Overview of Assistive Technology

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Agenda

• What is AT?
• AT continuum & Major Categories
• AT available @ UWW
• Specific Demonstrations:
  • Kurzweil 3000 (professional, Firefly, Web-based)
  • Livescribe 3 Smart-Pen
• Questions
What is Assistive Technology?

• A system of no tech, low tech, and high tech tools, strategies, and services that match a person's needs, abilities, and tasks. Regardless of abilities (i.e., glasses).

• Question: What is the largest used assistive technology and where?

• What is Assistive Technology Device?
• “any item, piece of equipment, or product system whether commercially off the shelf, modified or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.”
## Assistive Technology Continuum

<table>
<thead>
<tr>
<th>Low Tech</th>
<th>Mid Tech</th>
<th>High Tech</th>
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<tbody>
<tr>
<td>Simple</td>
<td>Some Maintenance</td>
<td>Complex Electronics</td>
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<tr>
<td>Little Maintenance</td>
<td>Some Training</td>
<td>More Training</td>
</tr>
<tr>
<td>Limited/No electronics</td>
<td>More Electronics</td>
<td>More Maintenance</td>
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</tbody>
</table>

- **Low tech examples**
  - Velcro, tape, etc.

- **Mid tech examples**
  - Tablets (Ipad, Kindle), Dragon Naturally Speaking

- **High tech examples**
  - Augmentative Communication devices, Refreshable braille display, etc.
Major Categories of AT Devices

- Computer Access
- Augmentative Alternative Communication (AAC)
- AT for People with LD
- AT for people with sensory impairments
- Low tech solutions for Creative thinking
- Seating and positioning
- Mobility Aids
- Activities of Daily living (ADL)/Electronic Aides for Daily Living (EADL)
- Recreation
AT Available at UWW

• General Access Labs
  – Microsoft Suite, Kurzweil 3000, Zoom Text, JAWS, Dragon Naturally Speaking, Inspiration, & Mathimatica

• CSD/Project ASSIST Lab
  – Kurzweil 3000, Zoom Text, JAWS, Dragon Naturally Speaking, Adobe Creative Suite 5.5, CCtv, Wacom Tablet, Document Scanner,

• Tech Checkout @ CSD
  – Ipad, Kindle, Voice Recorder(s), Smart Pen(s), Thermal Pen, Reading Pen 2, & Sign Language Training DVD set
Alternative Media-Kurzweil 3000

- Alternative Media is the provision of printed materials in alternative formats for individuals with visual or information processing disabilities. Print materials are provided in a variety of alternative formats.

- Kurzweil 3000: is tiered assistive reading, writing and learning medium aimed at students with learning disabilities and others disabilities that make reading and writing difficult.
Alternative Media-Kurzweil 3000

Demonstration:
JAWS & ZoomText: Screen Readers

- **JAWS**: JAWS (Job Access With Speech) is a computer screen reader program in Microsoft Windows that allows blind and visually impaired users to read the screen either with a text-to-speech output or by a Refreshable Braille display. JAWS is produced by the Blind and Low Vision Group of Freedom Scientific, St. Petersburg, Florida, USA.

- **ZoomText**: is a screen magnifier for Microsoft Windows. ZoomText is available in two editions: ZoomText Magnifier and ZoomText Magnifier/Reader, which includes a built-in screen reader.

- **ZoomText** is a stand-alone piece of software designed for visually impaired people. It is available for the Microsoft Windows operating systems 2000, XP, Vista and Windows 7.

- The program allows you to see and hear everything on the computer screen as well as providing access to applications, documents, email and the Internet. The software can help individuals with ‘early vision loss, computer vision syndrome, and visual impairments such as macular degeneration and glaucoma’.
Dragon Naturally Speaking

• Dragon Naturally Speaking is a speech recognition software package developed and sold by Nuance Communications for Windows personal computers.

• The most recent package is version 11.5, which supports 32-bit and 64-bit editions of Windows XP, Vista and 7.

• The Mac OS version is called Dragon Dictate.
A Livescribe smartpen is about the size and weight of a large pen (5/8" x 6 1/8"), and is equipped with a removable ball-point ink cartridge, a microphone to record audio, a speaker for playback, a small OLED display, and internal flash memory that captures handwritten notes, audio and drawings.

The user can choose to record audio in addition to the handwritten text. Recorded audio is kept indexed with the handwritten text—tapping on a written word starts playback of the recorded audio from that part of the recording.
Livescribe 3 - Smartpen

Demonstration:
Organizational Assistance

- Assignment notebook/Daily Planner
- Microsoft One Note & Evernote
- Smart Phones and Tablets (Organization Apps: Google Keep)
- UWW: Microsoft Outlook Calendar

Questions