AT Supports for Reading and Writing in the General Education Environment

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Section 300.5 of the Individuals with Disabilities Education Act (IDEA) defines an Assistive Technology device as:

"any item, piece of equipment or product system, whether acquired commercially off the shelf, modified or customized, that is used to increase, maintain or improve the functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted or the replacement of such device."

Assistive Technology:

- Helps ALL students learn more effectively and helps students with disabilities compensate for their impairments, giving them the same access to education, as their peers
- Promotes independence
- Decreases the need for other educational supports
- Builds confidence and self esteem
- Better prepares them to be enter the adult and working world

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What are some common myths surrounding the use of Assistive Technology?

Some of the most common AT solutions include:

Vision/Hearing

- Glasses/Contacts
- Enlarged Text
- Slant boards
- Magnification software
- CCTV
- Books in Alternate Format/Large print
- Highlighters
- Hearing Aids/FM Systems
- Notetakers/copy of notes

Mobility

- Wheelchair (manual or electric)
- Stander
- Laptray
- Canes, crutches, leg braces

Some of the most common AT solutions include:

Organization/Studying

- Planner/Schedule
- Highlighters
- Colored pencils, markers
- Post it Notes
- Note taking software/apps
- Graphic Organizers

Communication

- Communication boards and devices
- Low and High Tech [Dynavox devices, iPads with communication apps, Picture Exchange Communication symbols books (PECS)]

Some of the most common AT solutions include:

Math

- Calculators
- Software and apps for writing calculations
- Graphing paper
- Drawing tools such as a ruler, protractor and stencils
- Manipulatives such as number lines, objects, etc.
- Graphic Organizers
- Dictation

Computer Access

- Proper positioning to access computer and keyboard
- Adapted Keyboards (Enlarged, Braille, etc.)
- Touch Screens
- Adapted mouse/trackpad
- Accessibility settings ie. high contrast screen, enlarged cursors, text to speech, keyboard shortcuts, sticky keys, etc.
- Screen magnifiers
- Enlarged text, fonts choices, etc.

AT Supports for Reading and Writing:

Reading Supports

- Bookshare (bookshare.org)
- Bookshare Web Reader Ext. (Chrome)
- Learning Ally
- Snap and Read Universal

Both Reading and Writing

- Read and Write Universal

Writing Supports

- Google Voice Typing
- Dragon Naturally Speaking
- SpeakIt Chrome Extension
- Co-Writer
- SnapType app
- Doodle Buddy app
- EquatIO (for Math from Texthelp)

AT Reading Supports

Do you know what BOOKSHARE is?

Let's find out!

Some facts about Bookshare

- FREE to students in the US who have a qualifying disability.
- Students can obtain both an Organizational and Individual membership.
- Search for or discover new books, magazine, from over 600K titles.
- Reading is easy with many reading tools available to read on their own or be assigned books to use on Webshare Reader.
- Readable on a variety of devices/apps including low vision and blind students (Braille options)
- Lots of training, videos, brochures and How to Guides for self teaching and support.
- Operates in the U.S. under a copyright exemption.

Notable apps to mention for reading Bookshare Books:

- Read2Go (iOS device) $19.99

- Voice Dream Reader (iOS and Android) $14.99

- Go Read (Android) Free

Learning Ally

- Non-profit Audiobook company
- Students can qualify under 4 categories (Reading Accommodation, Specific Learning Disability, Blind or Visually Impaired or Other Physical Disability.)
- Learning Ally has 80,000 human-read audiobooks with an extensive collection of K-12 books including popular fiction, classic literature, textbooks, test prep and study aids are a download away. Audiobooks on mainstream devices using accessible technology with page-level navigation, text highlighting and speed adjustments.
- Cost? District license 1-500 students in a building is $1250 through Erie 1 BOCES
- 10 Individual licenses - $990

Screen Reader

Snap & Read Universal by Don Johnston Co.

- Reads accessible and inaccessible test aloud.Levels the text to help with comprehension
- Works in Google Drive, email, websites, Kindle cloud reader and PDF's
- Works offline
- Dynamic Text Leveling
- Can translate 100+ languages in Chrome
- Provides data for reading level and usage
- Study Tools and Bibliographer
- Cost? Approximately $950 per building

Watch a Demo and Sign up for a Free Trial.

AT Writing Supports

Writing Supports:

- Dragon Naturally Speaking
- Google Voice Typing
- Co-Writer
- SnapType app
- Doodle Buddy
- EquatIO Digital Math
- ModMath app
- Panther MathPaper App
   Video

Read and Write

- Improve reading comprehension: hear web pages and documents read aloud with a choice of natural voices
- Help students understand unfamiliar words with text and picture dictionaries
- Develop writing skills and confidence with word prediction
- Support homework and independent research with study skills tools

Read and Write is Free to teachers!! Free 30 day trial for others.
https://www.texthelp.com/en-us/products/free-for-teachers/#

- Turn documents and web pages into MP3 files for easy listening on the move
- Assists English Language Learners and students studying a second language
- Accessibility features like screen masking give extra support to students with dyslexia and other literacy challenges
- Access through a variety of devices and platforms.

Video

Cost?? Single annual license: $145; Discounted prices for groups and schools.

Challenges for Teachers

Challenges facing our teachers in implementing and helping students use Assistive Technology in their classrooms:
- Training
- Time to plan and implement its use
- Lack of available AT professionals to provide training and support for students/staff
- Evaluating the success and making changes when necessary
- Cost
- Motivation of the student in using the AT

Considerations for the CSE

What are some things that the CSE should consider before making a referral for an Assistive Technology Evaluation due to concerns with Reading and Writing?

- Make sure the student has had a thorough visual evaluation by an Opthamologist to rule out any visual deficits that may impact sight. Hearing should also be formally assessed if auditory comprehension/processing is an issue.
- Has an OT Evaluation been completed to assess fine motor issues for writing or an OT consulted regarding concerns of the team?
- Complete an Assistive Technology Consideration Guide to pinpoint areas that may be affected and develop a plan to work on them.
- What modifications and accommodations would the student benefit from?

http://www.drscavanaugh.org/assistive/technology_accommodations.htm
http://www.drscavanaugh.org/assistive/cklist.htm

Question and Answer Time

Thank you for your time this afternoon.

If you have any questions/comments, please feel free to contact me at:
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Resources

http://www.nysed.gov/edtech/assistive-technology-0

https://sites.ed.gov/idea/regs/b/a/300.5

https://www.understood.org/en

www.bookshare.org

http://www.thevisiontherapycenter.com/discovering-vision-therapy/bid/98393/How-Functional-Vision-Problems-Affect-Reading-Writing-and-Arithmetic

http://www.drscavanaugh.org/assistive/technology_accommodations.htm

http://www.gpat.org/Georgia-Project-for-Assistive-Technology/Documents/Consideration/GPAT%20AT%20Consideration%20Process%20Guide.pdf

Program and App Resources

- Learning Ally: http://www.learningally.org/
- Snap and Read Universal: http://donjohnston.com/snap-read/
- CoWriter Universal: http://donjohnston.com/cowriter/
- Texthelp: Read and Write:https://www.texthelp.com/en-us/sectors/education/schools/
- SnapType: http://www.snaptypeapp.com/
- Google Voice Typing: https://support.google.com/docs/answer/4492226?hl=en
- Dragon Naturally Speaking: https://www.nuance.com/dragon/dragon-for-pc.html
- Doodle Buddy: https://youtu.be/iisZ2mux1nk
- EquatIO:https://chrome.google.com/webstore/detail/equatio-math-made-digital/hjngolefdpdnooamgdldlkjgmdcmcinc?hl=en-US
- Read and Write: https://www.texthelp.com/en-us/products/read-write/read-write-for-education/

Read2Go: https://www.bookshare.org/cms/help-center/reading-tools/read2go
Voice Dream: https://www.bookshare.org/cms/help-center/reading-tools/voicedreamreader
Go Read: https://www.bookshare.org/cms/help-center/reading-tools/goread
ModMath: http://www.modmath.com/
Panther Math Paper: http://panthertechnology.com/products/math-paper/