

Trinity Valley School Technology and Information Literacy Plan



Developed by the Technology and Library Departments
Spring 2006

TVS Technology and Information Literacy Plan

Table of Contents

Mission Statement	3
Information Literacy	3
Faculty Standards.....	4
Levels of Technology Implementation.....	4
Evaluation	4
Student Standards.....	5
Implementation	5
Evaluation	5
Kindergarten	6
Grade One	7
Grade Two	8
Grade Three	9
Grade Four	10
Grade Five	11
Grade Six.....	12
Grade Seven	13
Grade Eight	14
Grades Nine through Twelve.....	15
Resources	16

MISSION STATEMENT

Technology

Trinity Valley School views technology as a vital tool to help students be successful, productive, and well-informed citizens in a competitive global society. We believe that appropriate integration of technology into the curriculum helps our students to develop the critical thinking skills that will enable them to become

- life-long learners actively participating in the acquisition of their own knowledge
- discerning and responsible information users who evaluate and organize information
- good communicators who collaborate successfully and share ideas effectively

Information Literacy

The desire to teach students to be information literate is a concept that has developed as the volume and complexity of information has grown over the past decades. Simply put, Information Literacy is the ability to locate needed information and to process the information effectively into a useful form. In the school forum, this process may begin with something as basic as finding information on an assigned topic (snakes) in a given location (encyclopedia) for a one-page written report. With an older student the process may grow as complex as asking a student to choose a topic, read primary material, decide where to research for secondary information (such as literary criticisms), evaluate the authority and suitability of the chosen resources, decide what format would be best for presentation, and assess the overall success of the effort upon completion. In real life, we practice information literacy skills with varying amounts of success throughout our lives, whether we are buying a car, presenting a report, analyzing a lawn fertilizer, or deciding on a political candidate.

The Information Literacy Plan at Trinity Valley School is designed to help students learn how to find and use information, both with and without the use of technology, to further knowledge, answer questions, solve problems, and add value to their lives and the lives of those around them. Because information and information technology grows and changes so quickly, it is difficult to define precise standards of what is expected. New information processes, such as podcasting, e-books and blogging appear, as other technologies, such as microfilm and archived copies of printed magazines, fall into disuse. In light of these frequent changes, The [American Association of School Librarians](#), in the book *Information Power*, has set forth nine broad standards in three categories to describe the information literate student:

The student who is information literate:

- accesses information efficiently and effectively.
- evaluates information critically and competently.
- uses information accurately and creatively.

The student who is an independent learner:

- pursues information related to personal interests.
- appreciates literature and other creative expressions of information.
- strives for excellence in information seeking and knowledge generation.

The student who contributes positively to the learning community and to society:

- recognizes the importance of information to a democratic society.
- practices ethical behavior in regard to information and information technology.
- participates effectively in groups to pursue and generate information.

FACULTY STANDARDS

Goals

Trinity Valley School encourages all faculty to explore ways in which technology and information literacy skills can enhance our curriculum and improve the learning environment. We attempt to identify “best practices” and apply them through thoughtful experimentation and evaluation. Our professional staff offers teachers in-service training and other opportunities for professional growth to help them comply with the [National Educational Technology Standards \(NETS\) for Teachers](#). As suggested in the NETS document, teachers know that technology should not be used “in isolation, but rather as an integral component or tool for learning and communications within the context of academic subject areas.”

At TVS we advocate a blend of traditional and innovative approaches to facilitate learning of relevant content while addressing individual needs. Our teachers are encouraged to create a school culture which values

student-centered learning	as opposed to teacher-centered instruction
multisensory stimulation	as opposed to single sense stimulation
multipath progression	as opposed to single path progression
multimedia use	as opposed to single media use
information exchange	as opposed to information delivery
active, exploratory, and inquiry-based learning	as opposed to passive learning
critical thinking and informed decision making	as opposed to factual, knowledge-based learning
authentic, real-world context	as opposed to isolated, artificial context

Levels of Technology Implementation

We view technology implementation as occurring at three distinct levels of involvement, the last one reflecting our ultimate goal. We believe that every TVS faculty member should endeavor to use technology at each of the following levels:

I. Personal productivity. This basic level includes word processing and desktop publishing to produce materials for use with their classes, e-mail to enhance communication with colleagues, listservs and the Internet as sources of information relevant to their teaching areas and interests.

II. Presentation of lessons. This intermediate level includes the use of educational and/or multimedia software and the Internet to enhance lectures, demonstrations and presentations of material.

III. Putting technology in the hands of the students. We ask that teachers develop technology-rich lesson plans and hands-on activities to help the students become the types of learners described previously and meet the Student Standards outlined below.

Evaluation

At the beginning of each school year, as part of their regular evaluation, faculty members will be asked to set their own goals for technology implementation which are tied to the three levels listed above.

STUDENT STANDARDS

Goals

To achieve our technology and information literacy goals, we have outlined the following technology and information literacy skill expectations using both the [National Educational Technology Standards \(NETS\) for Students](#) as outlined by the [International Society for Technology in Education](#), and [information literacy standards](#) as outlined by the [American Library Association](#). These standards will ensure that age and grade appropriate activities and projects are introduced in a sequential manner, allowing the students to build on the skills they have learned at the previous level.

Implementation

A variety of both formal and informal information literacy models help students learn to tame the overwhelming flow of information. Formal models such as Eisenberg and Berkowitz's Big6 Information Literacy Model, their Super3 (Plan, Do, Review), and KWL charts (what I Know, what I Want to know, and what I Learned) give specific steps for approaching information problems. Less formal methods may include worksheets developed by individual teachers or a framework such as that of the NetSavvy Group, which outlines five aspects of information literacy: asking, accessing, analyzing, applying and assessing.

Evaluation

Student achievement of standards is evaluated through a variety of measures. Specific tests can measure some skills, such as keyboarding speed and accuracy and the ability to manage student e-mail. Other skills are assessed through class assignments such as:

- producing a graph or spreadsheet from known information.
- reporting information from several sources woven into a coherent report.
- explaining a concept or principle using presentation software such as PowerPoint.
- choosing a topic and creating an informational web page to share with classmates.

Students may also be asked to evaluate themselves from time to time, setting goals or working with a rubric to achieve the desired grade.

Technology and Information Literacy Skill Expectations: Kindergarten

By the end of the kindergarten year, students will be able to perform the following skills:

Research and Inquiry Skills

Research question:

- Ask a question about a specific topic of interest.

Location:

- Use a library card to check out a book at the circulation desk.
- Understand the difference between fiction books and factual books.
- Find books about specific curriculum topics.
- Identify the author and illustrator of a book.
- Identify parts of a book, including cover, spine, title page, copyright page.

Communication:

- Share something observed or heard.

Evaluation:

- Select and check out a book of interest.
- Select a book of appropriate reading level using pre-developed criteria.

Life-long Reading

- Enjoy and learn from books.
- Understand that media centers are sources of information.

Technology Skills

- Identify a computer's keyboard, monitor, CD-ROM drive, mouse, and mouse pad.
- Log in and out of the TVS computer network with assistance.
- Use a computer mouse to select, drag, and drop.
- Use Kindergarten curriculum software correctly.
- Create, save, and print original pictures using a computer graphics program.
- Recognize letters and numbers on the computer keyboard and use them to type simple words and sentences.

Appropriate Use of Resources

- Listen to or watch audio-visual presentations appropriately.
- Use and care for books, media materials and equipment in a respectful way.
- Understand and follow the lower school computer usage agreement.

Technology and Information Literacy Skill Expectations: Grade One

By the end of this year, students will be able to perform all of the skills outlined for Kindergarten plus the following:

Research and Inquiry Skills

Research question:

- Within a group, formulate three questions about a single topic.

Location:

- Identify a book's copyright page and copyright date.
- Use a table of contents, index and glossary.
- Search for a book using the online catalog with assistance.

Communication:

- Contribute to a class information sheet.
- Identify basic parts of a story.
- Understand why research sources need to be listed.

Evaluation:

- Complete a project checklist.
- Compile a simple reading log.
- Evaluate the approximate reading level of a book using pre-developed criteria.

Life-long Reading

- Recognize pictures that enhance the story.
- Recognize Caldecott Award books.
- Recognize that books can be read for both pleasure and information.

Technology Skills

- Turn a computer on/off and log in/out of the TVS computer network.
- Correctly spell assigned username and use a password when software requires it.
- Use a computer mouse to left-click, right-click, and double-click.
- Use arrow keys and scroll bars to navigate through documents.
- Use pull-down menus and basic open, save, save as, print, and exit commands.
- Open, create, and close documents using simple word-processing software.
- Use First Grade curriculum software.
- Use multimedia software to create projects with text, graphics, and sound.
- Use software to create simple graphs and diagrams.
- Use previously-set bookmarks to access and use activities on the Internet.
- Recognize and use the following beginning keyboarding skills:
 - left-hand keys and right-hand keys
 - anchor keys for home row finger placement
 - shift keys to type capital letters
 - backspace, delete, and enter keys
 - number keypad

Appropriate Use of Resources

- Use online research software and websites with assistance.
- Communicate ideas with others in a respectful manner.
- Print only with permission from the teacher.
- Understand and follow the lower school computer usage agreement.

Technology and Information Literacy Skill Expectations: Grade Two

By the end of this year, students will be able to perform all of the skills outlined for Kindergarten and First Grade plus the following:

Research and Inquiry Skills

Research Question:

- Create three questions about a research topic.

Location:

- Locate the media center's fiction, non-fiction, biography and reference sections.
- Recognize that library books are arranged in alphabetical and numerical order on the shelves.
- Find a book using a keyword as a search tool in the online library catalog.
- Use the print and online encyclopedia to locate information on a topic.

Communication:

- Write a simple book report.
- Participate in a classroom novel study.
- Recommend a book to a friend.
- Make a simple list of sources which includes author, title, and copyright date.

Evaluation:

- Take a comprehensive quiz on a book using appropriate computer software.
- Understand how to take a multiple choice test.

Life-long Reading

- Check out books on a regular basis.
- Identify different kinds of stories: folktales and biography/autobiography.

Technology Skills

- Demonstrate basic Windows skills (i.e., minimize, maximize, task bar).
- Edit and delete text; change fonts, styles, color, and size; and insert and alter graphics using simple word processing software.
- Use the tab key and alignment commands in word processing and graphing software.
- Use multimedia, graphic organizing, and graphing software to complete grade-appropriate projects.
- Use home row keys to complete simple touch-typing keyboarding lessons.

Appropriate Use of Resources

- Use both online and offline dictionaries, thesauruses, and encyclopedias.
- Use a browser to navigate pre-selected grade-appropriate websites to gather information and complete classroom assignments.
- Select different printers and print only with permission from the teacher.
- Understand and follow the lower school computer usage agreement.

Technology and Information Literacy Skill Expectations: Grade Three

By the end of this year, students will be able to perform all of the skills outlined for Kindergarten through Grade Two plus the following:

Research and Inquiry Skills

Research question:

- Create five research questions on a single assigned topic.

Location:

- Use the electronic catalog to see if a book is available.
- Locate books within the fiction section by author.
- Use the print and online encyclopedias to locate information on a topic.

Communication:

- Summarize a story they have read or heard.
- Explain research findings with relevant facts that answer questions.
- List research sources using a template.

Evaluation:

- Track comprehensive reading achievement and skills through computer generated quizzes.
- Self-evaluate work using a teacher generated checklist.
- Choose and vote for a favorite book from Texas Bluebonnet Award nominees.

Life-long Reading

- Identify different kinds of literature including folklore, fairy tales and pour quoi tales.
- Explore a variety of books nominated for the Texas Bluebonnet Award.

Technology Skills

- Perform basic Windows tasks with increased skill.
- Use a more complex word processor to align and edit text; insert and manipulate graphics from a variety of sources; and create numbered and bulleted lists.
- Use presentation software to create, edit, and present projects with transitions, sound effects, animated graphics, and WordArt.
- Use simple spreadsheet software to record, graph, and compare data.
- Use a graphic organizer to access information and complete classroom projects.
- Perform keyboarding assignments using correct touch-typing skills with an emphasis on accuracy of 90% or higher.

Appropriate Use of Resources

- Use Print Preview before printing and print only with permission from the teacher.
- Understand and follow the lower school computer and library usage agreements.

Technology and Information Literacy Skill Expectations: Grade Four

By the end of this year, students will be able to perform all of the skills outlined for Kindergarten through Grade Three plus the following:

Research and Inquiry Skills

Research question:

- Create five research questions on a single topic of choice.

Location:

- Use the online catalog to check the availability of a book.
- Locate non-fiction and reference materials on a shelf using the call number.
- Create a list of books on a specific topic by using the OPAC BookBag.
- Search the on-line library catalog to find a book by title, subject, and keyword.

Communication

- Create a simple bibliography using a template.
- Write journal entries detailing thoughts and feelings.
- Create a book report that includes visuals.

Evaluation

- Evaluate a project using a checklist.
- Track personal reading progress using computerized software.

Life-long Reading

- Make a connection between books read and other areas of life.
- Recommend books or authors to others.
- Select books to enjoy from a variety of sources including school media center, classroom collection, and book fairs.

Technology Skills

- Use keyboard, mouse, printers, and other common input and output devices effectively.
- Perform basic Windows tasks with increased skill.
- Use the Edit menu and keyboard shortcuts to copy, cut, and paste.
- Use the Draw tools in Microsoft Office software.
- Create an effective multi-media presentation.
- Use complex graphic organizers and spreadsheets.
- Use correct keyboarding skills to type a minimum of 15 words per minute with 90% accuracy.

Appropriate Use of Resources

- Search the online library catalog to find a book by title, subject, and keyword.
- Use Print Preview before printing and print only with permission from the teacher.
- Understand and follow the lower school computer and library usage agreements.
- Be able to discuss basic issues related to responsible use of technology and information, and describe personal consequences of inappropriate use.

Technology and Information Literacy Skill Expectations: Grade Five

By the end of this year, students will be able to perform all of the skills outlined for Kindergarten through Grade Four, plus the following:

Research and Inquiry Skills

Research question:

- Create research questions that identify topics, subtopics, and key words.

Location:

- Understand the difference between the Internet and an online database.
- Find information using on-shelf resources and at least one online database.

Communication:

- Take usable notes, including the source of the information, to answer research questions.
- Communicate and record data on a single topic.
- Report and organize findings.

Evaluation:

- Compare individual findings to large group findings.
- Identify areas for further investigation.

Life-long Reading

- Identify award-winning Newbery and Bluebonnet books.
- Select books from a variety of sources including school media center, public library, classroom collections, and personal collections.
- Recommend books to others.

Technology Skills

- Troubleshoot basic problems with computers.
- Store, organize and back up files of original work.
- Create a signature and contact in an e-mail program.
- Transfer files between school and home.
- Use the Print Preview and Print Selection functions before printing.
- Understand how to route a print job to the appropriate printer.
- Create and manipulate a table in a word processor.
- Create a newsletter using desktop publishing software.
- Produce a multimedia presentation for the Web.
- Create Venn diagrams, pre-writing webs and outlines using a graphic organizer.
- Use curriculum-based software to develop problem-solving skills.
- Develop map skills with mapmaking software.
- Create a simple timeline on the computer.
- With assistance, produce a spreadsheet.
- With assistance, chart a graph with legend/key, axis labels, appropriate scale and intervals.
- Use WebQuests to develop higher-level thinking skills.
- Use correct keyboarding skills to type a minimum of 20 words per minute with 90% accuracy.

Appropriate Use of Resources

- Care for media materials and equipment.
- Understand the difference between appropriate and inappropriate websites.

- Understand and follow the middle and upper school computer usage agreement.

**Technology and Information Literacy Skill Expectations:
Grade Six**

By the end of this year, students will be able to perform all of the skills listed for Grade Five, plus the following:

Research and Inquiry Skills

Research Question

- Create research questions that identify topics, related topics, key words, and search terms.

Location:

- Locate information using Internet search engines.
- Locate information using at least three online databases.
- Locate information using specialized on-shelf reference materials such as biographical and geographical dictionaries.

Communication:

- Collect and report the results of an activity on a spreadsheet.

Evaluation:

- Determine the differences and similarities of news stories.
- Evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of websites used in research.

Life-long Reading

- Read silently up to thirty minutes per day.
- Relate a current event found in a newspaper or magazine.
- Identify the sections of a newspaper.
- Identify Lone Star and Coretta Scott King award-winning books.

Technology Skills

- Create a spreadsheet and report results using a chart.
- Use the spellchecker and thesaurus in computer applications.
- Format a word processing document with margins, tabs, bold, italics, underlining and centering.
- Use graphic organizing software to further develop organization and outlining skills.
- Use curriculum-based software to further develop problem-solving skills.
- Use an electronic dictionary.
- Use correct keyboarding skills to type a minimum of 25 words per minute with 90% accuracy.

Appropriate Use of Resources

- Care for media materials and equipment respectfully and independently.
- Understand and practice appropriate Internet use and follow the middle and upper school computer usage agreement.

Technology and Information Literacy Skill Expectations: Grade Seven

By the end of this year, students will be able to perform all of the skills listed for Grade Six on a more advanced level, plus the following:

Research and Inquiry Skills

Research question

- Generate questions and information in order of importance and relevance.

Communication

- Communicate information through multimedia.

Location

- Use Boolean logic (and/or/not) to determine the scope of a search.
- Use a variety of search engines to locate information on the Internet.
- Use at least five online databases to locate information.
- Create a bibliography or annotated bibliography or works cited list to accompany a report.

Evaluation

- Represent and support a position on a given topic using direct observation, interviews, and/or surveys.
- Evaluate the relevance, accuracy, appropriateness, comprehensiveness and bias of most electronic resources.

Life-long Reading

- Read silently up to thirty minutes per day.
- Check out leisure reading materials from the library media center on a regular basis.
- Identify award-winning titles from Newbery and Lone Star lists.

Technology Skills

- Locate and use information from the Internet.
- Produce a multimedia presentation to communicate information.
- Develop further skills in word processing, concept mapping, and outlining.
- Insert audio and/or video into a multimedia presentation.
- Use a computer to complete an increasing number of school projects.
- Continue to develop speed and accuracy in keyboarding.
- Evaluate resources for accuracy and validity and use them appropriately to complete research assignments.

Appropriate Use of Resources

- Understand and practice appropriate Internet use and follow the middle and upper school computer usage agreement.
- Understand and follow copyright laws.

Technology and Information Literacy Skill Expectations: Grade Eight

By the end of this year, students will be able to perform all of the skills listed for Grade Seven on a more advanced level, plus the following:

Research and Inquiry Skills

Research Question

- Narrow or broaden the scope of a topic.

Location

- Copy and paste between resources to take notes, with appropriate source attribution information.
- Create a bibliography, annotated bibliography or works cited list to accompany a report.

Communication and Evaluation

- Synthesize information to answer a question or support a position using a variety of print and non-print sources.
- Evaluate the relevance, accuracy, appropriateness, comprehensiveness and bias of most electronic resources.

Life-long Reading

- Read silently for thirty minutes or more each day.
- Identify a favorite author or genre.
- Identify award-winning titles from the Tayshas list.

Technology Skills

- Use a variety of online resources to gather information about a topic.
- Insert audio and/or video into a multimedia presentation.
- Produce an HTML document (web page) to communicate information.
- Use probes and science software to gather and interpret scientific data.
- Use graphing calculators to understand basic mathematical functions and concepts and to further develop problem-solving skills.
- Further develop research and reporting skills.

Appropriate Use of Resources

- Understand and practice appropriate Internet use and follow the middle and upper school computer usage agreement.
- Understand and follow copyright laws and understand the concept of plagiarism.

Technology and Information Literacy Skill Expectations: Grades Nine through Twelve

By the end of grade twelve, students will be able to perform all of the skills outlined for grades five through eight, plus the following:

Research and Inquiry Skills

Research Question

- Ask an original question and formulate a topic of limited scope for a research project that requires an original supported conclusion.
- Identify the information sources available, including print, electronic, and primary sources and determine which sources best suit the chosen research topic.

Location

- Use Internet search engines efficiently and effectively to locate relevant information.
- Efficiently use online databases, including periodical databases, to locate information.
- Use criteria to judge the accuracy, currency and bias of information found.
- Cite the source of information in proper format from print, electronic and primary sources.
- Efficiently gather and organize information by copying and pasting information into an original word processing document or database.

Communication

- Collaborate with others using technology for the completion of academic work.
- Identify the important information from research performed, and be able to communicate it to various audiences by means of the following: word processed report, face-to-face talk supplemented by a computer presentation program, web page, spreadsheet and pictorial representation of data from charting and graphing programs.

Evaluation

- Use assessment tools to judge the quality of research performed.
- Establish criteria for a self-assessment of research.
- Evaluate the ethical decisions made during the research process.

Life-long Reading

- Identify favorite authors and literary types for personal reading.
- Identify information sources for current events and topics of personal interest.
- Articulate the criteria used when evaluating the quality of a fictional or a factual work.

Technology Skills

- Format word processing documents with columns, headers, footers and tabs.
- Purposefully use e-mail, Internet browsers, spreadsheets, graphic tools and graphic editing programs, databases, hypermedia and presentation programs.
- Send database articles and transfer files between school and home.
- Use peripheral devices such as digital cameras, video cameras, scanners, removable storage devices and scientific probes.
- Store, organize and back up files of original work.
- Troubleshoot basic computer and printer problems.
- Recognize the differences in various computer platforms, and transfer documents between platforms when necessary.

Appropriate Use of Resources

- Understand basic e-mail etiquette.
- Protect self from harmful acts of others by recognizing threats to privacy and property.
- Understand and follow copyright laws and understand the concept of plagiarism.
- Understand and follow the middle and upper school computer usage agreement.
- Identify the uses of technology as they relate to academics, personal life, and career.

RESOURCES

Bibliography

American Library Association. *Information Power: Building Partnerships for Learning*. 2nd ed. Chicago: American Library Association: 1998.

Portions of this book are available online at

<http://www.ala.org/ala/aasl/aaslproftools/informationpower/informationpower.htm>

(Accessed 03 Mar, 2006)

Jukes, Ian, Anita Dosaj, and Bruce Macdonald. *Building Information Literacy in the Classroom*. 2nd ed. Thousand Oaks, CA: Corwin Press, 2000.

[NetSavvy: Building Information Literacy in the Classroom](#)

NETS for Students. International Society for Technology in Education. May 10, 2006

http://cnets.iste.org/students/pdf/NETSS_standards.pdf.

Additional Resources and Suggested Reading

Friedman, Thomas L. *The World is Flat: A Brief History of the Twenty-First Century*. New York: Farrar, Straus and Giroux, 2005.

www.big6.com

This links to the homepage of Mike Eisenberg and Bob Berkowitz's Big6 information literacy model. The Big6 is an approach used world-wide to teach information technology concepts and practices. Their Super3 model (Plan-Do-Review) simplifies the concepts and language of Big6, making it more accessible for younger students.

<http://www.shambles.net/informationliteracy/>

Among its database of "over 25,000 education websites that have been recommended and approved by teachers," The Shambles.net website contains a large collection of links focused on Information Literacy. Shambles.net is designed for teachers and administrators and contains a large collection of teacher-selected links to web resources.