Terms to Understand in Assistive Technology

Students with LDs will most often require Assistive Technology (AT) that assists with reading, language, organizational skills, and processing information. Software changes quickly - so we'll just stick to describing the basic sorts of assistive technologies, and share some of the benefits. Cost is often a factor, as is computer hardware. Your school principal will be able to guide you in finding the appropriate funding sources and training.

**Screen Reading Software**
Screen reading software will read the text that appears on a computer screen to the user. Screen reading software is particularly useful for individuals with dyslexia, but is also used for people who are auditory learners.

**Speech/Voice Recognition Software**
Speech/Voice recognition software also sometimes referred to as speech-to-text software will convert the spoken word into text on a page, or into computer commands (i.e. opening files, or navigating software applications) via a microphone. Speech recognition software is particularly useful for individuals who have written expressive difficulties and difficulty using keyboards to navigate software applications.

**Word Prediction Software**
Word prediction software will present possible words that a user is looking for while typing text, which the user can select with a mouse click. The software will also predict the next possible word based on frequency of usage and context. This technology is particularly useful for individuals with difficulty spelling, and for people who have difficulty typing.

**Optical Character Recognition (OCR)**
Optical Character Recognition (OCR) software will convert paper based text into electronic text for use with screen readers. A scanner is needed to scan materials from book or other paper-based text. The OCR will then recognize the letter shapes through imaging analysis and convert them to electronic text. This technology is particularly useful for individuals who cannot access printed materials due to low vision or processing deficits.

**Visual Organizers**
Visual Organizers are used to present ideas, concepts, information, and related concepts in the form of charts, tables, graphs, flowcharts, and diagrams. This technology is particularly useful for individuals who have difficulty processing, analyzing, and comprehending text-based information but is also used for people who are visual learners.

**Electronic Organizers**
Electronic or digital organizers are hardware devices or software used for time management and resource organization. This technology is particularly useful for individuals who have difficulty with time management and organization, and is also used by people who are tactile learners and prefer opportunities where they can actually do something physically with the information they are to learn.
Some Useful and Relevant Assistive Technology to Consider

**Reading**

*Kurzweil 3000*

Kurzweil 3000 is a text-to-speech and scanning program. It features a number of learning tools, such as, highlighting and annotation, voice recording, audio files creation, audible dictionary and more.

**BENEFITS FOR STUDENTS WITH LD:**
- Have the program read your writing back while editing
- Scan and listen to course readings and lecture notes
- Highlight important points to create reading reviews
- Create audio files from your course materials and listen on the go

*Dragon Naturally Speaking*

Dragon Naturally Speaking is a speech recognition program that transcribes verbal information. With above 97% accuracy, Dragon can be used with any word processing program, email, or web browser.

**BENEFITS FOR STUDENTS WITH LD:**
- Express ideas verbally to help you with essay writing
- Record your research summaries away from computer and have Dragon transcribe from recording
- Use text reading feature to listen for mistakes when editing your essays

*Read & Write by TextHELP*

Read & Write is a text-to-speech program with GOLD edition adding the scanning and OCR functionality. Additional features include a dictionary, sound file maker, word prediction, pronunciation wizard, etc.

**BENEFITS FOR STUDENTS WITH LD:**
- Have the program read your writing back while editing
- Scan and listen to course readings and lecture notes
- Create audio files from your course materials and listen on the go
- Collect summary information for reading reviews

**Notetaking**

*Digital Recorder*

Digital recorders allow for tape-free recording that can be transferred to computers in different audio formats. They offer features like folder management, index marking, mp3 playback, etc.

**BENEFITS FOR STUDENTS WITH LD:**
- Record classes to supplement handwritten notes
- Use index marking to highlight important lecture points
- Get organized with voice memos and alarms

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• Brainstorm ideas verbally and recorder research summaries away from computer

**AlphaSmart, Dana and Neo**
AlphaSmart, Dana and Neo are word-processing keyboarding devices. AlphaSmart is a simple word processor with limited storage space. Dana builds on this functionality with palm operating system tools.

**BENEFITS FOR STUDENTS WITH LD:**
• Take lecture notes and easily transfer them to computer
• Organize your time with a palm calendar
• Create to-do lists and set reminder alarms
• Type assignments and summarize research on the go with the convenience of word processing features.

**Organization and Planning**
**Personal Digital Assistants**
PDA’s are used for time management and organization. Higher end, feature-rich devices are capable of word processing, sound recording, and wireless internet access.

**BENEFITS FOR STUDENTS WITH LD:**
• Keep track of your deadlines with a calendar
• Plan required tasks with to do lists and priorities
• Alarms help you keep all appointments on time
• Take notes in class with a portable keyboard
• Import electronic course readings, including PDF files

**Inspiration**
Inspiration allows users to plan and organize their ideas in visual form. Diagramming and outlining workspace provide tools for brainstorming, concept mapping, comparative analysis, planning, webbing.

**BENEFITS FOR STUDENTS WITH LD:**
• Use diagrams to organize your essay structure and generate outlines
• Visually map difficult readings to see the big picture and how ideas relate
• Use Rapid Fire feature to quickly brainstorm your ideas
• Organize your schedule and plan tasks in visual form

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