

## Assistive Technology

**Brief Description:** Assistive technology ranges from no-tech to high-tech devices and is an umbrella term that includes assistive, adaptive, and rehabilitative devices for people with disabilities. It also includes the process used in selecting, locating, using and determining effectiveness of these devices.

### Helpful Links:

- **Texas AT Network** provides a good overview to understand the basics of assistive technology.

<http://www.texasat.net/default.aspx?name=trainmod.consideration>

- **WATI** also provides a good overview to understand the basics of assistive technology for students.

<http://wati.org/>

- **Intervention Central** has a large number of free resources for reading interventions. Tools to generate fluency passages for Curriculum Based Assessment from any book. Great resources.

[www.interventioncentral.org](http://www.interventioncentral.org)

- **The US Department of Education** (My Child's Special Needs section) provides links to Guides to the IEP Program, Family & Advocates Partnership for Education, Disability Discrimination information, and much more.

<http://www.ed.gov/parents/needs/speced/edpicks.jhtml?src=ln>

- **The Office of Special Education and Rehabilitative Services** (OSERS) is committed to improving results and outcomes for people with disabilities of all ages.

<http://www.ed.gov/about/offices/list/osers/index.html?src=oc>

- **Tools for Life Lab TASH** - Equity, Diversity, Social Justice and Inclusion is an international association of people with disabilities, their family members, other advocates, and professionals fighting for a society in which inclusion of all people in all aspects of society is the norm.

<http://www.tash.org/>

- **The Council for Exceptional Children** (CEC) is the largest international professional organization dedicated to improving educational outcomes for individuals with exceptionalities, students with disabilities, and/or the gifted.

<http://www.cec.sped.org/>

### **Specific Assistive Technology for Teaching:**

- **CAST's Book Builder** is a free tool where students can create their own stories with audio and visual prompts.

<http://bookbuilder.cast.org/>

- **General information** provides cards and lessons to use on teaching social skills and behavior to individuals with autism.

<http://www.polyxo.com/socialstories/introduction.html>

- **Books Should Be Free** provides free public domain audiobooks and ebooks for use with iPhone, Kindle and mp3 players.

<http://www.booksshouldbefree.com/>

- **Spreadsong** provides free public domain audiobooks from iTunes.

<http://itunes.apple.com/us/app/free-audiobooks-4-728-classic/id352615816?mt=8>

- **Bookshare** is an online library of digital books for people with print disabilities. It operates under exception to US Copyright law which allows copyrighted digital books (not just public domain) to be made available to people with qualifying disabilities. To become a member you must prove that you have a need for their service by completing a proof of disability form (available on their web site).

<https://bookshare.org/>

- **Learning Ally** has 80,000 + digitally recorded textbooks and literature titles available to individuals with print disabilities. The materials can be delivered through internet downloads and accessed using various mainstream and assistive technology devices. Through a contract with the Texas Education Agency, Learning Ally offers free memberships to Texas K-12 public and charter schools with qualifying students.

<http://www.learningally.org/Educators/school-grants/Texas>

- **American Printing House for the Blind, Louis Database** contains information on approximately 407,055 titles in accessible formats, including braille, large print, sound recording, and electronic files.

<http://louis.aph.org/catalog/CategoryInfo.aspx?cid=152>

- **The National Center on Accessible Instructional Materials** serves as a resource to state and district-level educators, parents, publishers, conversion houses, accessible media producers, and others interested in learning more about AIM and the National Instructional Materials Accessibility Standard (NIMAS).

<http://aem.cast.org>

- **Resources By Disability:** For assistive technology and other tools based off of students abilities and disabilities check out these sites:

For AT resources to assist with students with **Dyscalculia**, check out this site:

<http://www.dyscalculia.org/math-ld-books/math-tools>

For AT resources to assist students with **Learning Disabilities, ADD/ADHD, and Behavioral** struggles check out this site:

<https://www.understood.org/en/learning-attention-issues>

For AT resources to assist **Bilingual and English as a Second Language** students, check out this site: <http://elltx.org/instructional.html>

For ideas to assist with **Gifted** students, check out

[http://www.texaspsp.org/toolkit/GT\\_Teacher\\_Toolkit.html](http://www.texaspsp.org/toolkit/GT_Teacher_Toolkit.html) and

<http://www.texaspsp.org/toolkit2/Toolkit2.html>

**Resources By Content Area:** For assistive technology and further ideas for specific areas of need and strength for any student, check out the following. (These ideas are taken with permission directly from By Kristin Stanberry and Marshall H. Raskind, Ph.D., GreatSchools.net staff. This piece is reprinted with permission from [greatschools.net](http://greatschools.net), Copyright 2009.)

- **Math:** Electronic math worksheet software enables students to [organize](#) and work through problems on a computer screen. Numbers that appear onscreen can be read aloud by a speech synthesizer. Products to consider: MathPad and MathPad Plus ([cambiumlearning.com](http://cambiumlearning.com)) and MathTalk ([mathtalk.com](http://mathtalk.com)). Talking calculators have a built-in speech synthesizer that reads aloud each number, symbol, or operation key a student presses, as well as the answer. The aural feedback lets an attention deficit student know whether he pressed the right keys and verifies the answer before he transfers it to paper. Products to consider: Independent Living Aids ([independentliving.com](http://independentliving.com)), MaxiAids ([maxiaids.com](http://maxiaids.com)), and

AbleData ([abledata.com](http://abledata.com)) make a range of pocket-size and desktop talking calculators -- some with an alarm to keep students moving along.

[Scholastic.com/kids](http://Scholastic.com/kids) has a terrific page where students can practice their math.

Or try MathPad Plus software ([InfoUse.com/mathpadplus](http://InfoUse.com/mathpadplus)). Designed for grades three through five, it covers basic math operations, including fractions and decimals.

- **Writing:** Kidspiration software ([Inspiration.com](http://Inspiration.com)) helps children organize their thoughts. It can help visual learners organize their notes in preparation for a test or group ideas to create an outline for a paper. Portable word processors are lightweight devices that look like a computer keyboard with a screen. They can be helpful to ADHD children who have trouble with [handwriting](#). These battery-powered machines can be brought to school for note-taking and writing assignments. At home, files can be transferred to a PC or Mac. Some portable word processors come pre-loaded with word prediction and text-to-speech software. Products to consider: AlphaSmart Writer Learning Neo ([renlearn.com](http://renlearn.com)), Fusion ([writerlearning.com](http://writerlearning.com)), and QuickPad ([quickpad.com](http://quickpad.com)). Speech-recognition programs allow a student to read aloud into a microphone and see his words appear on a computer screen. The software is especially helpful for students whose [oral language skills are superior to their writing skills](#). Products to consider: Dragon NaturallySpeaking ([nuance.com](http://nuance.com)), Simply Speaking ([simplyspeakinginc.com](http://simplyspeakinginc.com)), and MacSpeech ([macspeech.com](http://macspeech.com)). Word-prediction software “predicts” the word the user intends to type, expanding his vocabulary and improving written expression. These programs can assist attention deficit students in producing grammatically correct and topic-specific sentences and paragraphs on a word processor. Products to consider: Co:Writer ([donjohnston.com](http://donjohnston.com)), EZ Keys ([words-plus.com](http://words-plus.com)), and WordQ ([wordq.com](http://wordq.com)).
- **Note-Taking:** Portable Keyboards, such as the AlphaSmart 3000 ([AlphaSmart.com](http://AlphaSmart.com)), can hold up to 100 pages of text, which can be uploaded to a computer. They're wonderful for children who write slowly or illegibly.
- **Reading:** Audio books and reading software. Recorded books allow users to listen to text, and they are available in a variety of formats: audio cassette, CD, and MP3 download. Special playback units allow users to search and bookmark pages and chapters. Products and services to consider: [Audible.com](http://Audible.com) allows students to listen to books on the computer or to download and burn on CDs. Kurzweil 3000 ([kurzweilededu.com](http://kurzweilededu.com)) improves reading speed and comprehension by enabling a student to convert print to electronic text. This program includes

both visual and auditory feedback to help an attention deficit student understand and retain what he is reading. Optical character recognition (OCR) programs allow a student to scan printed material into a computer or handheld unit. The scanned text is then read aloud by a speech synthesis/screen reading system. OCR is available in stand-alone units, as software, and as portable, pocket-sized devices that display words on an easy-to-read screen. Scanning pens are perfect for library research and other reading that doesn't involve a computer. This device scans text as it's dragged along the page. The pen displays the words on an easy-to-read screen, speaks them aloud, and provides definitions. Products to consider: WYNN Literacy Software Solution ([freedomscientific.com](http://freedomscientific.com)), Quicktionary 2 Scanning Translator and Reading Pen Basic Edition (both available at [wizcomtech.com](http://wizcomtech.com)). Speech synthesizers/screen reader systems can display and read aloud text on a computer screen, including text that has been typed by a student, scanned in from printed pages (books, letters), or material from the Internet. Products to consider: Aspire Reader 4.0 ([axistive.com](http://axistive.com)), ClassMate Reader ([humanware.com](http://humanware.com)), and Read&Write Gold ([texthelp.com](http://texthelp.com)).

#### **Resources Available At Our Center:**

- Assistive Technology 3rd Edition
- Reader Strips
- Chair Bands
- Weighted Pencils
- Left Handed Scissors
- Sensory Light Covers
- Tactile Letters
- Yoya Sensory Balls
- Toss and Learn Comprehension
- Differentiated Instruction Cubes