
- 4—Evolution
- 5—Web Page Design
- 6—Do's and Don'ts of Web Page Design
- 7—Interactivity of Websites
- 8—Math-on-Line
- 9—E-Mail Pen Pals

NTTI in Virginia: Opportunity for Staff Develop[ment in Science, Math, and Technology

Organizing Your Network for Learning

Planning for Educational Technology: Managing New Resources, Meeting New Expectations

ROMbudsman: CD-ROM/Living Books (For Parents and Teachers)

- Storybooks
- Math Programs
- CD-ROM Gifts
- Navigating Web Sites and Science Programs
- Math and Writing Activity

ROMbudsman: CD-ROM/Living Books (Grades 9-12)

- Writing College Applications
- Language Arts for High School

Searching the Web

Superintendent's Report and Update on the Technology Initiatives

Supporting the SOL: A Look at the First Lady's Education Website and The Governor's Best Practice Centers

Surf the Web

Teaching with Technology: Using Videodisc in the Classroom

Teaching with Television

TechKNOWedgey Academy Orientation

TechKNOWedgey Academy (1-10)

Technology-Based Curriculum/SOL Materials and Access for Special Needs Students

Technology Forum: Selecting Technology Systems and Service Packages

Technology Integration: Making It Happen in Your School

Technology Literacy: Integrated Applications for 8th Grade Math and Databases and Spreadsheets for 5th Grade Science

Technology Literacy: Word Processing and Graphics for 5th Grade English

Technology Literacy Workshop

Tech Prep and integration of Academic and Vocational Education: Breaking the Mold

Telecommunications in the Chesapeake Schools

Using Probeware to Integrate Math and Science SOL (Parts 1-3)

Using the Casio with the Algebra SOL (Parts 1-6)

Using the TI-82 Graphing Calculator

Using the TI-83 Graphing Calculator (Parts 1-7)

Using the TI-83 with the Algebra SOL (Parts 1-6)

Videodisc in the K-12 Classroom: A Video Documentary

Video Producer's Handbook

Virginia's National Teacher Training Institutes: A Model for Technology Training

Web Deli

- Welcome to the Web Deli
- Using HTML with Wizards
- Organization and Content
- Servers, Links and Images (*has technical problems*)
- Adding Images
- Putting Your Work on the Web
- Personal Web Server

What is a Media Center?

Which Way to the Web?

- Networks
- Search Engines
- Copyright
- Virtual Worlds

Windows 95

Wired World

Your Ticket to Technology: K-12 World Wide Web Sites Community Forum

Your Ticket to Technology: Cable Modems

Your Ticket to Technology: Education on Demand—Accessing Multimedia Material in the Classroom

Your Ticket to Technology: The Next Generation

Your Ticket to Technology: Model Technology “Keys to Success”

Your Ticket to Technology: Technology and Curriculum Development Future Technology

Books: Professional Technology Use and Application

Basic TV Technology
Computer Activities
Computer Literacy
Copyright for Schools: A Practical Guide (2nd Edition)
Create Excellent Video
Discover the World Wide Web with You Sportster
Educator's Internet Companion (2nd Edition)
How It Works: Television and Video
Internet and You: Training Workbook
Internet Complete Reference
Internet for Library Media Specialists
Library Copyright Guide
Looking Great in Video
Making It with Media
Managing Interactive Video/Multimedia Projects
Media Production and Computer Activities
Multimedia and CD-ROM's for Dummies
New Kids on the Net (A Tutorial for Teachers, Parents, and Students)
Skills for Life: Library Information Literacy for Grades 6-8
Teaching Electronic Information Skills Resource Guide (K-5)
Teaching Electronic Information Skills Resource Guide (6-8)
Teaching Information Literacy Using Electronic Resources for Grades K-6
Teaching with the Internet: Lessons from the Classroom
Technology @ Your Fingertips: A Guide to Implementing Technology Solutions for Education Agencies and Institutions
Television Production for Elementary and Middle Schools
Videotape Editing: A Post-production Primer
Video Production Handbook
World Wide Web for Teachers

Technology Standards for Instructional Personnel Charlottesville City Schools — Proficiency Certification Form

Name _____ Location _____

Each instructional staff member is responsible for maintaining an accurate record of proficiency documentation. The school division will only maintain records of fully *completed* Staff Certification Forms.

Task Number	Authorized Verifier	Verification Signature	Date
PE-1	TM		

Required

C-1	IS TM		
C-2	IS TM		
C-3	IS TM		
C-4	IS TM		

2

C-5	IS TM		
C-6	IS TM		
C-7	IS TM		

1

IM-1	IS TM		
IM-2	IS TM		
IM-3	IS TM		

All

DC-1	MS IS TM		
DC-2	MS IS TM		
DC-3	MS IS TM		
DC-4	MS TM		
DC-5	MS TM		
DC-6	IS TM		

3

MS = Media Specialist

IS = Immediate Supervisor

TM = TSIP Task Mentor

**Technology Standards for Instructional Personnel
 Charlottesville City Schools — Proficiency Certification Form (Page 2)**

Task Number	Authorized Verifier	Verification Signature	Date
-------------	---------------------	------------------------	------

PA-1	IS TM		
PA-2	IS TM		
PA-3	IS TM		
PA-4	IS TM		
PA-5	IS TM		
PA-6	IS TM		
PA-7	IS TM		
PA-8	IS TM		
PA-9	IS TM		
PA-10	IS TM		
PA-11	IS TM		
PA-12	IS TM		

PA-13	IS TM		
PA-14	IS TM		

MS = Media Specialist

IS = Immediate Supervisor

TM = TSIP Task Mentor

Completed Form Received by: _____

Date: _____