

Assistive Technology Options for Blind Youth during the Transition Years

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What is assistive technology (AT)?

- AT assists with disability-related access needs.
- For people who are blind or visually impaired, AT converts print into an accessible reading medium.
- Enables the blind user to read, write, and use computers without relying on print.

Devices and Outputs

- Large print: software or a video magnifier to enlarge print on the computer screen.
- Text-to-speech: computer software reads screen contents aloud, using the computer speakers.
- Braille: specialized notetaking device or braille display uses refreshable pins to display braille.

Hardware: Computer Based AT

- Assistive software can be run on a standard computer.
- Examples: ZoomText, Magic, JAWS, NVDA, VoiceOver
- Advantages: multiple modalities; inexpensive; computers are powerful
- Disadvantages: less portable; not all applications work with assistive software

Hardware: Braille Notetakers

- Specialized PDAs with built-in braille and speech output.
- Brands: Braille Note, Pac Mate, Braille Sense
- Advantages: self-contained; portable; easy to use; braille integration
- Disadvantages: expensive; not very powerful OS

Hardware: Mobile Devices and Tablets

- Magnification or text-to-speech software run on a mobile device or tablet, with optional braille display connected.
- Examples: VoiceOver (iPhone and iPad); Zoom; TalkBack (Android).
- Advantages: mainstream device; multiple modalities; relatively affordable.
- Disadvantages: not very powerful OS; may not be able to handle academic demands.

Peripheral Devices

- Closed-circuit television (CCTV): produces video magnification of print.
- Scanner: converts print to a digital image which can be converted to speech or braille.
- Braille embosser: used to produce hard-copy braille.

Choosing the Right AT

- What are the academic expectations?
- Which modality works best for the student?
- What nonacademic tasks does the student wish to perform with AT?

Technology Goals for Transitioning Students

- Independent notetaking skills.
- Computer skills: word processing, spreadsheets, presentations.
- Web searching and email skills.
- Ability to explore and self-teach new technology.

Contact Information

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