Accessible Technology
Considerations to Support Educational Independence
Outcomes

Participants will:

1. Gain an understanding of key considerations related to the identification and use of accessible technology features critical to promoting independence.

2. Identify at least three components of accessible technologies that can support independence in the areas of reading, writing, and organizing.

3. Have access to a list of potential tools that will support independence in a post-secondary setting.
Presenter:

Tiffanie Zaugg - Prairie Lakes Area Education Agency - State of Iowa Assistive Technology Leadership Team Lead
Accessibility Features Checklist

Accessible Technology Features:
A Checklist for Consideration

Consider the various Accessibility Features below to identify the TYPE of technology tools/supports that may be helpful for the individual as they transition to post-secondary education or vocational placements.

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<tr>
<th>TECHNOLOGY ACCESSIBILITY FEATURE</th>
<th>YES/NO Is this accessibility feature required for the individual?</th>
<th>LIST SPECIFIC TOOL(S) AVAILABLE FOR THE INDIVIDUAL TO MEET THIS NEED</th>
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<td><strong>Reading</strong> - Text-to-Speech</td>
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<td><strong>Reading</strong> - Screen Reader (reads display content &amp; offers alternative navigation options)</td>
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Key Considerations for Any Assistive Technology

- What is it the individual needs to be able to do that he/she is currently unable to do?
- What are the “access” barriers?
- Is there any Assistive Technology tool or service that might compensate to provide access and more independent success?
## Areas of Assistive Technology:

<table>
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<tr>
<th>Fine Motor</th>
<th>Motor Aspects of Writing</th>
<th>Written Materials</th>
<th>Communication</th>
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<td>Reading</td>
<td>Learning &amp; Studying</td>
<td>Math</td>
<td>Rec &amp; Leisure</td>
</tr>
<tr>
<td>Seating &amp; Positioning</td>
<td>Mobility</td>
<td>Vision</td>
<td>Hearing</td>
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1. Look at the features that might support an area of need or greater success.

1. The tool/s selected should be what works for the individual.

1. The tools listed in this presentation are possibilities, but NOT the only possibilities...there are many more options if one searches the web or collaborates with others.
What is it the individual wants to be able to do in reading that s/he is currently unable to do?
Reading Considerations:

- Difficulties in Reading Can Result from:
  - Limited Visual Acuity or Impairment
  - Decoding/Fluency
  - Comprehension
  - Physical Access
    - Difficulty holding the book and/or turning the pages
Accessible Formats for Printed Text

- Braille
- Large Print
- Audio
- Digital Text

Individuals should identify a preferred format(s) and related repositories and/or sources to acquire materials.

Examples: Bookshare, Audible.com, e-books, public libraries, etc.
Assistive Technology Tools to Support Reading

Text-to-speech
- With or without highlighting
- Changing voice and speed

Simplify Text and/or Summarize

Dictionary Tools

Text to Audio Conversion
Text-to-Speech (TTS) Tools

Built-in Features

○ Windows (Narrator)
  ■ Microsoft accessibility

○ Macintosh (Voice Over)
  ■ Apple Accessibility

○ iOS (i-Devices) (Voice Over/Speak Selection)
  ■ iPad Accessibility

○ Android (Talkback/Select to Speak)

○ Browser Extensions (e.g. Chrome)
Text-to-Speech (TTS) Tools

Popular Vendors offering integrated Text to Speech Tools

- **Snap and Read** (Don Johnston)
- **Read and Write** (Text Help)
- **Kurzweil** (Cambium)

iPad TTS apps: **Voice Dream Reader**, **Capti Voice**, and more.
Text-to-Speech (TTS) Tools
On-the-Go Conversion from Text to Speech

Examples:

- **i-Device Apps:** Prizmo, Claro ScanPen, TextGrabber 6, Seeing Ai, etc.
- **Android:** TextGrabber, Text Fairy, etc.
- **OCR Scanning Pens:** e.g. C-Pen, ScanMarker, IrisPen Executive, etc.
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<th>Simplify Text</th>
<th>Text Summarizer</th>
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<td>Reduces text complexity by REPLACING DIFFICULT WORDS with more common</td>
<td>SHORTENS the AMOUNT of text presented.</td>
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<tr>
<td>vocabulary however this tool is NOT focused on reducing the QUANTITY of text.</td>
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Text Summarizer Tools

- Text Compactor website (free)
- Read & Write for Google toolbar

Text Simplifier Tools

- Rewordify (free)
- Snap & Read toolbar
Text to Audio Conversion

Examples:

- Read & Write for Google: Audio Maker
- Kurzweil 3000: Audio conversion tool

Also search to explore other free Text to Audio converter tools.
Dictionary Tools

Examples:

- **Google Dictionary**: Chrome Extension
- **Dictionary-FREE!**: (Microsoft app)
- **Read & Write** (Texthelp) Dictionary (on toolbar)
- **Snap & Read** (Don Johnston)
- **Kurzweil** (Cambium) - looking up word feature
Writing

What is it the individual wants to be able to do in writing that s/he is currently unable to do?
Writing Considerations

Mechanical Act of writing letters (handwriting or keyboarding)

Word Processing

Act of composing (text production)

Planning and Organizing text production

Types of writing (narrative, expository, etc.)
Word Processing with Spelling, Thesaurus, and Grammar Checks

- Spell Checks (Built in)
  - Thesaurus
- Grammar Checks
  - Ginger software
  - Ghotit
  - Grammarly
Word prediction applications predict the word you are intending to type based on frequency, syntax and the first letters typed.

- **Co:W riter** (Don Johnston)
- **Kurzweil** (Cambium)
- **Read and W rite** (Text Help)
- **Free Built-in**
Word Processing with Speech Recognition

Speech Recognition

- Voice Typing - Google Docs (built-in)
- Speech Recognition - Microsoft (built-in)
- Dragon Naturally Speaking

Voice Recordings

- Evernote, Notability, Audio Note
Word Processing and Text to Speech

Hearing the words and sentences spoken aloud may assist the student with monitoring and revising their writing.
Act of Composing

Planning and Organizing Text Production

- Concept Mapping/Outlining
  - Inspiration (software or app)
  - Popplet (app)
  - MindMash (app)
  - Graphic Organizers (free templates)
Note Taking

- Evernote, Notability, Audio Note, & Ava (apps)
- Livescribe Pens (audio recording pen)
- Word, Google Docs, Pages, OneNote (word processing)

5 Effective Note Taking Methods
Organization

What is it the individual wants to be able to organize that s/he is currently unable to do or do as effectively as desired?
Organization/Learning Supports

What part of organization could be improved?

- Meeting deadlines
- Completing tasks
- Managing content/papers/notes/materials
Organization/Learning Supports (Considerations & Features)

- Folders/Naming/Coding by colors and/or numbers
- Notifications/Reminders
- Making Lists
- Extracting information for later use
  - Collecting and keeping track of information collected
Examples of Locations with Organization/Learning Support Features

Folders/Naming/Coding by attributes

- Google Drive
- Microsoft OneDrive
- Dropbox and more...
Examples of Tools with Organizational/Learning Support Features

Notifications/Reminders to assist with staying on top of deadlines/events/tasks

- Google Calendar
- Outlook
- My Study Life
- Todoist
- Google Keep
Examples of Tools with Organization/Learning Support Features

Making Lists - Tasks - To Do

- W underlist
- Todoists
- Google Keep
- EverNote
Examples of Tools with Organization/Learning Support Features

Collecting, tracking, and extracting information for later use

- W underlist
- Snap&Read
- Read&W rite for Google Chrome (Premium)
- Google Keep
- Evernote
- Dualless
- Diigo
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First, it is critically important to understand that the services a student has gotten while in high school DO NOT AUTOMATICALLY follow them to college. This is because postsecondary institutions must follow Americans with Disabilities Act (ADA) guidelines which are different from high schools, which must follow IDEA guidelines.
Secondly, 

Services at each postsecondary institution can vary greatly. It is important to connect with the Disability Service Directors/Coordinators when going on college visits to discuss what accommodations that particular university/college is able to provide. (These will be based on services that the student has previously received on their IEP in high school.)
Next,

Each community college/college/university is required to have a disability director &/or disability services office. As you/your child explores potential colleges, type “disability services” into the search bar on the college website to find out who to contact. The disability services website will tell you the process to request accommodations; many have an online application that must be completed.
Lastly,

Students should call or make an appointment to visit with the disability director when they are scheduling college visits. This person needs to be their new best friend while they transition to postsecondary setting!

PS: It is STRONGLY RECOMMENDED to do this as soon as possible. College work is much more challenging, and it is better to start out using the approved accommodations as students transition to their new environment instead of trying to dig out of a deep hole later!
Thank you for attending!

Tiffanie Zaugg - tzaugg@plaea.org – Prairie Lakes Area Education Agency- Assistive Technology Coordinator

State of Iowa Assistive Technology Leadership Team Lead