

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

Educational *Technology*



Grades 3 - 5

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 3rd through 5th grade. Educators can see how a learning expectation differs from grade to grade across grade spans of 3-5.

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

John Maschuk

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.

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).

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 4
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. ▪ Recognize and report cyberbullying.
Examples	<ul style="list-style-type: none"> • Identify the consequences of unethical uses of technology. • Comply with copyright law when copying and pasting from websites.

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 ongoing professional development.

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/>

Examples	Basic Level
	<ul style="list-style-type: none"> • Use presentation software to identify and show the unique geographic regions of Washington State. Sc, SS
	21st Century Learning Environment
	<ul style="list-style-type: none"> • Create a digital vocabulary list of new words for subject areas. R, W, M, Sc, SS • Store and present electronic portfolios of exemplary work. R, W, M • Use a table to analyze, organize and compare information. R, W, M, Sc, SS

GRADES 3 – 5

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	3	4	5
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 design and produce multimedia projects. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> Brainstorm writing topics using a computer or document camera and projector. R, W, M, Sc, SS 	<ul style="list-style-type: none"> Use presentation software to identify and show the unique geographic regions of Washington State. Sc, SS 	<ul style="list-style-type: none"> Use presentation software to give examples of the importance of the <i>Bill of Rights</i> in today's world. SS
	21st Century Learning Environment		
	<ul style="list-style-type: none"> Create a digital diagram of how volcanoes erupt. Sc Select exemplary work to store in an electronic portfolio. R, W, M, Sc, SS Use presentation software to present original stories about classroom topics. R, W, M, Sc, SS 	<ul style="list-style-type: none"> Create a digital vocabulary list of new words for subject areas. R, W, M, Sc, SS Store and present electronic portfolios of exemplary work. R, W, M Use a table to analyze, organize and compare information. R, W, M, Sc, SS 	<ul style="list-style-type: none"> Use social bookmarking websites for a project on a shared writing topic dealing with the causes of the Revolutionary War. SS Store and present electronic portfolios of exemplary work. R, W, M Label an image to show parts of the water cycle. 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	3	4	5
1.1.2	Use models and simulations to explore systems, identify trends and forecast possibilities.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Practice skills, explore new concepts and recognize patterns using interactive resources and educational games. ▪ Collect and graph data to predict outcomes and interpret patterns. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Create a class graph showing weather and temperature data over one week. M, Sc 	<ul style="list-style-type: none"> • Identify trends by using an online coin flipping site. M 	<ul style="list-style-type: none"> • Use online simulations and activities to visualize fractions. M
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Identify trends using online weather and temperature data. Sc 	<ul style="list-style-type: none"> • Create a spreadsheet to display and analyze data. M • Use online models and simulations to conceptualize area and perimeter. M 	<ul style="list-style-type: none"> • Use online resources to demonstrate transfer of energy between systems. Sc • Investigate earthquake locations around the world using online mapping tools. SS, Sc

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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	3	4	5
1.2.1	Communicate and collaborate to learn with others.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Participate in online projects. ▪ Interact with others using email or other communication tools. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Compare the life cycle of different plants using digital images. Sc 	<ul style="list-style-type: none"> • Connect with pen pal using digital tools to share favorite hobbies. W 	<ul style="list-style-type: none"> • Participate in collaborative projects with students from outside classroom. R, W, M, Sc, SS, C, H/F
	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 	<ul style="list-style-type: none"> • Communicate effectively using digital tools (e.g., construct a simple geometric design, write instructions for replication and share with others). R, W, M, C • Share and comment, using digital tools, on student science projects. Sc • Solve a mathematics problem and post online for feedback or comments. M 	<ul style="list-style-type: none"> • Debate issues on water quality using shared documents. R, W • Share book reviews and make book recommendations on a classroom wiki, blog or web page. R, W • Connect to other students to reflect on and share poems using a blog. W

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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	3	4	5
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 and share relevant information. ▪ Participate as a class in global online projects that include a wide variety of perspectives. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Explore a variety of teacher-selected websites of cultural events, listen to music from many cultures and experience an online virtual tour. SS, A 	<ul style="list-style-type: none"> • Compare characteristics of native people from several regions of Washington State using selected websites. Sc, SS 	<ul style="list-style-type: none"> • Collect images from the Internet and take digital pictures of objects to create a collection of art from various countries. SS, A
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Articulate uniquenesses and commonalities between cultures in your community using a graphic organizer in pairs or small groups. R, W, SS • Participate in an online class project with other classrooms. R, W 	<ul style="list-style-type: none"> • Use online interactive tools to engage with students from other cultures. R, W, M, Sc, SS • Learn about another country by participating in a videoconference with students from that country. R, W, M, Sc, SS 	<ul style="list-style-type: none"> • Identify and investigate a global issue and generate possible solutions by sharing ideas with students from another school. R, W, M, Sc, SS • Compare Veterans Day and Remembrance Day with students from Canada and Australia. W, SS, C

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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	3	4	5
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 viewing multimedia. Use digital tools to help plan projects. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> Generate questions individually after viewing a video or DVD. R, W, M, Sc, SS 	<ul style="list-style-type: none"> Record summer activities in a digital template. W, SS 	<ul style="list-style-type: none"> Develop research questions using a digital template. R, W, M, Sc, SS
	21st Century Learning Environment		
	<ul style="list-style-type: none"> Use selected websites to find out more about a problem or topic for research. R, W, M, Sc, SS Record ideas and questions about a topic using digital tools. R, W, M, Sc, SS 	<ul style="list-style-type: none"> Use online mapping software to hypothesize the reasons different summer activities occur in various geographic regions. SS Identify key words and questions using digital search tools. R, W, M, Sc, SS 	<ul style="list-style-type: none"> Build background knowledge about a problem using selected websites. R, W, 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	3	4	5
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 selected digital resources. ▪ Organize information using digital tools. ▪ Record sources used in research. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Locate information using teacher-selected websites to answer a question. R, W, Sc, SS 	<ul style="list-style-type: none"> • Question information to determine fact vs. fiction on a web page. R, W, Sc, SS 	<ul style="list-style-type: none"> • Locate useful information to copy and paste into an organized list. R, W
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Identify which online resources provided answers to questions. R, W, Sc, SS • Copy key words from digital sources into a table or document. R, W, M, Sc, SS 	<ul style="list-style-type: none"> • Tag and share bookmarked sites. R, W, Sc, SS 	<ul style="list-style-type: none"> • Select and bookmark websites that will answer questions or find information. R, W, Sc, SS • Work with others to complete a task using online resources selected by the teacher. R, W, 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	3	4	5
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"> ▪ Identify, evaluate and select information for decision making. ▪ Create and present solutions using multimedia software. ▪ Begin to recognize potential bias in websites. ▪ Understand the basic ideas involved in copyrighted materials. ▪ Cite all sources. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Collect and use digital images to show the unique features that help an animal survive. Sc 	<ul style="list-style-type: none"> • Use concept mapping software to label important parts of the electrical circuits or other systems. Sc 	<ul style="list-style-type: none"> • Use presentation software to show the causes of conflict leading to the Revolutionary War. SS
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Highlight or hyperlink important words that show the three unique features of an animal that helps it survive in its environment. Sc 	<ul style="list-style-type: none"> • Use concept mapping software to identify and select information to help make decisions. R, W, M, Sc, SS, C, H/F • Share research about a specific animal using presentation software and publish on a class website. Sc 	<ul style="list-style-type: none"> • Create an illustrated online timeline to demonstrate the causes of conflict leading to the Civil War. SS • Use classroom blogs to evaluate and determine which early American explorer had the most impact on the growth of the United States. R, W

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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	3	4	5
1.3.4	Use multiple processes and diverse perspectives to explore alternative solutions.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Compare results to evaluate the best solution. ▪ Explore and integrate alternative concepts and feedback from multiple audiences. ▪ Compare different ways to solve problems. 		
Examples	Basic Level		
	<ul style="list-style-type: none"> • Share solutions to mathematics problems using a document camera. M	<ul style="list-style-type: none"> • Use software to evaluate social and economic data to forecast trends. SS	<ul style="list-style-type: none"> • Analyze survey data using a spreadsheet to support a change in local or state laws. M, SS
	21st Century Learning Environment		
	<ul style="list-style-type: none"> • Share solutions to mathematics problems on a classroom blog. M	<ul style="list-style-type: none"> • Present solutions to a panel using digital tools to determine best solution. R, W, M, Sc, SS, C	<ul style="list-style-type: none"> • Collect blog comments from other classrooms on which book should be the top children’s book of the year. R, W

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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	3	4	5
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"> • Use a secure password to protect the privacy of information. • Know not to click on pop-ups or advertisements. 	<ul style="list-style-type: none"> • Participate in class discussions about online safety. • Understand why not to click on pop-ups or advertisements. 	<ul style="list-style-type: none"> • Create and use an anonymous online name. • Demonstrate knowledge of when to share personal information. • Explain why not to click on pop-ups or advertisements.

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	3	4	5
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. ▪ Recognize and report cyberbullying. 		
Examples	<ul style="list-style-type: none"> • Identify the differences between ethical and unethical behavior. • Describe appropriate and inappropriate use of the creative digital work of others. 	<ul style="list-style-type: none"> • Identify the consequences of unethical uses of technology. • Comply with copyright law when copying and pasting from websites. 	<ul style="list-style-type: none"> • Describe the impact of unethical and illegal use of technology on individuals and society. • Cite all sources properly.

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	3	4	5
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. ▪ Manage files effectively. 		
Examples	<ul style="list-style-type: none"> • Use age appropriate keyboarding programs to increase speed and accuracy. • Demonstrate correct posture consistently. • Use basic file commands (e.g., Open, Save, Print and Save As). 	<ul style="list-style-type: none"> • Use age appropriate keyboarding programs to increase speed and accuracy. • Use shortcut keys to increase speed. • Save or back up information to appropriate location (e.g., local, network or external drives). • Organize and manage files and folders between school, home and online. 	<ul style="list-style-type: none"> • Demonstrate the correct use of all letters, numbers, punctuation keys, shift, enter, symbol and command keys using proper techniques. • Save or backup information to appropriate location (e.g., local, network or external drives). • Organize and manage files and folders between school, home and online.

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	3	4	5
2.2.2	Use a variety of hardware to support learning.		
Evidence of Learning	<ul style="list-style-type: none">▪ Maintain and use digital equipment* effectively.▪ Identify and solve common problems related to digital equipment.		
Examples	<ul style="list-style-type: none">• Use a multimedia device to show a video.• Verify that cables are connected and power is on.	<ul style="list-style-type: none">• Use external storage device to save files.• Verify cable connections and that caps lock is off.	<ul style="list-style-type: none">• Configure digital equipment for multimedia presentation.• Troubleshoot using help wizard.

* 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	3	4	5
2.3.1	Select and use common applications.		
Evidence of Learning	<ul style="list-style-type: none"> ▪ Use software to reinforce skills in all subject areas. ▪ Use basic navigation skills that increase in complexity across grade levels. ▪ Use common features of a: <ul style="list-style-type: none"> - Word processing or publishing program. - Spreadsheet program. - Presentation program. - Database program (or database functionality in other programs). 		
Examples	<ul style="list-style-type: none"> • Print documents independently and responsibly. • Use a template to create a graph. • Make a multi-slide presentation. 	<ul style="list-style-type: none"> • Use common features of applications (e.g., Save, Print, Close, Quit). • Graph results from a survey. • Insert images and sounds. 	<ul style="list-style-type: none"> • Identify and use proper file formats (e.g., .doc, .docx, .ods, .txt). • Create tables and make outlines. • Use graphics, sounds and music to enhance a presentation.

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	3	4	5
2.3.2	Select and use online applications.		
Evidence of Learning	<ul style="list-style-type: none">▪ Use basic navigation skills to search for and find information.▪ Use collaborative technologies to support learning.		
Examples	<ul style="list-style-type: none">• Recognize basic web browser navigation.• Use teacher bookmarked websites.	<ul style="list-style-type: none">• Use a search engine or an online database to find information.• Read classroom website, wikis or blogs.	<ul style="list-style-type: none">• Use interactive online tools to comment, link, post and embed information at a beginning level (e.g., wikis, blogs).

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: Hardware and software that generate, store and process 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 a 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.