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Tech Tools for Students with DYSLEXIA

What is Assistive Technology (AT)?

Assistive technology is defined as any device, piece of equipment or system that helps bypass, work around or compensate for an individual's specific learning deficits. AT doesn't cure or eliminate learning difficulties, but it can help an individual capitalize on their strengths and bypass areas of difficulty. Assistive technology is most effective when accompanied by remedial efforts in an educational setting.

Considerations for AT?

Assistive Technology solutions are determined based on the specific and identified needs of each individual student rather than by disability.

- What task do we want this student to do, that she/he is unable to do at a level that reflects his/her skills/abilities?
- What are the environmental considerations?
- Consider an individual's learning style and technology interests.
- What accommodations or modifications are currently used and/or is there a form of AT (devices, tools, hardware, or software) that is currently used to address this task?
- What is the student's level of success using these tools?
- Is the student currently able to independently complete tasks with current strategies or accommodations? If so, AT is most likely not necessary!
- Would the use of AT help the student perform this task more easily or efficiently, in the least restrictive environment, or perform successfully with less personal assistance?

AT tools range from low tech (simple) solutions to high tech (more sophisticated) solutions and do not have to be expensive.

Training for the student, family and professionals working with the student is a crucial component to the successful implementation of AT.

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*The following examples of assistive technology tools can be used to develop and strengthen a variety of academic skills. This is **not** an exhaustive list of all assistive technologies, instead it shows a few selected tools. When being used as part of an IEP, transition plan, employment or independent living plan, technology should be selected and implemented by a team of professionals in the appropriate format.*

READING

E-Text Readers

Hardware devices specifically designed to read Electronic Text.
Examples include iPad, Nook, Kindle Fire, Classmate Reader and Intel Reader.

Alternative Formats

Refers to the transcription of books or other content (such as notes or newspapers or magazines) into a format other than standard print, i.e., large print, Braille, audio, talking books.
Examples include

Computer Software	Read:Outloud Read:Outloud Bookshare Edition (free for members) Kurzweil 3000 vs. 14 Learning Ally
iDevice	Voice Dream Reader (with Bookshare membership) Learning Ally
Google Chrome	Bookshare Web Reader Learning Ally Link

Scan and Read Programs

This combination of hardware (flatbed or auto feed scanner) and software will allow a hard copy of a document to be scanned, converted to text the computer understands (OCR) and then read aloud by the computer. The user can choose different voices, reading speeds and other customizable options.
Examples include

Computer Software	Kurzweil 3000 vs. 14 WYNN Read & Write Gold
iDevice	Prizmo or **Prizmo with Claro PDF**
Google Chrome	**Read & Write Google with SnapVerter** Snap and Read

Scan and Read Pens

A hardware device designed to scan, say, and define a single word. These pens have a database as large as 400,000 words.
Example include the **ReadingPen 2** or Quickionary 2.

Reading Skills

There is a plethora of software available to help students develop specific skills in phonemic awareness, phonics, sight words, vocabulary, and reading comprehension.
Examples include Lexia, Edmark and Laureate**. L'Escapadou** and Grasshopper Apps.

Fluency is the ability to read phrases and sentences smoothly and quickly, while understanding them as expressions of complete ideas.
Examples include **Fluency Tutor by TextHelp**, The Start to Finish program and Read Naturally.

- **Comprehension** has to do with identifying key elements in a story, summarizing, predicting, questioning, making connections while reading, and using pictures to help figure out the text. Tools to support comprehension are embedded in many software programs, iDevices, apps, and extensions.

  Examples include **ReadWorks.com**, a leading national non-profit organization that provides FREE, research-based, and Common Core-aligned reading comprehension curriculum, and **Rewordify.com**, a website the puts text in a pane to be 'rewordified' (more simplistically explained), which has some great features within it including feature settings, study materials, flash cards, quizzes, cloze passages, and 'rewordified' books. http://rewordify.com/vidsiteoverview.php

SPELLING

Electronic Spell Checker

A portable dictionary, thesaurus and spell checker that has an option of a visual display with auditory output.
Examples include the Franklin's "The Assistant" and "Collegiate Voice".

WRITING

Voice Recognition

Voice recognition (also called speech recognition) allows the user to speak to the computer, instead of using a keyboard or mouse, to input data or control computer functions. Voice recognition systems can be used to create text documents such as letters or email, to browse the Internet, and to navigate among applications and menus.
Examples include

Computer Software	Windows 7/8 Built-in Accessibility: Voice Recognition Apple Built-in Accessibility: Dictation Dragon Naturally Speaking
iDevice	Built-in Accessibility: Siri and Dictation
Google Chrome	Google Docs Built-in Accessibility: Dictation Read & Write Google

Talking Word Processors

Talking word processors (also called TTS or Text-to-Speech) are writing software programs that provide audio feedback as the student writes. As each letter is typed and each word is written, the talking word processor will "speak" it back to the user. These programs offer other adjustments as well, such as enlarging the size of the text, and changing the font or color of the foreground, background, and highlighting box, to assist students in following along as the text is read.
Examples include

Computer Software	Apple Built-in Accessibility: Speak Balabolka (free) Write:Outloud Clicker 6 Kurzweil 3000 vs. 14 WYNN
iDevice	Built-in Accessibility: Speak Selection Co:Writer iReadWrite Clicker Connect, Sentences, and Docs as well as WriteOnline
Google Chrome	Read & Write Google Speak It

Word Prediction Programs

Word prediction programs allow the user to select a desired word from an on-screen list located in the prediction window. The computer-generated list predicts words from the first or second letter(s) typed by the user. The word may then be selected from the list and inserted into the text by typing a number, clicking the mouse, or scanning with a switch.

Examples include

Computer Software	Co:Writer 6 Write Online Read & Write Gold
iDevice	Built-in Accessibility: Predictive Keyboard Co:Writer iReadWrite Clicker Connect, Sentences, and Docs as well as WriteOnline
Google Chrome	Read & Write Google Co:Writer Universal

ORGANIZATION and NOTETAKING

Livescribe Pens

The Livescribe Smartpens will record lectures that you are listening to, while you take handwritten notes. You can playback the audio recording that is synced to your handwritten notes within the notepad, or on your computer.

Organizational Software

Software that lets the user organize notes, to-do lists and documents. Often allows the user to organize with folders and/or with color-coding.

Examples include

Computer Software	Sonocent Todo.ly
iDevice	Built-in App: Notes Notability iStudiez PRO
Google Chrome	Extensify Any.do

Visual Mapping Software

Electronic concept mapping allowing user to link ideas to each other in thematic and hierarchal ways, with simultaneous outlining function.

Examples include

Computer Software	Sonocent Inspiration and Kidspiration www.ReadWriteThink.org
iDevice	Inspiration and Kidspiration Tools4Students
Google Chrome	Mindmeister

http://appcrawlr.com/app/uberGrid/977046

MATH

There are several options for learning math in a multisensory way. Using a variety of teaching tools helps kids visualize and understand math concepts better and improve a student's ability to progress in the general math curriculum.
Examples include

AT Tools	Talking Calculators Tactile Rulers
Computer Software	National Library of Virtual Manipulatives MathType software
iDevice	iStudious flashcards Talking Calculator