

Washington State
K-12 Essential Academic Learning Requirements
& Grade Level Expectations

Educational *Technology*



Grades K - 2

Office of Superintendent of Public Instruction
December 1, 2008

For complete K-12 Educational Technology Standards go to:

<http://www.k12.wa.us/EdTech/Standards/default.aspx>

Legislative Directive

...OSPI shall develop essential academic learning requirements (EALRs) and grade level expectations (GLEs) for educational technology literacy and technology fluency...

Aware of the pressing need for technology skills among high school graduates headed for higher education, career training or the job market, the 2007 Washington State Legislature directed the Office of Superintendent of Public Instruction to develop a new set of academic standards. Lawmakers called for Essential Academic Learning Requirements (EALRs) and Grade Level Expectations (GLEs) that describe what K-12 students must know and be able to do with technology. They framed these new proficiencies within a definition of basic literacy and its next level of skill development, technological fluency.

Technology Literacy is the ability to responsibly, creatively and effectively use appropriate technology to:

- Communicate.
- Access, collect, manage, integrate and evaluate information.
- Solve problems and create solutions
- Build and share knowledge.
- Improve and enhance learning in all subject areas and experiences.

Technology Fluency is demonstrated when students:

- Apply technology to real-world experiences.
- Adapt to changing technologies.
- Modify current and create new technologies.
- Personalize technology to meet personal needs, interests and learning style.

Legislative Directive

2SHB 1906, Section 16 (1) Within funds specifically appropriated, by December 1, 2008, the SPI shall develop essential academic learning requirements (EALRs) and grade level expectations (GLEs) for educational technology literacy and technology fluency that identify the knowledge and skills that all public school students need to know and be able to do in the areas of technology and technology literacy and fluency.

The development process shall include a review of current standards that have been developed or are used by other states and national and international technology associations. To the maximum extent possible, the superintendent shall integrate goal four and the knowledge and skill areas in the other goals in the technology essential academic learning requirements.

Educational Technology Essential Academic Learning Requirements (EALRs) with Components

Document Organization

The educational technology standards are organized to map the learning proficiency sequence from kindergarten through 2nd grade. Educators can see how a learning expectation differs from grade to grade across grade spans of K-2.

*If learning is an act of exploration
then technology equips
the explorer
for a journey of a lifetime.*

John Maschuk

An empty, shaded box in an early grade or grades indicates that proficiency is not yet expected.

EALR 1 – Integration

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Components

1.1: Innovate: Demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.

1.2: Collaborate: Use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others.

1.3: Investigate and Think Critically: Research, manage and evaluate information and solve problems using digital tools and resources.

EALR 2 – Digital Citizenship

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

Components

2.1: Practice Safety: Practice safe, legal and ethical behavior in the use of information and technology.

2.2: Operate Systems: Understand technology systems and use hardware and networks to support learning.

2.3: Select and Use Applications: Use productivity tools and common applications effectively and constructively.

2.4: Adapt to Change (Technology Fluency): Transfer current knowledge to new and emerging technologies. (Grades 6-12 only)

Understanding Grade Level Expectations

Required:

An **Essential Academic Learning Requirement (EALR)** is a broad statement of the learning that applies to Grades K–12.

The **Component** is a statement that further defines and provides more specific information about the EALR. There is at least one component for each EALR.

The **Grade Level Expectation (GLE)** is a statement containing the essential content or process to be learned and the cognitive demand required to learn it. A revision of Bloom’s Taxonomy was used to categorize the cognitive demand required of the student. Each GLE includes evidence of learning statements, which are considered essential to the GLE.

The GLE **Numbering System** identifies the EALR, the component and the GLE, in that order. In the example at right, the number 2 indicates the EALR, the number 2.1 indicates the component and the number 2.1.2 indicates the GLE. Note: Grade levels are not referenced in the numbering system.

The **Evidence of Learning** is a bulleted list of ways students can demonstrate learning considered essential to the GLE. Educators are encouraged to identify additional ways in which the student can show proficiency as the educational technology GLEs are integrated across the curriculum.

Suggested:

The **Examples** provide specific illustrations of the learning. However, these examples are not exhaustive, and educators are encouraged to find multiple ways by which learners can demonstrate what they know.

EALR 2 — DIGITAL CITIZENSHIP Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.	
Component 2.1: Practice Safety Demonstrate safe, legal and ethical behavior in the use of information and technology.	
GLE	Grade 1
2.1.2	Practice ethical and respectful behavior.
Evidence of Learning	<ul style="list-style-type: none"> ▪ Comply with district Acceptable Use Policy (AUP). ▪ Demonstrate respect for the digital work of others. ▪ Demonstrate respect for opinions of others posted online.
Examples	<ul style="list-style-type: none"> • Use classroom technologies carefully and correctly.

Note: Examples in EALR 2 – Digital Citizenship – do not have suggested subject areas or Basic/21st Century examples as those in EALR 1 – Integration (see next page).

Understanding the Examples in EALR 1 – Integration

There are two types of examples given at each grade level in EALR 1 – Integration:

- Basic Level.
- 21st Century Learning Environment.

Basic Level

Annual inventory data indicates that 99%+ of classrooms, statewide, have at least one computer connected to the Internet; many classrooms have access to an LCD projector or a document camera. Given this level of technology presence, all educators can reasonably use the examples, or their equivalent, at the Basic Level.

21st Century Learning Environment

For schools that have moved beyond the Basic Level, the 21st Century Learning Environment examples are intended to provide achievable outcomes using available technological tools. The long-term goal is to move all classroom instruction to 21st century learning environments with on-going professional development.

Examples	Basic Level
	<ul style="list-style-type: none"> • Share information from the author’s website as part of a book report. R, W
	21st Century Learning Environment
	<ul style="list-style-type: none"> • Create a multimedia project to share learning about a particular animal. R, W, Sc • Record the list of books read by class using a spreadsheet and post to classroom web page. R

Subject Area References

In the Integration EALR, examples also include a suggested subject area or areas into which the technology standards could be integrated (**R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = The Arts, **H/F** = Health and Fitness, **CTE** = Career and Technical Education, **WL** = World Languages). OSPI anticipates that each one of these will be linked on the OSPI website to a high quality, standards-based lesson aligned to specific Grade Level Expectations or Performance Expectations for that subject area. All examples will be updated regularly as technology changes.

Access the latest version of the technology standards on the Grade Level Resources website at <https://eds.ospi.k12.wa.us/ealrs/>

GRADES K – 2

EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.1 Innovate

Demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.

GLE	K	1	2
1.1.1	Generate ideas and create original works for personal and group expression using a variety of digital tools.		
Evidence of Learning	<ul style="list-style-type: none"> Organize ideas and produce digital products with assistance. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> Create a picture in a digital drawing program. R, W 	<ul style="list-style-type: none"> Brainstorm ideas for a project using software as a class. R, W 	<ul style="list-style-type: none"> Create a class graph or survey about student interests. M
	21st Century Learning Environment		
	<ul style="list-style-type: none"> Use drawing tools to illustrate pages in a digital ABC book. R, W, A Sort and classify various items using a document camera or an interactive whiteboard as a class. R, W, M 	<ul style="list-style-type: none"> Illustrate and communicate original ideas and stories on various topics using digital tools. R, W Record ideas as a class for animal habitats using a graphic organizer. W, Sc 	<ul style="list-style-type: none"> Share an answer to a math problem using an interactive whiteboard or tablet. M Record the lifecycle of a butterfly using an online graphic organizer with digital images. Sc

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = The Arts, **H/F** = Health and Fitness, **CTE** = Career and Technical Education, **WL** = World Languages

EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.1 Innovate

Demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology.

GLE	K	1	2
1.1.2	Use models and simulations to explore systems, identify trends and forecast possibilities.		
Evidence of Learning	<ul style="list-style-type: none"> Use interactive resources to practice skills, explore new concepts and describe patterns. 		
Examples	Basic Level		
		<ul style="list-style-type: none"> Use templates to explore and identify patterns as a class. M 	<ul style="list-style-type: none"> Predict weather patterns using a template. Sc
	21st Century Learning Environment		
		<ul style="list-style-type: none"> Explore various websites with pictures of animals, foods and colors to reinforce vocabulary as a class. R Participate in creating a class digital presentation to display different reading word families. R, W 	<ul style="list-style-type: none"> Use digital simulations to explore and depict patterns of growth such as the life cycles of plants. Sc Create surveys, collect data and use graphing templates to share results. M

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EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.2 Collaborate

Use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others.

GLE	K	1	2
1.2.1	Communicate and collaborate to learn with others.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Participate in online projects as a class. ▪ Work with others using technology tools to convey ideas or illustrate simple concepts. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Share and discuss learning using a document camera or computer with LCD projector. R, W, M 	<ul style="list-style-type: none"> • Choose digital pictures with a partner to incorporate into a classroom project. R, W, Sc, A 	<ul style="list-style-type: none"> • Share information from the author’s website as part of a book report. R, W
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Draw a picture story with a partner using an age appropriate software program. R 	<ul style="list-style-type: none"> • Draw pictures of animals and post to classroom web page to share with others. W, A • Collaborate with partner to create an animal habitat using drawing software. Sc 	<ul style="list-style-type: none"> • Create a multimedia project to share learning about a particular animal. R, W, Sc • Record the list of books read by class using a spreadsheet and post to classroom web page. R

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EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.2 Collaborate:

Use digital media and environments to communicate and work collaboratively to support individual learning and contribute to the learning of others.

GLE	K	1	2
1.2.2	Develop cultural understanding and global awareness by engaging with learners of many cultures.		
Evidence of Learning	<ul style="list-style-type: none"> Learn about many cultures through digital images and stories from around the world. 		
Examples	Basic Level		
		<ul style="list-style-type: none"> Watch videos of cultural events and listen to music of many cultures. SS, A 	<ul style="list-style-type: none"> Watch videos of cultural events, listen to music of many cultures and experience an online virtual tour. SS, A
	21st Century Learning Environment		
		<ul style="list-style-type: none"> Collaborate as a small group to create a community map using digital tools. SS 	<ul style="list-style-type: none"> Participate in an information exchange with students from another area of the United States. R, W, M, Sc, SS

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EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.3 Investigate and Think Critically

Research, manage and evaluate information and solve problems using digital tools and resources.

GLE	K	1	2
1.3.1	Identify and define authentic problems and significant questions for investigation and plan strategies to guide inquiry.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Build background knowledge and generate questions by using digital content. ▪ Record questions using digital tools with assistance. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Generate questions after viewing a video as a class. R 	<ul style="list-style-type: none"> • Visit a website about a subject and generate questions with a partner or a small group. R, W 	<ul style="list-style-type: none"> • Generate questions individually after viewing a videotape or DVD. R, W, M, Sc
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Record questions for a digital KWL chart as a class. R, M 	<ul style="list-style-type: none"> • Record questions for a digital KWL chart with a partner or group. R, W, M 	<ul style="list-style-type: none"> • Generate questions individually for a digital KWL chart. R, W, M, Sc • Investigate a topic and generate questions using a variety of online tools. R, W, M, Sc, SS

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EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.3 Investigate and Think Critically

Research, manage and evaluate information and solve problems using digital tools and resources.

GLE	K	1	2
1.3.2	Locate and organize information from a variety of sources and media.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Gather information using teacher-selected digital resources. ▪ Organize information using a table, digital template or online tool with assistance. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Gather information about animals as a class using websites. R, W, Sc 	<ul style="list-style-type: none"> • Gather information about animals as a class using websites, videos, CDs and other digital media. R, W, Sc 	<ul style="list-style-type: none"> • Gather and begin to understand the need to cite information from websites. R, W, M
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Use a table to organize information as a class using a presentation tool such as an interactive whiteboard or document camera. R, W, M, Sc, SS 	<ul style="list-style-type: none"> • Use a digital organizer as a class. R, W, M, Sc, SS 	<ul style="list-style-type: none"> • Choose relevant websites from a collection of online resources selected by the teacher. R, W, M • Use a digital template with a partner to organize information. R, W, M, Sc, SS

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EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.3 Investigate and Think Critically

Research, manage and evaluate information and solve problems using digital tools and resources.

GLE	K	1	2
1.3.3	Analyze, synthesize and ethically use information to develop a solution, make informed decisions and report results.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Analyze and evaluate results, discuss and identify the solution(s). ▪ Share learning and results through a multimedia product. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Use pre-designed templates to explore and depict patterns as a class. M 	<ul style="list-style-type: none"> • Create surveys, collect data and use a spreadsheet to share results as a class. R, W, M 	<ul style="list-style-type: none"> • Create surveys, collect data and share results using a graphing template. R, W, M, Sc
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Share information and pictures of student projects on a teacher web page. R, W, M • Share findings about a specific area of research using presentation software as a class. R, W, M, Sc 	<ul style="list-style-type: none"> • Share information and pictures of student projects on a teacher web page. R, W, M • Share findings about a specific area of research using presentation software. R, W, M, Sc, SS 	<ul style="list-style-type: none"> • Share research about a specific animal using presentation software. Sc • Use a presentation template to share results of specific topic with a partner. R, W, M, Sc, SS

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EALR 1 — INTEGRATION

Students use technology within all content areas to collaborate, communicate, generate innovative ideas, investigate and solve problems.

Component 1.3 Investigate and Think Critically

Research, manage and evaluate information and solve problems using digital tools and resources.

GLE	K	1	2
1.3.4	Use multiple processes and diverse perspectives to explore alternative solutions.		
Evidence of Learning	<ul style="list-style-type: none"> Share different ways to solve problems. 		
Examples	Basic Level		
		<ul style="list-style-type: none"> Explain solutions in mathematics using a document camera or computer with LCD projector. M 	<ul style="list-style-type: none"> Discuss alternative solutions to mathematics problems while sharing work using a document camera or computer with LCD projector. M
	21st Century Learning Environment		
		<ul style="list-style-type: none"> Compare two different math online programs, select favorite and explain why. M 	<ul style="list-style-type: none"> Use word art from a word processing program to type spelling words. R

Possible content area connections: **R** = Reading, **W** = Writing, **M** = Mathematics, **Sc** = Science, **SS** = Social Studies, **C** = Communication, **A** = The Arts, **H/F** = Health and Fitness, **CTE** = Career and Technical Education, **WL** = World Languages

EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

Component 2.1 Practice Safety

Demonstrate safe, legal and ethical behavior in the use of information and technology.

GLE	K	1	2
2.1.1	Practice personal safety.		
Evidence of Learning	<ul style="list-style-type: none">▪ Practice the safe, responsible sharing of information online.▪ Keep passwords private.▪ Recognize potential online dangers.		
Examples	<ul style="list-style-type: none">• Participate in classroom safety discussions that reference online safety.	<ul style="list-style-type: none">• Discuss danger in using personal name, address, phone number or picture online.	<ul style="list-style-type: none">• Recognize danger in using personal name, address, phone number or picture online.

EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

Component 2.1 Practice Safety

Demonstrate safe, legal and ethical behavior in the use of information and technology.

GLE	K	1	2
2.1.2	Practice ethical and respectful behavior.		
Evidence of Learning	<ul style="list-style-type: none">▪ Comply with district Acceptable Use Policy (AUP).▪ Demonstrate respect for the digital work of others.▪ Demonstrate respect for opinions of others posted online.		
Examples	<ul style="list-style-type: none">• Use classroom technologies carefully and correctly.	<ul style="list-style-type: none">• Use classroom technologies carefully and correctly.	<ul style="list-style-type: none">• Identify the differences between correct and incorrect use of classroom technologies.

EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

Component 2.2 Operate Systems

Understand technology systems and use hardware and networks to support learning.

GLE	K	1	2
2.2.1	Develop skills to use technology effectively.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Use correct vocabulary to describe digital technologies. ▪ Meet keyboarding proficiency standards for grade level. ▪ Open, save and print files. 		
Examples	<ul style="list-style-type: none"> • Use left and right hand side of keyboard, thumb on spacebar. 	<ul style="list-style-type: none"> • Use left and right hand side of keyboard, thumb on spacebar and little finger on the enter key. • Demonstrate correct posture while using the keyboard. • Demonstrate ability to save and retrieve a file to and from a specified folder with assistance. 	<ul style="list-style-type: none"> • Demonstrate correct home row on the keyboard. • Use district program or age appropriate online keyboarding programs. • Demonstrate correct posture while using the keyboard. • Demonstrate ability to save and retrieve a file to and from a specified folder.

EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

Component 2.2 Operate Systems

Understand technology systems and use hardware and networks to support learning.

GLE	K	1	2
2.2.2	Use a variety of hardware to support learning.		
Evidence of Learning	<ul style="list-style-type: none">▪ Use digital equipment effectively.*▪ Identify and solve common problems related to digital equipment.		
Examples	<ul style="list-style-type: none">• Use digital equipment to share work with class.	<ul style="list-style-type: none">• Use digital equipment to capture an image.• Check that monitor is turned on.	<ul style="list-style-type: none">• Use digital equipment to capture sound.• Verify that computer is turned on.

* Digital equipment can include digital and document cameras, microphones, computers, various handheld devices, assistive technologies, scanners, classroom response systems, microscopes, pedometers, interactive whiteboards, GPS, etc.

EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

Component 2.3 Select and Use Applications

Use productivity tools and common applications effectively and constructively.

GLE	K	1	2
2.3.1	Select and use common applications.		
Evidence of Learning	<ul style="list-style-type: none">▪ Use classroom software to reinforce skills in reading and mathematics.▪ Use basic navigation skills that increase in complexity across grade levels.▪ Communicate learning in reading and writing with beginning level features of a word processing or publishing program.		
Examples		<ul style="list-style-type: none">• Open and close applications.• Use clip art to illustrate a story.	<ul style="list-style-type: none">• Open and close applications and print documents.• Create a digital image to illustrate a story.

EALR 2 — DIGITAL CITIZENSHIP

Students demonstrate a clear understanding of technology systems and operations and practice safe, legal and ethical behavior.

Component 2.3 Select and Use Applications

Use productivity tools and common applications effectively and constructively.

GLE	K	1	2
2.3.2	Select and use online applications.		
Evidence of Learning	▪ Visit teacher-selected websites.		
Examples		• Use interactive reading websites to practice reading skills.	• Use a variety of interactive websites to practice subject specific skills.

Glossary

419 Fraud: An email scam in which the solicitor offers large sums of money in return for a smaller upfront investment.

Acceptable Use Policy (AUP): A school or organization's official policy statement regarding the use of the Internet or other computer networks.

Anonymity: The quality or state of being anonymous (not named or identified, of unknown authorship).

Anonymous Online Name: A name that is not identifiable, lacking individuality, distinction or recognizability.

Application: A computer or software program, activated by a user that can perform a specific function or functions.

Authentic Problem: A genuine, real or original problem to be solved.

Blog: A diary or personal journal kept on a website, usually updated frequently, that might be private or might be intended for public viewing.

Bookmark: A marker that allows a user to navigate to a website on the Internet to allow for rapid access.

Browser: See Web Browser.

CD-ROM (Compact Disk Read-Only Memory): A portable storage device for computer files.

Clip Art: Graphics that can be cut and pasted electronically into documents. Clip art can be photographs, maps, diagrams, illustrations or cartoons.

Concept Mapping: A technique for visualizing the relationships among different concepts which can be used as a tool in defining a research topic.

Copyright Law: Law that provides protection to the authors of "original works of authorship," including literary, dramatic, musical, artistic and certain other intellectual works.

Creative Commons: Creative Commons licenses are designed to facilitate and encourage more versatility and flexibility in copyright law.

Cyberbullying: Involves the use of information and communication technologies to support deliberate, repeated and hostile behavior by an individual or group that is intended to harm others.

Database: A collection or listing of information, usually organized with searchable elements or fields. For example, a library catalog can be searched by author, title or subject.

Desktop: The background area on a computer screen which usually contains an icon for the hard drive and trash can (used to remove files). Folders, files, applications and a working document may also appear on the desktop window.

Digital Stories: A variety of new forms of digital narratives (web-based stories, interactive stories, hypertexts and narrative computer games).

Digital Tools: Electronic technology that generates, stores and processes data.

Document: Any self-contained piece of work created using an application program.

Document Camera: A camera mounted on a stand, able to capture text or 3-dimensional objects. The image is typically displayed through an LCD projector.

DVD (Digital Video Disk): A digital storage medium, the same physical size as a CD-ROM disk, that can store massive amounts of data including graphics and full motion video.

Electronic Portfolio: A collection of electronic evidence assembled and managed by a user. Also known as an e-portfolio or a digital portfolio.

Email (Electronic Mail): The electronic transmission of letters, messages and memos from one computer to another over a network.

Empathy: The recognition and understanding of the states of mind, beliefs, desires, and particularly, emotions of others. It is often characterized as the ability to experience the outlook or emotions of another.

Enter Key: A key located at the right end of the third row from the bottom on a QWERTY keyboard. Pressing the enter key performs a typed or highlighted command. In a word processing program, the enter key starts a new paragraph.

Equity: In the context of instructional technology, equity is often used to refer to the equal availability of technology to all students regardless of socioeconomic status, culture, locale, gender, age or race.

Folksonomy: A taxonomy generated by Internet users that identifies and classifies web pages, images, links, etc.

Formats: The layout, presentation or arrangement of data on a screen or paper. May also refer to filename or type of file.

Gantt Chart: A type of bar chart used in process or project planning and control to display planned work targets for completion of work in relation to time.

GIS (Graphical Information Systems) Software: An information system for capturing, storing, analyzing, managing and presenting geographic data which is linked to location.

GPS (Global Positioning System): A system of satellites that allows one's position to be calculated with great accuracy by the use of an electronic receiver.

Graphic Organizer: An application that allows users to combine both icons (graphics) and text to give structure and logic to a project or presentation. Also known as storyboard software.

Hard Drive: The primary storage device for a computer. Also called hard disk. It is where applications and files are stored.

Hardware: Physical equipment, components or devices.

Help Wizard: An application that provides assistance for users who need help by topic.

Hyperlink: Content on a website which can be “clicked on” with a mouse, which in turn will take a person to another web page or a different area of the same web page.

Hypertext: The primary way to navigate between web pages and among websites. Hypertext on web pages has been expanded to include hyperlinks from text, a picture or a graphic and from image maps.

Identity Theft: Term for the criminal act of stealing personal information with the intent to use it to create similar identities without the victim’s knowledge.

Installer: A program used to update or install software programs.

Interactive Whiteboard: A large touch sensitive display that connects to a computer and projector.

Internet: A global communications network that is a collaborative effort among educational institutions, government agencies, various commercial and nonprofit organizations and individual users.

Keyboard: The main input device for computers. Keyboards are modeled on typewriter keys but have additional keys that enhance their function.

KWL Chart: An instructional technique. Students list K = What I Know, W = What I want to know and L = What I learned. In early grades, activity is conducted as a group.

LCD Projector: See Projector.

Link: See Hyperlink.

Multimedia: Digital products that integrate interactive text, images, sound and color. Multimedia can be anything from a simple PowerPoint slide show to a complex interactive simulation.

Network: A collection of computers that are linked together for the purpose of sharing information.

Online: A common term used to refer to being connected to the Internet.

Online Community: A meeting place on the Internet for people who share common interests. Online communities can be open to anyone or limited to members only. Some online communities have a moderator.

Password: A series of characters that enables a user to gain access to a file, computer or program.

Paste: A command that transfers text or graphics from the clipboard to the document at the location of the cursor.

Phishing: The practice of convincing someone to divulge confidential information they normally would not provide to a stranger. The purpose of phishing is to gather the information needed to steal a victim's money or identity.

Plagiarism: Using another person's ideas or creative work without giving credit to that person.

Podcast: A media file that is distributed over the Internet using syndication feeds, for playback on portable media players and personal computers.

Pop-ups: A secondary web browser window of varying size, often containing a form of advertising, which opens outside of the primary web browser window.

Portfolio: See Electronic Portfolio.

Program: A set of instructions describing operations for a computer to perform to accomplish a task. See Application.

Projector: One of several devices that can be connected to a computer to display information to an audience. The most common devices are video projection units and video converters for television monitors.

Public Domain: Information that has been made available to the general public and is distributed and redistributed without copyright or patent.

Research: Careful study, investigation and experimentation aimed at discovering or interpreting facts to create new knowledge or understandings on the part of the researcher.

Response System: A system that allows users to respond to questions posed by the presenter using interactive hand-held devices that resemble a television remote control.

RSS (Really Simple Syndication): A format for delivering regularly changing web content. Many news-related sites, weblogs and other online publishers syndicate their content as an RSS feed.

Search Engine: A program that searches documents for specified keywords and returns a list of the documents where the keywords were found.

Section 508: The section of the 1998 Rehabilitation Act that states that all electronic and information technology procured, used or developed by the federal government after June 25, 2001, must be accessible to people with disabilities.

Shortcut Keys: The keys or key combinations that provide quick access to frequently performed commands or operations.

Social Bookmarking: Web-based applications that allow users to store, classify, share and search links through the practice of folksonomy on the Internet or an intranet.

Social Networking: A category of Internet applications to help connect friends, business partners or other individuals together.

Software: The instructions that tell a computer what to do. See Application.

Spam: Unsolicited, unwanted junk email.

Spreadsheet: Application program that manipulates numerical and string data in rows and columns of cells.

Tablet: A notebook or slate-shaped mobile computer, equipped with touch-screen technology which allows the user to operate the computer with a stylus or digital pen, instead of a keyboard or mouse. Also known as a Pen computer.

Tag: A relevant keyword or term associated with, or assigned to, a piece of information – picture, article or video clip, etc. – which describes the content and makes keyword-based classification possible.

Video: The visual presentation of information.

Videoconferencing: The ability for two or more participants to meet from different locations by using computer networks to transmit audio and video data. Usually requires user to have a camera, microphone and speakers on their computer.

Virtual: In the context of computing, not concrete or physical. For instance, a completely virtual university does not have actual buildings but instead holds classes over the Internet.

Virtual Classroom: The online learning space where students and instructors interact.

Web or World Wide Web (WWW): A global hypertext network that is part of the Internet. It is normally viewed through a web browser.

Web Browser: An application used to view World Wide Web pages. Firefox and Internet Explorer are examples of web browsers.

Web Page: One page of a document on the World Wide Web. Each web page has its own address called a Uniform Resource Locator (URL).

Webinar: An online seminar or meeting conducted over the World Wide Web.

Website: A location on the World Wide Web. A website usually contains multiple pages.

Wiki: A website that allows users to add, remove and edit and change content, typically without the need for registration. It also allows for linking among any number of pages.

Word Processing: An application that allows a user to create, edit and format text.