Glossary for Ed Tech Standards, K-12 and Implementation Guide

2009 Educational Technology Standard Glossary

1. **application** – Computer programs that help you perform a specific task such as word processing. Also called application programs, applications, programs, or software. Depending on the device, also known as "apps".

2. **authority** - A source that is cited to support facts in a research paper or report.

3. **avatar** - A digital symbol or image that represents a user in a virtual environment such as a game or simulation, i.e.., Second Life. *Ted substituted an **avatar** instead of a photo to represent himself as a user in his email account.*

4. **bandwidth** - The capacity of a network connection to handle the flow of information, often measured in kilobits or megabits per second, which represents the speed data travels over the network.

5. **blog** - An online journal or web log (hence the term, blog)

6. **bluetooth** - is an open wireless technology standard for exchanging data over short distances.

7. **Boolean logic** - A logical system for advanced searching of databases and search engines using the operators AND, OR and NOT. Example: *When doing research on the country of Haiti prior to the earthquake, use the **Boolean** operator NOT to connect "Haiti NOT earthquake" in a search phrase.*

8. **browser** - software which enables users to browse or view the Internet. Examples include Safari, Internet Explorer, Google Chrome, Opera, or Firefox.

9. **chat** - communicating online with others in real time.

10. **cloud computing -** the practice of interacting on demand over the Internet to transfer and store data and media. Example: Google Drive is a clouding computing system.

11. **code** - A system of symbols or signals used to communicate electronically, i.e., computer code. Examples include: C, C++, JavaScript, SQL, etc. *Programmers use **code** when creating software applications.*

12. **collaborative tools** – Instruments, devices or software applications which make it easier to work more productively together in a group or groups. This may include anything from concept maps or webs (see concept mapping tool) to a website where a group collaborates on a single document, such as Google Docs or using devices such as webcams.

13. **component** - an accompanying part or element, that is usually a smaller, self-contained part of a larger entity . Example: *Since the power **component** failed, the entire computer would not boot or work.*

14. **concept mapping tool** - a device or software application which enables the user to create a diagram or "map" that represents a collection of ideas; excellent for brainstorming Examples include Inspiration, Bubbl.us, Kidspiration, C-Map, or Thinking Maps.

15. **cookies** - small computer files placed on a computer's hard drive when the user visits a website. The purpose of a "cookie" is to track information about that user.

16. **cyber** - a prefix referring to computers or computer networks in a virtual setting. Example: The students took a virtual field trip in cyberspace.

17. **cyber-bullying** – the act of intimidating and threatening another person while using a computer or IT devices; typically more than one occurrence.

18. **database** - Software which allows the user to systematically search for, sort and/or input data. The Library of Congress is an example of one of the largest databases available for primary source information.

19. **device** - A mechanical item or piece of equipment used to perform a task. Examples include anything from a GPS unit to barcode scanners.

20. **digital** - refers to technology that works through "digits" or binary code, where the digits 0 and 1 are used to transmit data (the computer's "language"). Digital refers to anything available in electronic form that could be read, observed, or manipulated using a computing device.

21. **digital citizenship** - an educational concept in which everyone involved in a learning community (students, parents, et al.) gains knowledge on how to practice safe and appropriate behavior when using electronic media and IT devices.

22. **digital environments** - an artificial environment (surroundings, area, place, or context) that is found digitally via the Internet, an intranet, a network, satellite, or by some other means of connecting. Examples of digital environments include social networking sites such as Facebook or MySpace, virtual worlds like World of Warcraft or Second Life, any websites that include online message boards, online chat rooms, or any online community interaction tools. See **online community** and **digital**.

23. **digital image/graphic** - an image (picture, likeness, or visual) that is presented digitally, i.e., in digital or electronic code. Graphic file formats may include: .jpeg, .tiff, .gif, and .bmp. See **digital**.

24. **digital model** - a model (representation, schematic, replica, reproduction, example) of a real world object, concept, or system that is displayed digitally and can be manipulated. Examples of digital models include those found in textbook software and educational websites like the NLVM (the National Library of Virtual Manipulatives), FOSS web, or Explorelearning's Gizmos. See **digital** and **digital simulation**.

25. **digital simulation** - a virtual simulation (imitation or replication) of a real world process, concept, environment, or system that is displayed digitally. Digital simulations can be as simple as a simulated card game to a complex system modeled interactively. Simulations involve the ability to manipulate variables to affect outcomes. See **digital**, **digital model** and **virtual**.

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26. **digital storytelling** - the publication or creation of a story (video, slide show, storybook or short story) using available digital tools and software. See **digital** and **digital tools**.

27. **digital video** - a video (visual transmission, reception, or recording) that is transmitted, received, or recorded digitally. An example includes MP4 file. See **digital**.

28. **Directory** - A directory is another name for a folder. Files on your hard disk are organized into various folders, or directories, so that it is easier to keep track of them. For example, you may keep your pictures in one folder and your music files in another folder. Folders can also contain other folders, allowing for more specific organization.

29. **document** - a digital file that is used to record, communicate, orpublish information in text. Some examples of applications and programs that are used to create and view a document include: Microsoft Word, Apple's Pages, Open Office Writer, Adobe Acrobat, Notepad and Google Docs.

30. **download** - the process of transferring a file to one user's computer or IT device from another connected computer, network, or website. The transferred file is also referred to as a "download."

31. **drawing tool** - any digital tool that is used for drawing, sketching, creating, designing, painting, drafting, highlighting, writing, or annotating. Drawing tools can be found within word processing, graphic design, publishing, presentation, notebook, 3-D imaging, CAD, tablets, or paint program applications, Google Sketch-up

32. **ergonomic** - The applied science of equipment design, as for the workplace, intended to maximize productivity by reducing operator fatigue and discomfort.

33. **Essential Question** – See the all standards doc. http://www.azed.gov/wp-content/uploads/PDF/EdTechStandard2009.pdf on Page 13. There is a note that this needs to be defined.

34. **external hard drive** - a **device** for storing **data**. Examples include flash drives, thumb drives, or **hard drives** connected through a USB, firewire or wireless.

35. **fair use** – Guidelines under which copyrighted material can be legally used in limited situations without obtaining the permission of the copyright owner or paying royalties.

36. **FAQ** - an acronym for "frequently asked questions."

37. **file extension** - the short (usually three letter) suffix at the end of a file name that indicates the file type and the applications it is associated with. A few examples include: Microsoft Word (.doc or .docx), Microsoft Power Point (.ppt), a digital photo (.jpg) - JPEG format (Joint Photographic Experts Group), Adobe Acrobat (.pdf), and a presentation created in Open Office Impress (.odp).

38. **firewall** - a hardware device or software program that filters what goes in and out of a network or computer in order to protect it against any harm, such as viruses, from an unauthorized user.

39. **formatting** - the way a document is presented, organized, or arranged. Examples of basic formatting options include font size, bold text, bullets, or margins.   An example of advanced formatting may include manipulating images and aligning text in a document.

40. **global community** - a term used to describe the economic, social, and political interdependence of all people and nations of the world advanced through the use of technology. *The scientific global community continually discusses global warming by blogging the issue.*

41. **hacking** - the act of gaining illegal entry into a computer or network typically to gain access to data, steal information, identity theft or crash a system.

42. **hard drive** - a computer's main data storage component, permanently housed in the CPU (central processing unit).

43. **hardware** - the physical components of a computer or digital device. Examples of **hardware** on a computer include: a motherboard which holds a CPU (central processing unit), expansion cards; a power supply; a hard drive (or hard disk); input (mouse) or output (monitor) devices.

44. **home page** – the first page a user sees when opening a web browser, or the first webpage to be seen when visiting a website. Most websites of organizations, school districts, agencies, companies, etc. have a **home page** that serves as both an introductory page and a navigation tool (like a table of contents with **links**) to direct a user to the various pages within the website.

45. **hyperlink (also called link) -** an element in an electronic document or webpage which, when selected, takes the user to another location, either in the same document or to a different document, webpage, email client, or video. Links usually appear as a different color, are underlined or can be assigned to an icon or other elements on a page.

46. **icon -** A small picture or symbol on an IT device. Selecting an **icon** activates a function such as opening a page or a software program.

47. **Identity Theft** - is a form of fraud or cheating of another person's identity in which someone pretends to be someone else by assuming that person's identity, typically in order to access resources or obtain credit and other benefits in that person's name.

48. **input device -** a mechanical or electronic tool used to enter information into a computer or IT device. Examples include computer mouse, microphone, keyboard, stylus, touch screen, track pad, voice or web cam.

49. **Intellectual Property (copyright)** - Intellectual property refers to the ownership of intangible and non-physical goods. This includes ideas, names, designs, symbols, artwork, writings, and other creations. It also refers to digital media, such as audio and video clips that can be downloaded online.

50. **interactive white board** – a large screen type display that connects a computer and a projector allowing the user to interact with the information isplayed on the screen/board.

51. **intranet** - A network of computers belonging to an organization (university/school/company), accessible only by the organization's members, employees, or others with authorization. It is protected from outside intrusion by a combination of **firewalls** and other security measures.

52. **link -** See **hyperlink.**

53. **media –** a way to store, deliver or view information or data. Examples include CDs or DVDs, flash drives, video or audio recordings, interactive websites, slide presentations, and websites.

54. **media hosting** - Online sites which house photos, videos, and other files **uploaded** by users. It is a repository. Examples include YouTube, Flickr, Teacher Tube, and SnapFish.

55. **metadata -** data that describes and gives information about other data; metadata might include information about the means of creation of the data, the purpose of the data, the time and creation of the data, or the author of the data. In digital photography, metadata can include searchable information about the date and time the photo was taken, where it was taken, color depth, resolution, etc.

56. **model** - a physical representation of an abstract concept .

57. **mobile device** – a small digital device with touch-screen and/or keyboard, that can run software applications (apps). Examples: Smartphones, iPod Touch, tablets, etc.

58. **modules -** a set of tutorials that can be presented via text, video, or online.

59. **multimedia presentation -** any combination of text, audio, video, graphics, or animation to present a story, concept, content or interactive lesson.
60. **netiquette** - Using good manners or polite behavior in various online or digital settings; Online etiquette.

61. **network -** two or more computers connected to allow users to share files and devices or communicate with one another. *We stored the graphics for the project on the network.*

62. **network storage device -** a place reserved for storing digital data on a network; Often used to share or back up files from a user's individual computer. See **server**.

63. **network protocol -** an agreed upon format for transmitting data between two or more connected computers or devices; a set of rules and standards to allow networked devices to communicate with one another. Examples: http (Hyper Text Transfer Protocol) or ftp (File Transfer Protocol).

64. **online community**- a digital environment that allows users of similar interests to communicate and associate with each other within that environment online. See **digital environment** and **online and global community.**

65. **open source** - **Software** in which the source code is available to the general public for use and/or modification from its original design free of charge. The Linux operating **system** and Open Office are examples of open source applications.

66. **output device -** a mechanical or electronic tool used to display or share information from a computer or IT device to another medium. Examples include printers, computer monitors, speakers, CD/DVD writers, headphones, and removeable storage devices.

67. **Original work-** Work that has been composed first hand.

68. **password -** a security measure used by individuals to access protected computers or computing systems, applications, or files. Passwords are comprised of strings of letters, numbers, and/or symbols.

69. **personal digital device -** an electronic device used by an individual for personal or professional productivity, communication, and/or storage of data. Examples include smart phones, PDAs, laptops, iPods, iPads, Zunes, and MP3 players.

70. **phishing -** a form of fraud in which an email recipient is asked to provide sensitive personal information (bank account or credit card numbers; social security number; birth date) either by selecting a link provided within the email or by replying to the email itself.

71. **podcast -** a blend of the words "iPod" and "broadcast." A **podcast** is a sound or audio file (although many have video as well) that can be downloaded directly from the web or via a podcast collector (such as iTunes).

72. **presentation software -** a program used to display and share information. Examples include: Microsoft's PowerPoint, Apple's Keynote, Open Office's Impress, and Prezi.

73. **primary source -** An original, authoritative document which represents a first-hand, eye-witness account of an event or subject. An example is an autobiography. One of the best sources is the Library of Congress.

74. **program** – a sequence of instructions written to perform a specified task for a computer.

75. **publishing -** making a file available for viewing or sharing**.** Examples include: Printing a brochure or newsletter or uploading a file to the internet.

76. **Qwerty keyboard -** is the most common keyboard layout. The name comes from the first six keys appearing in the top left letter row of the keyboard: Q-W-E-R-T-Y.

77. **query** - the word or words used to search a topic using a search engine. Also, a search within a database.

78. **RSS** – An acronym for Really Simply Syndication; It is a family of web feed formats used to publish frequently updated works in a standardized format.

79. **Search engine** - a tool or website that allows the user to search the Internet for specific information (using key word). The results of the search may be web pages, images, or other files.   **Advanced searches** allow the user to limit search parameters to reduce the number of results and sometimes uses **Boolean Logic**. i.e. Google, Yahoo, and Bing.

80. **social media** – digital tools, through the web or mobile devices, that provide an interactive platform for communication.

81. **secondary sources -** A document which represents a second-hand account of an event or subject that was originated by someone else. An example is a biography (a second-hand account of a person's life).

82. **server -** a computer that processes and stores information/files to and from other computers. These computers, called clients, can connect to a server through either a local area network (LAN) or a wide area network (WAN), such as the Internet. There are many different types of servers such as web servers, mail servers, and file servers. A web server hosts web pages to computers that connect to it. A mail server stores users' e-mail accounts and sends and receives e-mail messages.

83. **shortcuts** – is a finite set of keys that invoke a software or operating system operation when triggered by the user. Special Function keys are an example or CTRL + V for "paste"

84. **simulation –** a computer driven model that provides a visual example of an activity or process.

85. **Spam** - unwanted "junk" email sent to large numbers of people.

86. **Speech to text-** Ability of computer systems to accept speech input and act on it or transcribe it into written language.

87. **spoofing** - the act of tricking or deceiving a user into providing sensitive personal information. It is most frequently done via fraudulent email messages or imitating a reputable organization's website.

88. **social networking -** Social networks allow users to collaborate and communicate online. It create a sense of community. Facebook, Ning, Yahoo Groups, and Twitter are examples of social networks.

89. **software -** another term for a computer program or application.

90. **spreadsheet -** a document that stores data in a grid of horizontal rows and vertical columns. Rows are typically labeled using numbers (1, 2, 3, etc.), while columns are labeled with letters (A, B, C, etc). Individual row/column locations, such as C3 or B12, are referred to as cells. Each cell can store unique data. Spreadsheet examples include Microsoft Excel, Apple's Numbers, and Google Spreadsheet.

91. **synchronous (asynchronous)** – synchronous transmission technique that requires a common clock (occurs at the same time).   Asynchronous transmissions do NOT occur at the same time, but in sequence.

92. **system** - a combination of related components working together to perform a specific function. Examples include respiratory system, solar system, Dewey decimal system, or a technology system such as a computer or network.

93. **tab -** referring to tabs in a browser. Each tab in a single browser window is a different source

94. **taskbar** - A series of icons or graphical controls on a computer screen or IT device that enable the user to open or switch back and forth between programs. Referred to as a "dock" on a Macintosh computer.

95. **texting or text message-** The process of sending and receiving brief written messages using a cellular (mobile) phone or similar handheld device.

96. **toolbar -** a set of icons or buttons that are part of a software program's options. For example, Microsoft Word has a ribbons with icons that allow the user to open, save, and print documents, as well as change the font, text size, and style of the text. In many programs, the ribbon can be customized by adding or deleting options.

97. **transition -** In multimedia presentations, a transition is a change from one element to another. For example, you can create a transition between two slides in a presentation. Transitions are a creative way to shift from one slide to another.

98. **troubleshooting -** the process of diagnosing the cause of a problem or finding solutions.

99. **upload -** the process of transferring a file from one user's computer or IT device to another connected computer, network, or website. The transferred file is also referred to as an "upload."

100. **URL**- Uniform Resource Locator; the address of a website on the World Wide Web. The URL of any website can be found on the address bar of a web browser. *The **URL** for google is http://www.google.com.*

101. **USB** - Universal Serial Bus; a method for connecting peripherals and transferring **data** between **devices**.

102. **Video conferencing-** A real-time video session between two or more users that reside in two or more locations. This is a good use of collaboration tools. Some examples are: Skype and Face Time.

103. **virus -** small programs that are intentionally created to negatively affect IT devices such as computers, networks, or servers.. These malicious programs can (but are not limited to) create files, move files, erase files, consume a computer's memory, and cause a computer not to function correctly.   Some viruses can duplicate themselves, attach themselves to programs, and travel across networks. It is important to have a virus protection program to keep viruses from infecting a computer. Examples of virus-inducing programs include spyware, adware, and malware.

104. **Web 2.0 -** a term that refers to the second generation of the **World Wide Web**. The new generation of the web includes new features and functionality that were not available in the past. However, Web 2.0 does not refer to a specific version of the web, but rather a series of technological improvements, especially relating to interactivity. Examples of Web 2.0 tools include social networking, blogs, podcasts, and wikis.

105. **web browser -** see **browser**

106. **webinar** – an online meeting or presentation

107. **website -** a location, or site, on the Internet that is a collection of related web pages. For example a school website is comprised of many different web pages i.e., teacher pages, activity pages, etc.

108. **webpage -** a document written in HTML (Hypertext Markup Language). A web browser interprets the HTML document and displays a webpage. There are many programs that allow a user to create HTML documents (webpages) without needing to understand HTML code.

109. **Wi-Fi** – Wireless LANs, device to device connectivity (such as peer-to-peer), and a range of technologies that support other connections.

110. **wiki -** A wiki is a website that allows users to add and update content on the site using their own web browser. Wikis are "open source", i.e., other users can contribute collaboratively to its content. The term "wiki" comes from the Hawaiian phrase, "wiki wiki," which means "super fast". An example of a large wiki is Wikipedia, a free encyclopedia that approved users can edit. Examples of wiki tools include: PBworks and Wikispaces.

111. **World Wide Web** (www) – A system of interlinked hypertext documents that are accessed via the the Internet.

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Sources referenced in the compilation of this glossary include:

Webopedia - http://www.webopedia.com

Merriam Webster Online - http://www.merriam-webster.com/

Get Netwise - http://www.getnetwise.org/glossary

Utah Education Network - http://www.uen.org/core/edtech/glossary.shtml

Teaching Excellence Network - http://sait-fds.editme.com/EdTechGlossary

Learning Technologies at Virginia Tech. - http://www.edtech.vt.edu/edtech/id/index.html

Tech Terms Computer Dictionary - http://www.techterms.com

The Help Center - http://www.sharpened.net/helpcenter