

Examples of Assistive Technology

Assistive Technologies for Individuals Who Are Deaf or Are Hard-of-Hearing

- Flashing lights for doorbells, ringing phones, fire alarms (e.g., when a doorbell rings, a strobe light flashes above the door).
- Personal Assistive Listening Devices (e.g., hearing aids or other amplifications devices)
- Amplified telephones
- Video Phones (specific phone equipment that allows users to communicate visually by seeing each other communicate, which is especially useful for deaf/Deaf individuals who communicate through American Sign Language

 a visual, not verbally-based language).
- TTY (Text Telephone) allows people to type messages back and forth to one another instead of talking and listening. TTYs are becoming obsolete with the rapid advancement of other technologies.
- Telecommunications Relay Service (TRS) telephone service that allows persons with hearing or speech disabilities to place and receive telephone calls. TRS uses operators to facilitate telephone calls between people with hearing and speech disabilities and other individuals.
- TTY Relay operator voices what person types on TTY and types what the person voices on phone
- Internet Protocol (IP) Relay Service text-based form of TRS that is accessed using a computer and the Internet, rather than a TTY and a telephone.

- Video Relay Services (VRS) a form of Telecommunications Relay Service (TRS) that enables persons with hearing disabilities who use American Sign Language (ASL) to communicate with voice telephone users through video equipment, rather than through typed text.
- Video Remote Interpreting (VRI) combines video conferencing technology with a live remote (off-site) sign language interpreter to allow two individuals in the same room to communicate. (e.g., use a Video Phone, MSN Messenger, Skype, etc.).
- Voice Carry-Over (VCO) Devices enable deaf and hard of hearing individuals to use their speech on the telephone. The VCO user speaks directly to the other person, and when the person speaks back, the relay operator types a text response that is displayed on a TTY or VCO device.
- Captioned Telephone Service the telephone converts spoken words into text for the user to read. Users can speak and then simultaneously listen and read what the other person says.
- IP Captioned Telephone Service combines two other forms of TRS,
 Captioned Telephone Service and IP Relay, allowing consumers to use a computer or similar device, rather than a specialized captioned telephone, to make captioned telephone calls.
- Service animals known also as "hearing" animals that alert a person when a sound occurs.

Assistive Technologies for Individuals Who Have Speech Disabilities

- Hearing Carry Over (HCO) Devices a type of TRS that allows a person
 with a speech disability, but who wants to use his/her own hearing, to listen
 to the called party and type his/her part of the conversation on a TTY.
- Speech-to-Speech (STS) Relay Service enables persons with a speech disability to make telephone calls using their own voice (or an assistive voice device). Communications Assistants (CAs) relay the conversation back and forth between the person with the speech disability and the other party to the call.
- Speech Synthesizers individuals type/paste words in and computer "speaks" what you want is typed.
- Computer, tablet and smartphone apps and software that speak words or phrases aloud to assist with communication needs.

Assistive Technologies for Individuals Who Are Blind or Have Low Vision

- Large print
- Full page magnifier
- Screen magnifiers/software
- Screen readers converts files into audio (MP3 or WAV files), converts into Braille or prints to Braille printer/embosser.
- Scanners scans documents and converts printed words to electronic text file or Braille, reads aloud, or converts to large print on computer.
- Braille PDAs and Note takers Braille keyboard for inputting information and refreshable Braille dots for reading.
- Telebraille or Braillephone Relay allows users with TeleBraille or Braillephone TTYs to communicate with listener via Relay Operator or directly to another TTY.
- GPS Orientation Devices plot routes and download maps in speech or Braille.
- Service animals guide animals that assist people to navigate their environment.
- Computer, tablet and smartphone apps and software that allows content to be read aloud.

<u>Assistive Technologies for Individuals with Physical, Motor or Communication</u> Disabilities

- Devices for Daily Living, Communicating, and Working
 - Mobility aids (e.g., walkers, canes)
 - Home modifications (e.g., grab bars, safety rails, Dycem (non-slip material), doorway threshold ramps, adapted seating, wedges for positioning), lever door handles (versus doorknobs that require more fine motor skills), hand-held shower.
 - Daily aids (e.g., zipper pulls, book holders, page turners, pencil grips, switches, reachers/grabbers, foam adapter handles).
 - Service animals animals that assist an individual by providing support or performing tasks related to the person's disability.

3

- Electronic Aids for Daily Living, Communicating, and Working
 - Mobility aids (e.g., scooters, wheelchairs)
 - Augmentative or Alternative Communication: (e.g., voice recognition software, voice synthesizers, voice amplifier, artificial larynx, pocket-sized communicators, communication board software).
 - Environmental Controls (e.g., adaptive switches, hands-free controller for lights, appliances, blinds, phone, fan, etc.).

Sources: Disability Rights Wisconsin; Federal Communications Commission

