

# GLOSSARY OF TECHNOLOGY TERMS

with content focus on technology for persons with visual impairments

**ASCII:** ASCII (American Standard Code for Information Interchange) is the most common format for text files in computers and on the Internet. In an ASCII file, each alphabetic, numeric, or special character is represented with a 7-bit binary number (a string of seven 0s or 1s). 128 possible characters are defined. ASCII was developed by the American National Standards Institute (ANSI).

**Braille Display:** A Braille display is a device, typically attachable to a computer keyboard, that allows a blind person to read the contents of a display one text line at a time in the form of a line of Braille characters. Each Braille character consists of six or eight movable pins in a rectangular array. The pins can rise and fall depending on the electrical signals they receive. This simulates the effect of the raised dots of Braille impressed on paper. There are usually 40, 65, or 80 arrays (characters) per line of text, depending on the device.

**Braille Embosser:** A piece of hardware or peripheral which prints the output in braille. Braille embossers connect to a computer or other device in the same way a print-producing printer does. The embosser uses pins to push braille dots into a special braille embosser paper.

**Braille Keyboard:** Any keyboard set up to represent the braille cells and space bar. Braille keyboards are modelled on the original Perkins Brailier. On a QWERTY keyboard, the letters a, s, d, and j, k, l, can be set up to be used as dots 1, 2, 3, and 4, 5, 6, respectively.

**Braille Input:** A hardware device that allows input to the computer via a Braille style keyboard or specific keys on a standard keyboard that function in Braille patterns.

**Braille NoteTaker:** A Braille note taker is a portable computer or personal data assistant that has a Braille display built onto it. These devices can be used in a stand-alone mode for taking notes, doing basic word-processing, scheduling appointments and performing other tasks. They can also be connected to a computer with screen reading software and act as a Braille terminal.

**Braille Output:** A hardware device that produces hard copy Braille or paperless, refreshable Braille as output from the computer.

**Braille Translation Software:** Software which is designed to translate text into braille. It translates documents produced in a word processor into a format which can be sent to a braille embosser. As well, if text is entered in braille, the translation software can translate it so that it can be printed on a printer.

**Download:** To copy something from a primary source to a more peripheral one, as in saving something found on the Web (currently located on its server) to diskette or to a file on your local hard drive.

**eBooks:** An eBook is an electronic file that allows readers to enjoy novels on their PC, laptop or handheld device. Generally, eBooks are formatted identically to printed editions, and several manufacturers now offer dedicated handheld eBook devices that can store numerous eBooks at one time. This offers the reader the benefit of portability and convenience.

**eText (Electronic Text):** Textual information stored in a digital form that can be presented on a computer screen. Normally this can also be presented in braille or as enlarged characters on a computer screen.

Electronic text, is a computer readable electronic file that may be a duplicate of a physical, print text such as a textbook. There are many types of e-text including ASCII or Text (.txt), Rich Text Format (.rtf), Word Perfect (.wpd) and Word (.doc). Students who are proficient with computer technology can create their own e-text using a scanner and appropriate OCR software (e.g. Arkenstone Open Book or Kurzweil 1000).

**Extension:** In Windows, DOS and some other operating systems, one or several letters at the end of a filename. Filename extensions usually follow a period (dot) and indicate the type of file. For example, *this.txt* denotes a plain text file, *that.htm* or *that.html* denotes an HTML file. Some common image extensions are *picture.jpg* or *picture.jpeg* or *picture.bmp* or *picture.gif*

**Internet:** The vast collection of interconnected networks that all use the TCP/IP protocols and that evolved from the ARPANET of the late 60's and early 70's. An "internet" (lower case i) is any computers connected to each other (a network), and are not part of the Internet unless they use TCP/IP protocols. An "intranet" is a private network inside a company or organization that uses the same kinds of software that you would find on the public Internet, but that is only for internal use. An intranet may be on the Internet or may simply be a network.

**Link:** URL imbedded in another document, so that if you click on the highlighted text or button referring to the link, you retrieve the outside URL. If you search the field "link:", you retrieve on text in these imbedded URLs which you do not see in the documents.

**Online:** Online is the condition of being connected to a network of computers or other devices. The term is frequently used to describe someone who is currently connected to the Internet.

A device such as a printer is online when it is turned on and accessible to a computer.

**Operating System:** An operating system (sometimes abbreviated as "OS") is the program that, after being initially loaded into the computer, manages all the other programs in a computer. The other programs are called *applications*. The application programs make use of the operating system by making requests for services through a defined application program interface. In addition, users can interact directly with the operating system through a user interface.

**Optical Character Recognition (OCR):** A technology that allows the user to scan a printed page (with a scanner), analyze the printed text, recognize the letters or other

characters, and store this information as a computer text file that can be manipulated through a word processor or text editor.

With adaptive software the document created can be read by a screen reader or as hard copy produced in either braille or print.

**PDF or .pdf or pdf file:** Abbreviation for Portable Document Format, a file format developed by Adobe Systems, that is used to capture almost any kind of document with the formatting in the original. Viewing a PDF file requires Acrobat Reader, which is built into most browsers and can be downloaded free from Adobe.

**Peripheral:** A piece of hardware that is located outside the main computer. It usually refers to external items such as printers, embossers, or scanners.

**Refreshable Braille Display:** On a piece of technology, a braille display is a line of braille produced with six or eight plastic dots, sometimes called pins, to represent the dots in a braille cell. The pins move up and down to present the text on the screen of a computer or the information entered in a braille notetaker. This display is sometimes referred to as "refreshable" braille.

**Scanning (definition 1 of 2):** A flatbed scanner with software is used for importing printed (hard copy) information into the computer to be viewed, and/or magnified. This process is referred to as scanning.

**Scanning (definition 2 of 2):** "Switch Access" Scanning  
Scanning is an alternative to accessing the keyboard and mouse. This is a slow, but functional alternative for individuals with significant physical limitations. Switch access uses one or more switches to select from an electronic (set) of graphic images, symbols, and/or alphanumeric characters. The individual only needs to have consistent control of one or more anatomical sites for accessing a single switch, or multiple switches.

Not to be confused with a *flatbed scanner* for input.

**Screen Magnification:** A screen magnification program enlarges the image on screen. It is useful to magnify the text and graphics on the screen for users who require large text and graphics. Most magnification programs have variable magnification levels (from 2 times to 16 times). Some have split-screen viewing of magnified and unmagnified windows. Speech capabilities may also be included in screen magnification applications. Speech capabilities may include the ability to echo typing, control caret reading, and launch document or application readers.

**Screen Reader:** A program which speaks the contents of the computer's screen via a speech synthesizer. Such a program is usually also equipped with a system that allows the user to "navigate," or find his or her way around the screen, without the necessity of seeing the screen.

**Tactile Image Device:** A device used in the production of embossed diagrams or images which can be interpreted tactually. The tactile image is created by using a special heat sensitive paper which has the image drawn on it and is then passed through

the tactile image device. This creates a raised outline of the image. The Tactile Image Enhancer is an example of a tactile image device.

**Text-to-Speech:** Software (Also known as Talking Word Processors or Text Readers) designed for individuals with reading difficulties. Simultaneously highlights and reads aloud text documents. Text readers primarily read aloud text as it is keyboarded, and reads aloud text within documents such as e-mails, word processing documents, and other electronic text format. This type of software applications are more likely to be used by people with learning disabilities, people with poor reading abilities, and ESL (English as Second Language).

Text-to-speech (text reader) applications should not be confused with screen readers.

**URL:** Uniform Resource Locator. The unique address of any Web document. There is a logic to layout of a URL:

*Anatomy of a URL:*

(e.g. <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html>)

http:

Type of file (could say ftp:// or telnet:// )

www.lib.berkeley.edu

Domain name (computer file is on and its location on the Internet)

/TeachingLib/Guides/Internet

Path or directory on the computer to this file

FindInfo.html

Name of file, and its file extension (usually ending in .html or .htm)

**Word Processor:** A type of applications software that is used to enter, edit, manipulate, and format text. In order to be considered a word processing program rather than a simple text entry and editing program, a program should have fairly sophisticated capabilities.

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Special Education Technology – British Columbia

<http://www.setbc.org>

WhatIs.com

<http://whatis.techtarget.com/>