

**Tip Sheet 11**  
**Library Accessibility and Assistive Technology:**  
**What You Need to Know**

**Background**

Adaptive technologies are electronic solutions that enable people with disabilities to live independently. Blind persons can hear computer screen text, and people with visual impairments can enlarge text, enabling independent reading. People who are unable to manipulate a mouse can enter data and those who cannot physically hear a computer prompt can view prompts. There is also computer software that helps persons with learning differences see and hear the information displayed on the screen.

In an ideal world, all libraries provide access for all patrons. Ensure that the staff is aware of available tools.

**Tips for Assisting Patrons with Blindness or Visual Impairment**

Specialized software programs and hardware for patrons who are blind or visually-impaired enlarge displays on the monitor or read the material to the user through a speech synthesizer.

**Some of the Most Common Hardware and Software Solutions**

- ZoomText Xtra screen magnification software – This program allows patrons with low vision to access computer information by enlarging the screen display or tailoring the display to accommodate their disability.
- JAWS screen reader – This program enables individuals who are blind or visually-impaired to access the information on a computer screen through voice output.
- Open Book text-reader – Helps those with low or no vision. Scans printed text and verbalizes the text via synthetic speech.
- Duxbury Braille Translating Software – Program that, like a word processor, allows users to type text, then translate it into braille. A braille embosser produces hardcopy.
- Braille embosser – Similar to a printer, an embosser will print Grade II braille on paper, enabling patrons to create hardcopies of documents. If hard copy braille is not available, then enable users to save to a USB flash drive.

- Talking Typer software – Talking Typer from American Printing House (APH) is a specially designed typing teacher program for those who are blind, have low vision, or learn at a different pace. The program provides audio instruction and tutorials.
- It is important not to forget basic items like hand-held magnifiers and large magnification devices such as closed-circuit television magnifiers (CCTV). This system employs a video camera lens to enlarge text from three to thirty times normal text size.

### **Tips for Assisting Patrons with Learning Differences**

Specialized software programs and hardware for patrons who have learning differences are programs that will display print as well as provide auditory reading of the text.

- Kurzweil 3000 and WYNN Wizard – These programs increase reading speed and comprehension through simultaneous spoken word and highlighting of text.
- Read & Write Gold – A program that provides comprehensive and complete reading and writing support for those with literacy or learning difficulties.

### **Tips for Assisting Patrons with Physical Disabilities**

Persons with physical disabilities may need assistance in doing some of the physical tasks that are involved in using the computer. Persons using wheelchairs or scooters will need a sturdy, safe workstation. Table height and monitor position should be adjustable. The following items increase computer usability and safety:

- Special input devices such as joysticks, switches, touch pads, and augmented keyboards (micro keyboards or oversized keyboards with enlarged keys).
- Madentec Tracker – Users wear a tiny reflective dot on the forehead or glasses. A computer camera/tracker allows users to manipulate the cursor through head movement.
- Softype - A software utility that replaces the functionality of a standard keyboard with a full-featured, on-screen keyboard.

### **Microsoft Access**

Staff should be aware that Microsoft's Windows packages and Vista programs do come with accessibility attributes that can help some persons with moderate disabilities use computers. Some of these accommodations include programs such as See-Beep, which helps hearing-impaired people see audio computer cues. Another is StickyKeys, which enables key combination commands, such as Ctrl-Alt-Delete, to be entered as individual key entries. Libraries also use rudimentary screen reading programs, print and cursor enlargement, and online keyboards. Most libraries do not allow staff to access these programs. If a library does not have any adaptive technologies, it may be prudent to allow access to these programs for staff and patrons.

## **Resources**

ASCLA Website Glossary

Section 508 Assistive Technology Showcase

<http://section508.gov/index.cfm?FuseAction=Content&ID=87>