Considerations of Assistive Technology in the IEP

Below is a non-exhaustive list of Assistive Technology solutions that can be considered for individuals with disabilities. This list focuses on the area of need rather than a specific disability.

1. If Reading needs to be addressed consider technology that:
   a. Enhances standard text:
      • Corrective lenses (eyeglasses)
      • Highlighting
      • Colored overlays
      • Manually or electronically changing spacing
      • Screen color/contrast adaptations
      • Pictures/graphics/symbols
   b. Enlarges text and graphics:
      • Large print books
      • Manual hand-held magnifiers
      • Closed circuit television (CCTV)
      • Screen magnifier (placed over computer screen)
      • Screen magnification software
   c. Converts text and graphics to speech
      • Talking dictionary (to pronounce difficult words)
      • Tape recorded or talking books
      • Talking word -processor (to read specific words or all electronic text)
      • Screen reading software (to read any information on the computer)
      • Text reading software (to read any text that is scanned into electronic format)
      • Video description (verbal description of visual information conveyed in videotapes, TV, etc.)
   d. Converts text and graphics to Braille or other tactile symbols
      • Braille translation software and Braille printer
      • Refreshable Braille computer output
      • Tactile graphic display systems
2. If Writing needs to be addressed consider technology that:

a. Enhances standard writing
   - Adaptive grip, larger size, wide marking or other adapted writing utensil
   - Splints, wrist supports, etc.
   - Special paper (wider lines, raised lines, etc.)
   - Writing guides, signature guides, etc.
   - Slanted, larger, or no-slip writing surface

b. Replaces standard writing
   - Electronic notetaker, portable word processor with standard keyboard
   - Electronic notetaker, with Braille input
   - Computer with standard keyboard/pointing device
   - Computer with keyboard enhancements or adjustments (keyguard, repeat rate adjustment, etc.)
   - Computer with alternative keyboard/pointing device (on-screen keyboards, adaptive keyboards, trackballs, keyboard emulation)
   - Computer with switch, scanning, code or other alternative direct selection Input devices
   - Word prediction, abbreviation expansion and macros to reduce keystroke input
   - Computer with voice recognition input

c. Enhances the composition of written expression
   - Dictionary and thesaurus (print or electronic, may be talking)
   - Word processing with spell checker, grammar checker, templates, etc. (may be talking)
   - Abbreviation/expansion and word prediction (to facilitate composition content and input speed)
   - Voice recognition input (to facilitate composition content and input speed)

3. If Math needs to be addressed consider technology that:

a. Replaces mental calculations with mechanical or electronic devices
   - Calculator with print output
   - Talking ruler, thermometer, clock, watches, etc.)
   - Talking calculator with speech output
   - Calculator with large print LCD display
   - Calculator with large keypad
   - On screen calculator with computer input and/or output adaptations
   - Math development software
   - Accounting software

b. Adapts measuring Devices
• Talking rulers and thermometers
• Measuring devices with speech output
• Measuring devices with large print or LCD display
• Measuring devices with tactile output

4. If Attention, Memory or Organizational Skills needs to be addressed consider technology that:

a. Enhances or supplements attention, memory and organizational skills
   • Picture or picture schedule
   • Visual organizers (color coded tabs and folders, color coded high lighters, etc.)
   • Electronic managers or organizers
   • Speech output devices that provide verbal reminders for assignments, sequence of task, etc.
   • Software to support organization of ideas
   • Software with templates
   • Headphones or ear plugs
   • Digital or talking watches and clocks
   • Signaling systems (auditory, visual and tactile)
   • Critical thinking software

5. If Speech Language or Oral Expression needs to be addressed consider technology that:

a. Enhances speech
   • Speech amplifier
   • Speech clarifier

b. Supplements/replaces speech production with text, pictures, or graphics that communicate
   • Communication board/book
   • Text display or print output electronic notetaker, portable word processor, computer, or communication device

c. Supplements/replaces speech production with alternative speech
   • Artificial larynx
   • Tape recorded speech output communication devices with variable input options and range of number of messages that can be recorded, stored and retrieved
   • Computer generated speech output communication devices with variable input options and text to speech capacity
6. If Listening needs to be addressed consider technology that:
   
a. Enhances sound and speech reception (amplifies and/or reduces background noise)
   - Hearing aid
   - Cochlear implant
   - Assistive listening systems (FM, infrared, induction loop, etc.)

b. Converts speech to text
   - Captioning of videotapes and TV
   - Computer assisted real-time captioning (CART)
   - Computer assisted notetaking (CAN)

c. Enhances or replaces auditory signaling systems.
   - Signaling systems for computers, telephone, clocks, fire, etc (loud auditory, visual and tactile)

7. If Orientation, Mobility or Ambulation needs to be addressed consider technology that:
   
a. Enhances orientation, mobility, or ambulation function
   - Corrective lenses (eyeglasses)
   - White cane/electronic sensor cane devices
   - Auditory location signaler systems
   - Tactile signage
   - Grab bars, lever handles, etc.
   - Door opener
   - Splints, canes, walkers, stair glides, ramps etc.
   - Speech output devices that provide verbal directions

b. Supplements/replaces orientation, mobility, or ambulation function
   - Remote environmental controls (to control lights, appliances, doors, etc.)
   - Manual or power wheelchair
   - Power mobility device (scooter, toy car, etc.)

8. If Access to Work Site or Training Programs needs to be addressed consider technology that:
   
a. Provides equal access to work material, media and instruction
   - Modified or specialized desk, ergonomic chair, file cabinets, copy machines and other office equipment
   - Page-turner, book holder, electric stapler, monitor stand electric scissors, etc.
   - Alternative format print materials (large print, Braille, electronic, etc.)
• Adjusted or alternative input and output for computers, electronic, and online media
• Telephone access (TTY, VCO, amplified phone, etc.)
• Adjusted or alternative output for audio-visual media (captioning, video description, amplified audio output, magnified video output, audio/video conferencing etc.)

b. Provides equal access to the work or training environment
• Physical accessibility of buildings, restrooms, classrooms, library, workspace, desks, etc.
• Emergency signaling systems (visual fire alarms, etc.)
• Alternative signage (raised lettering, Braille)
• Workstation relocation

9. If Transition needs to be addressed consider technology that:

a. Enhances or develops independent living skills.
   • (See daily living)

b. Needs for post secondary education, employment
   • Transfers ownership of device(s) to student from High School
   • Accessible Testing

c. Enhances employment skills
   • Adaptive transportation, home/work place modifications
   • Public transportation, orientation
   • Testing, training, education, job coaching

10. If Daily Living needs to be addressed consider technology that:

a. Enhances or supplements development of daily living skills activities
   • Adapted eating utensils (e.g. Built-up handles, plate guards, straws)
   • Adapted dressing aids (e.g. Button holders, sock guides, Velcro closures)
   • Adaptive watches, adaptive clocks and alarms
   • Environmental control units (to control lights, appliances, doors, etc)
   • Adaptive driving equipment (e.g. Hand controls)

b. Replaces human functions to allow activity accomplishment
   • Feeding systems
   • Transfer systems