

Assistive Technology

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Agenda

- What is Assistive Technology?
- Read Aloud in Microsoft Edge
- Immersive Reader
- C-Reader Pen
- Other tools in use at Pioneer

What is Assistive Technology?

Assistive technology (AT) is any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of people with disabilities.

- AT can be low-tech: communication boards made of cardboard or fuzzy felt.
- AT can be high-tech: special-purpose computers.
- AT can be hardware: prosthetics, mounting systems, and positioning devices.
- AT can be computer hardware: special switches, keyboards, and pointing devices.
- AT can be computer software: screen readers and communication programs.
- AT can be inclusive or specialized learning materials and curriculum aids.
- AT can be specialized curricular software.
- AT can be much more—electronic devices, wheelchairs, walkers, braces, educational software, power lifts, pencil holders, eye-gaze and head trackers, and much more.

Assistive technology helps people who have difficulty speaking, typing, writing, remembering, pointing, seeing, hearing, learning, walking, and many other things. Different disabilities require different assistive technologies.

Assistive Technology (AT) Consideration Checklist

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<p>This checklist was designed to support Committees on Special Education (CSEs) and Committees on Preschool Education (CPSEs) in their thorough consideration of AT devices for students with disabilities. The AT devices included on this checklist are not exhaustive, so CPSEs/CSEs are encouraged to make other student-specific considerations outside of the items on this checklist if necessary. This checklist is for consideration purposes and may be used to support the assessment of an assistive technology device (i.e., devices) for an individual student.</p>					
<p>Student: _____</p> <p>Date: _____</p>					
<p>Environments and Tasks</p> <p>(Check all applicable environments and tasks in which the student may require AT support.)</p> <p>Curriculum Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Instruction <input type="checkbox"/> Independent Work <input type="checkbox"/> Group Work <input type="checkbox"/> Vocational Tasks <input type="checkbox"/> Assessments <input type="checkbox"/> Transitions <input type="checkbox"/> Homework <p>Physical Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Building Navigation <input type="checkbox"/> Materials Manipulation <input type="checkbox"/> Equipment Use <p>Social Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Communicating with Others <input type="checkbox"/> Participating in Extracurricular Activities <input type="checkbox"/> Peer Interaction <input type="checkbox"/> Game Play <p>Safety Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Safety Drills <input type="checkbox"/> Building Safety <input type="checkbox"/> Bus Safety <input type="checkbox"/> Equipment Safety <p>Environments:</p> <ul style="list-style-type: none"> <input type="checkbox"/> General Education Classrooms <input type="checkbox"/> Special Education Classrooms <input type="checkbox"/> Hallways <input type="checkbox"/> Outdoor Activity Areas <input type="checkbox"/> Assembly Spaces <input type="checkbox"/> Cafeteria/Meal Spaces <input type="checkbox"/> School Bus <input type="checkbox"/> Job Sites <input type="checkbox"/> Field Trips <input type="checkbox"/> Home <p>Other Tasks/Environments not listed: _____</p>	<p>Challenge Areas Related to Tasks</p> <p>(Check "Independent" if the student functions adequately with standard classroom tools. Check "Consider AT" if additional support may be needed.)</p> <p>Scaling, Positioning & Mobility</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Reading</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Writing</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Computer Access</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Communication</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Mathematics</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Organization</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT 	<p>Possible AT Devices</p> <p>(For areas in which "Consider AT" is chosen in the preceding column, indicate any possible AT devices the CPSE/CSE may wish to consider when assessing the student's AT needs.)</p> <p>Other: _____</p>	<p>Environments and Tasks</p> <p>(Check all applicable environments and tasks in which the student may require AT support.)</p> <p>Curriculum Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Instruction <input type="checkbox"/> Independent Work <input type="checkbox"/> Group Work <input type="checkbox"/> Vocational Tasks <input type="checkbox"/> Assessments <input type="checkbox"/> Transitions <input type="checkbox"/> Homework <p>Physical Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Building Navigation <input type="checkbox"/> Materials Manipulation <input type="checkbox"/> Equipment Use <p>Social Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Communicating with Others <input type="checkbox"/> Participating in Extracurricular Activities <input type="checkbox"/> Peer Interaction <input type="checkbox"/> Game Play <p>Safety Tasks:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Safety Drills <input type="checkbox"/> Building Safety <input type="checkbox"/> Bus Safety <input type="checkbox"/> Equipment Safety <p>Environments:</p> <ul style="list-style-type: none"> <input type="checkbox"/> General Education Classrooms <input type="checkbox"/> Special Education Classrooms <input type="checkbox"/> Hallways <input type="checkbox"/> Outdoor Activity Areas <input type="checkbox"/> Assembly Spaces <input type="checkbox"/> Cafeteria/Meal Spaces <input type="checkbox"/> School Bus <input type="checkbox"/> Job Sites <input type="checkbox"/> Field Trips <input type="checkbox"/> Home <p>Other Tasks/Environments not listed: _____</p>	<p>Challenge Areas Related to Tasks</p> <p>(Check "Independent" if the student functions adequately with standard classroom tools. Check "Consider AT" if additional support may be needed.)</p> <p>Vision</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Hearing</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Recreation and Leisure Activities</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Feeding</p> <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Consider AT <p>Other: _____</p>	<p>Possible AT Devices</p> <p>(For areas in which "Consider AT" is chosen in the preceding column, indicate any possible AT devices the CPSE/CSE may wish to consider when assessing the student's AT needs.)</p> <p>Other: _____</p>

<http://www.p12.nysed.gov/special/publications/2016-memos/documents/assistive-technology-consideration-checklist-fillable.docx>

I have a student who needs text read aloud...

- If it is on a webpage -> **Microsoft Edge Read Aloud**
- If it is on Office 365 Word Document -> **Immersive Reader**
- If you have a paper copy ONLY or a test -> **C-Reader Pen**

Microsoft Edge - Read Aloud

Learning Tools are built into the Microsoft Edge browser, adding more options for readers in your class to interact with texts.

Read aloud. Hear text read out loud. Just right-click (or press and hold) anywhere on the page and select Read aloud. Read aloud will begin automatically reading at the word you selected.



Immersive Reader - Microsoft Office 365



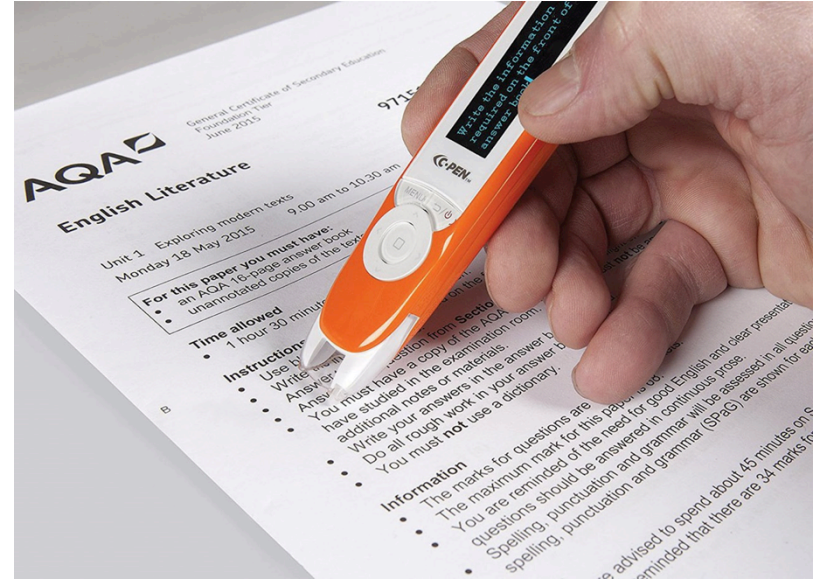
Learning Tools includes a modified reader view that utilizes techniques proven to help people read more effectively, such as:

- **Read Aloud**—Reads text aloud with simultaneous highlighting
- **Spacing**—Optimizes font spacing in a narrow column view.
- **Syllables**—Shows the breaks between syllables
- **Parts of Speech**— Identifies verbs, nouns and adjectives.

The Immersive Reader features help everyone on any device improve their reading skills, including those with dyslexia, dysgraphia, ADHD, emerging readers or a combination of the broad range of unique student abilities.

C-Reader Pen

The C-Pen Reader pen scanner supports those who suffer from reading difficulties such as dyslexia and other reading disabilities. The C-Pen Reader is a portable, pocket-sized device that reads text out aloud with an English, Spanish or French human-like digital voice.



Other Tools Used At Pione

- EZ Eyes Keyboard
- iPads with Live Listen
- Revibe Connect - Prompts
- Color Graphing Calculator



Revibe Connect

- Revibe reminds students to get back to work. Instead of a tap on the shoulder from their teacher, they get a quiet vibration on their wrist. This type of redirection empowers students to complete their work *independently*, improving their self-confidence.



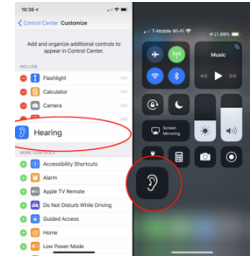
Teacher Feedback - Revibe Band



- The intentions of the band are to increase focus and attention to tasks.
- It connects to an app on a device within the classroom. Teachers need to have a device to control it.
- Used with 2nd grader - Classroom teacher and OT believe it helped increase attention to tasks.
- Used with 4th grader - became more distracting for student. Student would get mad at it - excessive tapping and experienced increase in anxiety when using
- “I wish that it had different software to where you could basically prompt it on command and alert the students. Students need to have fast visual tracking and reading speed as the prompt does not stay on the small screen for very long.
- “I liked the Motivator bands. It definitely helped refocus the student. My only complaints were that the screen was small and they could not read the messages easily. Also, the battery life was terrible. If you let the battery die before connecting the device to the iPad, any data that was collected disappeared.

Teacher Feedback - Live Listen

- It can be turned on in the settings of an iPad or iPhone.
- I'll be completely honest, I did not like using it at all. I had to be holding an iPad while I was teaching in order for the sound to come through loud enough for the ear pieces. Also, holding an iPad is not very conducive to elementary teaching, and I'm sure it is not for middle or high school either unless they have a podium in the front of the room or something.
- Also, we had two students needing the FM system at the same time...so I needed two iPads! Not ideal.



Teacher Feedback - Color Graphing Calculator

- The calculators that we use are the new TI-84 color graphing calculators.
 - They have all the same capability as the regular TI-84's, except they have a rechargeable battery & graph in color.
 - They are the same calculator that they use in the advanced math courses.
 - I really liked using them this year and the majority of the students did as well.
- The color feature for graphs and tables made it so much easier when graphing systems & looking for solutions.



Feedback

How would this look in your classroom?

What additional support would you need to make this happen on a daily basis?

Would you like to see a person who was very knowledgeable in these tools available during the school day to work with you and your students utilizing these tools?

Please tell your administration that this need exists!