

# Juneau School District Technology Curriculum



May 2003

**Juneau School District**  
**Technology Curriculum**  
Revised, 2002-2003 Academic Year

**Curriculum Committee Membership:**

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## Statement of Philosophy

**District Mission:** In Juneau, we are all partners in providing each student with the skills, knowledge and attitudes to be a contributing citizen in a changing world.

In the Juneau School District students use technology to seek new knowledge, solve problems, and collaborate in a global society. The use of technology by staff and students supports the mission of the District and helps students achieve the Alaska standards in all content areas.

The Juneau School Board has adopted the following educational goals, which are integral to successful education with in technology:

### All students will:

- ✓ Acquire and manage
  - ✓ information, solve problems, and think creatively and critically;
  - ✓ Communicate effectively, using written, verbal and artistic forms, and appreciate the creative expressions of others;
  - ✓ Possess and integrate a common core of knowledge concerning the physical, biological, and social sciences, mathematics, and the arts and humanities;
  - ✓ Become effective and responsible decision makers, who contribute to the community, state, country, and world;
  - ✓ Possess the ability to collaborate and adapt, and use the skills and tools necessary for the 21st century's world or work;
  - ✓ Demonstrate the ability to form responsible relations with a wide range of people including those with different socio-economic and cultural and cultural backgrounds;
  - ✓ Acquire the knowledge, habits and attitudes that promote personal and public health, both physical and mental;
  - ✓ Understand and evaluate their own worth, ability, and potential to enable growth.
- Communication and* information technology is to be used by students as a tool to achieve these educational goals within each content area. Information technology includes:
- ✓ Problem solving tools such as spreadsheets, databases, and graphing calculators;
  - ✓ Information-access tools such as the internet and content specific CD's;
  - ✓ Communications tools such a s word processors, multimedia software, web page editors, email, and video production tools;
  - ✓ Content-learning tools such as simulations, tutorials, and educational games.

## Resources for Curriculum Implementation

**Technology infrastructure** will be enhanced to ensure that the technology curriculum is implemented. The curriculum committee has recommended of the minimal technology needs for each site, based on elementary, middle level or high school level needs, and on an allocation per specific number of students to create equity between schools with different sizes. These needs will require frequent review based on technology advances, and must be reviewed before the purchase of any new infrastructure. The committee also recognizes the high school has additional technology needs as outlined in the career education curriculum.

Each site will have a technology committee, responsible for updating the site technology plan in compliance with the district approved technology plan and the district technology curriculum document. The district will assign a central office administrative staff member to review site technology plans and approve purchases of technology designed to implement the curriculum and technology plan Appendix A contains the specific minimal technology needs, and a fiscal note based on the current estimated costs.

**Staff development** to implement the technology curriculum must be ongoing and specific to the needs of each staff member to ensure they will have the skills to effectively use technology available within the schools to implement this curriculum. Staff training will be provided to site technicians and teachers on those tools software called for in the curriculum, and on methods for developing instructional units, projects, and lessons that effectively incorporate requirements of the curriculum. Staff training may be completed by outside trainers, or by teacher mentors whose primary assignment for a minimal block

of their day is to assist teachers in the effective integration of technology. The staff development needs will be met by drawing on the resources and knowledge of the staff that have attended ARCTIC training, technology mentor teachers, and site technology technicians. The staff development program must include workshops that have follow-up sessions in which a technology leader works with teachers while they have students.

**Assessment of students and curriculum** will be completed on a consistent basis. Student technology skills will be assessed in individual classes, and many assessments will be incorporated into the curriculum. During the implementation year the technology curriculum committee will meet to design, collect, and serve as a quality control group for rubrics designed to assess student understanding of the technology. Technology will be added to the report card, and should be placed in a prominent area to indicate the importance technology has in the world. The committee will work with a central administrator to organize the rubrics and scoring guides. The administrator will then work with principals to train staff and distribute the guides, and to publish the guides on the Internet. Keyboarding will be assessed in a systematic manner determined at each building site [determine if assessment happens in classroom, lab, or by a specific teacher within the school], However the assessment tool used to assess will be consistent between sites, and determined by the curriculum committee in the fall of the implementation year. The keyboarding assessment will be reported to the central administration, and scores based on words per minute and accuracy, will be noted on the student report card and in a master list to be forwarded to the next school the student attends when following normal promotion within the district, or when moving to a new school at the same grade level.

**Keyboarding** staff development must be implemented immediately to provide staff the necessary skills to teach keyboarding. When keyboarding is taught it requires staff to interact with the students, Computer games and programs will only be used as a supplement, not as a primary teaching tool. Staff development must take place in each elementary and middle school to train teachers responsible for teaching keyboarding the appropriate techniques to ensure students incorporate proper practice into their learning. Keyboarding must be taught in a consistent and regular manner for a focused period of time. Keyboarding includes specific assessment information that must be recorded, and is noted in the preceding assessment section. Implementing the keyboarding benchmarks requires the administration to review the curriculum at each site, and consider instructional and staff assignment changes at the elementary and middle school level.

**Administrative involvement is required** to support staff in the effective use of the computer labs and other technology resources and to create of a comprehensive staff development program. Staff development must including strategies for integrating the technology into existing content instructional program rather than developing a separate technology instructional strand. Principals will work with their staff to support the effective use of the technology laboratory, and request district level support for staff development program. The computer laboratory schedule must take into account the

curriculum requirements by grade level and the site administrator must be ensure appropriate computer laboratory time for the different grade levels, noting that some grade levels need greater access to the technology laboratory. *Computer labs and technology resources* are for the purpose of advancing the curriculum identified in this document, therefore the use of labs for “free time” and “free choice” is not acceptable. Each building principal will work with the district administrative staff and the site technology committee to reallocate resources and staff within a building to assure the curriculum can be adopted with integrity and quality.

The curriculum itself will be reviewed annually by each site technology committee (the committee will include an administrative representative, and representatives from each team/grade level/department/or wing depending on the school staffing structure). This committee will note areas where the curriculum is being implemented as designed, areas that need support to implement, and infrastructure and staff development needs. The site administrator will have the responsibility for determining individual staff member barriers to success, This will not be an issues addressed at the committee level. By May 1 each year, the site technology committee will forward their report to the site principal, which will include it in the year-end reports for the district.

Legend:

A= Algebra  
GE= Geometry  
SC= Science  
SS= Social Studies  
LA= Language Arts

<b>Technology Standard A</b> A student should be able to operate technology-based tools						
A student who meets the content standard should:	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Use a computer to enter and retrieve information;	<b>Basic System Control:</b> Know how to turn a computer on and off. How to wake up from sleep mode.  Introduce printing.  Open a program. Exit a program before opening another.	<b>Basic System Control:</b> Restart computer when necessary. Saving to an individual network file. <b>Calculators:</b> (1) Introduce use of calculator	<b>Operate Graphics Program:</b> For Drawing Pictures  <b>Calculators:</b> 2) Perform addition and subtraction. i.e. Trailblazer curriculum	<b>Basic System Control:</b> Locate application or file in hard drive folder, on launcher/ dock, on a menu, or in a server space.  <b>Calculators:</b> Use basic calculator functions (X, /, -, +, =) and Constant.	<b>Basic System Control:</b> Print to a specific output device.  <b>Keyboarding:</b> 15 wpm by the end of Fourth grade with 90 percent accuracy.	<b>Keyboarding:</b> Reinforcement of keyboarding in fifth grade.
2. Use technological tools for learning, communications, and productivity;	<b>Recording Devices:</b> Introduce record voice and sound; playback of digital and analog recordings.  <b>Multimedia:</b> Basic CD-Rom usage/care (Electronic books)	<b>Multimedia:</b> Basic CD-Rom usage/care (Electronic books)	<b>Recording Devices:</b> Create analog and digital sound recordings; play back and use playback functions		<b>Word Processing:</b> Insert graphics and photos Introduce outlines Introduce tab, center, underline, italic. Insert graphics, change font type, size, and style.  <b>Internet:</b> Use bookmarks and enter www address. Conduct basic internet search for research project.	<b>Spreadsheet::</b> Create 20-item data table and create bar, pie, and line graphs.
3. Use local and world-wide networks;	<b>Accessing File Server:</b> open from launchers, aliases, menus, and docks, media		<b>Accessing File Server:</b> Introduce log on to server Save to server file, open from launchers, aliases, menus, and docks		<b>Accessing File Server:</b> Log on to server Find and open server file Navigate from one server or hard disk space another with open desktop or from within a program	<b>Accessing File Server:</b> Save to server file, open from launchers, aliases, menus, and docks.

	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
4. Manage and maintain technology tools;	<p><b>Maintenance:</b> Identify safety issues such as keeping magnets, food and drink, (liquid) away from monitors.</p> <p><b>Appropriate behavior:</b> with and around equipment</p>	<p><b>Maintenance:</b> Keep monitor, keyboard, mouse clean. (1<sup>st</sup>)</p> <p><b>Continue to integrate maintenance:</b> Identify safety issues such as keeping magnets, food and drink (liquid), away from monitors.</p> <p><b>Appropriate behavior:</b> with and around equipment</p>		<p><b>Maintenance:</b> Keep monitor, keyboard, and mouse clean.</p> <p>Identify computer components.</p> <p><b>Continue to integrate maintenance:</b> Identify safety issues such as keeping magnets, food and drink (liquid), away from monitors. Keep monitor, keyboard, mouse clean.</p> <p><b>Appropriate behavior:</b> with and around equipment, including cables and power cords</p>		<p><b>Prevention:</b> Properly connect peripherals to prevent bent prongs, frayed wires, broken connectors.</p>
5. And diagnose and solve common technology problems.					<p><b>Problem solving:</b> Force-quit program. Restart frozen computer. Utilize trouble-shooting checklist</p>	

<b>Technology Standard A</b> A student should be able to operate technology-based tools A student who meets the content standard should:	<b>6-8</b>	<b>9-12</b>
1. Use a computer to enter and retrieve information;.	<p><b>Basic System Control:</b> Share files over a network</p> <p><b>Calculators:</b> Introduce graphing calculator functions such as table and graph</p> <p><b>Keyboarding:</b> 30 w.p.m. at 90 percent accuracy (8<sup>th</sup> grade)</p>	<p><b>Basic System Control:</b> Share files over the network.</p> <p><b>Calculators:</b>  Create and solve simple systems of equations, algebraically and graphically using a graphing calculator.  (A)</p>
2. Use technological tools for learning, communications, and productivity;	<p><b>Word Processing:</b> Fluency with basic tasks  Use outline form, Format document, including: Insert tables and spreadsheets, columns, outlining and concept webbing.</p> <p><b>Spreadsheet or Database</b> Create 20-item data table and create bar, pie, and line graphs. Sort data. Format cells and tables.</p> <p><b>Recording Devices:</b>  Connect a video player/recorder device to presentation equipment</p> <p><b>Multimedia:</b> Set up equipment, including computer and projection device when appropriate.  Presentation focuses on grade-level or standards content</p> <p><b>Graphics:</b>  Scan images into files  Operate digital still camera, including download image to computer via cable, disk, or other media Manipulate image orientation, size, color, and file size/type.</p> <p><b>Video:</b> Use and care of video camera and related hardware.</p> <p><b>Email:</b> use of email software and network for sending and receiving messages</p> <p><b>Printers:</b> Connect printers to computers or network, add paper, restart, clear paper jam Identify specific printer for print job, use page setup for proper formatting, set page range and number of copies</p>	<p><b>Word Processing:</b>  Use a computer for word processing:  -Fluency with basic tasks.  -Document formatting for various types of documents.  -Use spelling and grammar checking with 100% correctness.  (LA/SS)  Incorporate writing, data analysis from spreadsheet, and graphics into written documents.  (SC)</p> <p><b>Spreadsheet or Database:</b>  Enter data for analysis purpose, and tabulate results.  Create a spreadsheet and be able to graph results.  (SC)</p> <p>Use technology tools (such as sketch pad) to discover characteristics of geometry.  Identify, graph, and describe the graphs of basic families of function including linear, absolute value, quadratic, and exponential using a graphing calculator.  (GE)</p> <p><b>Multimedia:</b>  Set up equipment, including computer and projection devise for presentations.</p> <p>Complete presentation focused on content standards of course.  Use images from a variety of sources to enhance content.</p> <p>Use electronic mail and network resources to send and receive messages and to transfer files.  (LA/SS/SC)</p> <p>Design and conduct scientific investigations using appropriate instruments and technology.  (SC)</p>

	<b>6-8</b>	<b>9-12</b>
3. Use local and world-wide networks;	<p><b>Accessing File Server:</b> Operating system and browser: Define and describe systems, browsers, differences and compatibility</p> <p>Print web documents</p> <p><b>Wireless:</b> Log on to wireless network if available.</p>	<p><b>Accessing File Server:</b> Use personal storage space on the local server. (LA/SS/GE)</p> <p><b>WWW (internet searches):</b> Use internet resources for research purposes. -search for web sites. -evaluate the quality of web sites. -use information appropriately for research. -Cite sources in correct format. (LA/SS/SC)</p>
4. Manage and maintain technology tools;	<p><b>Maintenance:</b> Keep monitor, keyboard, and mouse clean</p> <p>Identify computer components, including hard drive, disk drive, monitor connectors, keyboard and mouse connectors</p> <p><b>Continue to integrate maintenance:</b> Identify safety issues such as keeping magnets, food and drink (liquid), away from monitors. Keep monitor, keyboard, mouse clean. Identify computer components.</p> <p><b>Appropriate behavior:</b> with and around equipment, including cables and power cords.</p> <p><b>Prevention:</b> Properly connect peripherals to prevent bent prongs, frayed wires, broken connectors</p>	<p><b>Maintenance:</b> Reinstall software Upgrade memory Set preferences Rebuilding desktops Virus software Memory management Maintain battery sources/replacement. Run software updates. (LA/SS)</p> <p><b>Continue to integrate maintenance:</b> Identify safety issues such as keeping magnets, food and drink (liquid), away from monitors. Keep monitor, keyboard, mouse clean. Identify computer components, including hard drive, disk drive, monitor connectors, keyboard and mouse connectors, and be able to connect peripherals to prevent bent prongs, frayed wires, and broken connectors. (LA/SS)</p> <p>Appropriately adjust microscopes. (SC)</p>
5. And diagnose and solve common technology problems.	<p><b>Problem solving:</b> VCR/TV connections Computer to presentation device Find resources on the web Identify software warnings and determine course of action Check connections with peripherals Identify and check parts, cables and connectors Identify and correct printer errors and jams.</p>	<p><b>Problem solving:</b> Understand operating system (extension conflicts)</p>

<b>Technology Content Standards B</b> A student should be able to use technology to locate, select, and manage information.	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Identify and locate information sources using technology	<ul style="list-style-type: none"> <li>Aware of information sources from electronic information sources.</li> </ul>	<ul style="list-style-type: none"> <li>Aware of the internet.</li> <li>Aware of electronic information sources for gathering information.</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of library cataloging software to search for printed materials.</li> </ul>	<ul style="list-style-type: none"> <li>Guided use of the internet. (i.e. direct navigation to a pre-evaluated site)</li> <li>Introduction to at least one "Browser"</li> <li>Use Library online catalog software to find information in books and other print media. Library catalogue: Conduct research by title, author, subject, and keyword.</li> </ul>	<ul style="list-style-type: none"> <li>Use the internet to find information.</li> <li>Introduction to Boolean parameters for internet research.</li> </ul>	
2. Choose sources of information from a variety of media.			<ul style="list-style-type: none"> <li>View and discuss information obtained from various electronic sources.</li> </ul>			<ul style="list-style-type: none"> <li>Use information from various electronic sources.</li> </ul>
3. Select relevant information by applying accepted research methods					<ul style="list-style-type: none"> <li>Directed internet exercises and verification from other resources.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate the validity of information found on the internet.</li> </ul>

<b>Technology Content Standards C</b> A student should be able to use technology to explore ideas, solve problems and derive meaning.	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Use technology to observe, analyze, interpret, and draw conclusions			<ul style="list-style-type: none"> <li>• Use technology to observe, analyze, interpret, and draw conclusions.</li> </ul>			
2. Solve problems both individually and with others.	<ul style="list-style-type: none"> <li>• Use technology with a peer to solve a problem.</li> <li>• Aware of technology as a source of information.</li> <li>•</li> </ul>				<ul style="list-style-type: none"> <li>• Use idea webbing or note taking software</li> </ul>	
3. Create new knowledge by evaluating, combining, or extending information using multiple technologies.						

<b>Technology Content Standards B</b> A student should be able to use technology to locate, select, and manage information.	<b>6-8</b>	<b>9-12</b>
1. Identify and locate information sources using technology	<ul style="list-style-type: none"> <li>• Proficient use of internet search engines to gather data and compile information</li> <li>• Proficient use of electronic library catalog to identify books and other print media.</li> <li>• Proficient use of various electronic sources.</li> <li>• Proficient use of Boolean parameter for internet research.</li> </ul>	<ul style="list-style-type: none"> <li>• Use internet search engines to gather data and compile information.</li> <li>• (LA/SS)</li> <li>• Use electronic library catalog to access materials. (LA/SS)</li> <li>• Use technology when appropriate for lab experiments. (SC)</li> </ul>
2. Choose sources of information from a variety of media.	<ul style="list-style-type: none"> <li>• Proficient use of information obtained from internet and other various electronic sources (i.e. electronic audio, video, CD, etc).</li> </ul>	<ul style="list-style-type: none"> <li>• Be able to choose from internet, videos, and other technology sources for research. (LA/SS/SC)</li> <li>• Evaluation author's credibility and purpose; verify information. (LA/SS)</li> <li>• Cite sources properly to credit intellectual property. (LA/SS)</li> </ul>
3. Select relevant information by applying accepted research methods	<ul style="list-style-type: none"> <li>• Proficient at identifying factual information from the internet by verifying with other printed or electronic sources.</li> </ul>	<ul style="list-style-type: none"> <li>• Use internet and other technology information tools when conducting research. (SC)</li> </ul>

<b>Technology Content Standards C</b> A student should be able to use technology to explore ideas, solve problems and derive meaning.	<b>6-8</b>	<b>9-12</b>
1. Use technology to observe, analyze, interpret, and draw conclusions	<ul style="list-style-type: none"> <li>• Observe and analyze media products.</li> </ul>	<ul style="list-style-type: none"> <li>• Compare different media presentations of information, analyze bias as well as strengths and weaknesses of different media. (LA/SS)</li> <li>• Analyze and interpret data from experiments using data bases, spreadsheets, and simulation software. (SC)</li> <li>• Use sensing devises (ex. Pascoe) to measure temperature, currents, and sound. (SC)</li> </ul>
2. Solve problems both individually and with others.	<ul style="list-style-type: none"> <li>• Collaborative work with other students in the district or worldwide using e-mail/telecommunications to solve a problem.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboratively work with other students in teams using the computer to interpret data and solve problems. (LA/SS/SC)</li> </ul>
3. Create new knowledge by evaluating, combining, or extending information using multiple technologies.		<ul style="list-style-type: none"> <li>• Analyze current events using the internet, TV, and other technology tools, and develop sound conclusions. (SC)</li> <li>• Construct geometric models using technology. (GE)</li> </ul>

Standard D Grade Level Guidelines	K	1	2	3	4	5
<p>1</p> <p>Convey ideas to a variety of audiences using publishing, multimedia and communication tools;</p>	<p><b>Writing:</b> (Phonetic Spelling) introduce writing sentences and stories. Begin to use punctuation and capitals.</p> <p>Graphics to support and prompt writing and general expression.</p>	<p>*Type name using proper capitalization and spacing.</p> <p>Using technology to publish a document.</p>	<p>Use technology to publish: two or more complete sentences on a single topic, including idea and details.</p> <p>With guidance, use writing process to: draft a piece of writing edit for periods, question marks and high frequency spelling words</p>	<p>With assistance, produce properly formatted document using software tools.</p> <p>Use technology to publish a document.</p> <p>Introduction of spell/grammar check usage.</p> <p>With assistance, insert graphics into document. Aware of graphic formatting.</p>	<p>Able to produce properly formatted document using software tools.</p> <p>Use technology to publish at least one of the following: addressed friendly letter descriptive multi-paragraphed piece research report fictional personal narratives</p> <p>With assistance, able to spell/grammar check document.</p> <p>With guidance, insert graphics into document. With guidance use graphic formatting.</p> <p>Aware of editing tools.</p>	<p>Use technology to publish at least two of the following: brief business letter poetry (haiku/limericks) research report/project biography folk tale the main idea of a passage</p> <p>With guidance, use writing process to develop own writing from draft to publication. Introduction to editing tools</p> <p>Independently format document through use of software tools. Including proper use of spell checkers.</p> <p>Is able to insert and know basic formatting of graphics into document</p>
<p>2</p> <p>Use communications technology to exchange ideas and information;</p>	<p>Introduction to multi-media presentation through templates (i.e. such as Storybook Weaver, Kidpix, etc.)</p>	<p>Introduction to producing simple multi-media presentation.</p> <p>Aware of simple special effects.</p>	<p>With guidance, produce a simple multi-media presentation; including simple graphics and text.</p> <p>Introduction to simple special effects ideas for use in multimedia presentations.</p>	<p>With assistance, produce multimedia presentation; text (both written and imported), graphics, and sound.</p> <p>With guidance, use simple special effects appropriately in a presentation.</p>	<p>With assistance, produce a multi-media presentation: including text(both written and imported), graphics, sound, and special effects.</p> <p>Introduction to various multi-media applications.</p> <p>Aware of graphic imaging software.</p>	<p>Able to produce a multimedia presentation; including text, graphics, sound and animation.</p> <p>Know the appropriate uses of various multimedia applications.</p> <p>With guidance, be able to understand appropriate uses of special effects in multimedia presentations.</p> <p>Introduction to graphic imaging software.</p>

	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
3 use technology to explore new and innovative methods for interaction with others			Aware of the possibilities of expressing/exchanging information and ideas via email, and internet.	Aware of the possibilities of expressing/exchanging ideas via internet and email.	Introduced to the proper usage of email and internet to express/exchange ideas.	Aware of internet publishing via template driven site/application.

<b>Standard D</b> <b>Grade Level</b> <b>Guidelines</b> <b>D.</b> “A student should be able to use technology to express ideas and exchange information.	<b>6-8</b>	<b>9-12</b>
1. Convey ideas to a variety of audiences using publishing, multimedia and communications	<p>Produce a variety of writing, including but not limited to essay, advertisements, poetry, fiction, short stories, tri-fold brochures and “I-Search” papers. Including appropriate layout and design for each type of writing.</p> <p>Practice real life writing skills by compiling job applications, basic forms and letter of reply to inquiries.</p> <p>Use writing process with emphasis on organization and sentence structure.            Proficient use of software formatting and editing tools.</p> <p>Is able to show proper and appropriate uses of graphics in a document. Including formatting and design.</p> <p>Publish work and save to digital media.</p>	
2. use communications technology to exchange ideas and information and	<p>Proficient in various multimedia applications and able to produce slide show incorporating various mediums i.e. music, narration, graphics/pictures, and text.</p> <p>Independently choose appropriate multimedia application for given project.</p> <p>Proficient in the appropriate use of special effects in multimedia presentations.</p> <p>Able to burn information to CD/DVD</p> <p>Introduction to audio/video medium</p>	
3. use technology to explore new and innovative methods for interaction with others.	<p>Express/exchange ideas, information, and images electronically.</p> <p>Able to publish ideas and information on the World Wide Web using web authoring applications.</p>	

<b>Technology Standard E</b> A student should be able to use technology responsibly and understand its impact on individual and society.	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. Evaluate potentials and limitations of existing technologies.			Share technology with a peer		Use technology to create a project with a peer and share project with classmates	
2. Discriminate between responsible and irresponsible use of technology.		Understand the basics of how to treat technology with respect (care of hardware)		Understand how to treat technology with respect (care of hardware and software)		
3. Respect others' rights of privacy in electronic environments.		Be aware of basic network ethics		Gain awareness of network ethics (Do not share or steal passwords: Do not use other people's storage areas)		
4. Demonstrate ethical and legal behavior regarding intellectual property, which is the manifestation of an original idea, such as computer software, music, or literature.				Be aware of Internet ethics. Know how to troubleshoot out of inappropriate sites	Learn about copyright laws, know why they are important, and respect their use	
5. Examine the role of technology in the work place and explore careers that require the use of technology.			Begin to notice how technology is used in the working world			Relate how technology has helped to change the world
6. Evaluate ways technology impacts culture and environment.						
7. Integrate technology into dialing living.						
8. Recognize implications of emerging technologies.			Know what technology we regularly use in school			

<b>Technology Standard E</b> A student should be able to use technology responsibly and understand its impact on individual and society.	<b>6-8</b>	<b>9-12</b>
1. Evaluate potentials and limitations of existing technologies.	Use technology to create a project with a peer and share project with school or community	Use technology to create a project with a peer and share project with community or globally.
2. Discriminate between responsible and irresponsible use of technology.	Understand how to maintain and extend the life of technology through consistent care and respect	Understand how to maintain and extend the life of technology through consistent care and respect
3. Respect others' rights of privacy in electronic environments.	Employ network ethics	Employ network ethics
4. Demonstrate ethical and legal behavior regarding intellectual property, which is the manifestation of an original idea, such as computer software, music, or literature.	Be aware of Internet and email ethics and use them everyday  Respect all copyright laws. Learn why plagiarism and music swapping is inappropriate and illegal	Be aware of Internet and email ethics and use them everyday  Respect all copyright laws. Understand why plagiarism and music swapping is inappropriate and illegal
5. Examine the role of technology in the work place and explore careers that require the use of technology.	Research how technology is used in the world to improve standards of living, safety, environmental issues, and cultural impact	Research ways in which technology is used in the workplace and explore careers that require the use of technology.  Understand the implications of emerging technology. Participate in reasoned discussions of public policy related to scientific innovations and proposed technological solutions to problems. Discuss how tools in the classroom are used in professions. Understand how mathematical technology tools can help prepare for careers.
6. Evaluate ways technology impacts culture and environment.	Construct specific medium messages to influence others (i.e. commercial, PSA, etc.)	Be aware of the implications of digital manipulations. Understand and discuss when it is appropriate and when it is inappropriate
7. Integrate technology into daily living.	Begin to notice when it is easier or more appropriate not to use technology for a task	Know when it is easier or more appropriate not to use technology for a task
8. Recognize implications of emerging technologies.	Gain an understanding that each person's use of technology impacts others – (For example: People can visit websites they create. People are negatively affected by email pranks)	Have a balanced view of technology as related with the rest of their life and know that they can use technology to effect other people's lives