

What is AT?

Assistive Technology (AT) includes both devices and services. The Individuals with Disabilities Education Act (IDEA) defines an AT device as any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities. Devices can replace a missing limb, help prevent the worsening of a condition, help improve physical functioning, help improve a person's capacity to learn, or strengthen a physical or other weakness.

AT services support people with disabilities or their caregivers to help them select, acquire, or use AT devices. Such services also include functional evaluations, training on or demonstration of devices, and purchasing or leasing devices. Specifically, AT services include:

- Evaluating the needs of an individual with a disability, including a functional evaluation of the individual in the individual's customary environment
- Purchasing, leasing, or otherwise providing for the acquisition of AT devices by individuals with disabilities
- Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of AT services;
- Coordinating and using other therapies, interventions, or services with AT devices, such as those associated with existing education and rehabilitation plans and programs
- Training or technical assistance for an individual with disabilities or family of an individual with disabilities
- Training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of individuals with disabilities.

AT can help people learn, compete in the work environment, achieve independence, or improve quality of life. Although, the use of assistive technology is not an end in itself, it is part of an ongoing therapeutic process to improve functional capabilities.

Examples of Assistive Technology

Aids for Daily Living: Self help aids for use in activities such as eating, bathing, cooking, dressing, toileting, home maintenance, etc. Examples include modified eating utensils, adapted books, pencil holders, page turners, dressing aids, adapted personal hygiene aids.

Aids for Hearing Impaired: Aids for specific populations including assistive listening devices (infrared, FM loop systems), hearing aids, TTYs, visual and tactile alerting systems, etc.

Aids for Vision Impaired: Aids for specific populations including magnifiers, Braille or speech output devices, large print screens, closed circuit television for magnifying documents, etc.

Augmentative and Alternative Communication (AAC): Electronic and non-electronic devices that help persons with speech and/or hearing disabilities communicate: communication boards, speech synthesizers, modified typewriters, head pointers, text to voice software.

Computer Access Aids: Headsticks, light pointers, modified or alternate keyboards, switches activated by pressure, sound or voice, touch screens, special software, voice to text software that enable persons with disabilities to use a computer. This category includes speech recognition software.

Environmental Controls: Electronic systems that help people control various appliances, switches for telephone, TV, or other appliances which are activated by pressure, eyebrows or breath.

Home/Workplace Modifications: Structural adaptations that remove or reduce physical barriers: ramps, lifts, bathroom changes, automatic door openers, expanded doorways.

Mobility Aids: Devices that help people move within their environments: electric or manual wheelchairs, modifications of vehicles for travel, scooters, crutches, canes and walkers.

Prosthetics and Orthotics: Replacement or augmentation of body parts with artificial limbs or other orthotic aids such as splints or braces. There are also prosthetics to assist with cognitive limitations or deficits, including audio tapes or pagers (that function as prompts or reminders).

Recreation: Devices to enable participation in sports, social, cultural events. Examples include audio description for movies, adaptive controls for video games, adaptive fishing rods, cuffs for grasping paddles or racquets, seating systems for boats.

Seating and Positioning: Adapted seating, cushions, standing tables, positioning belts, braces, cushions and wedges to maintain posture, and devices that provide body support to help people perform a range of daily tasks.

Service Animals: The Americans with Disabilities Act defines a service animal as any guide dog (for visually impaired and blind individuals), signal dog (for hearing impaired or Deaf individuals), or other animal individually trained to provide assistance to an individual with a disability.

Vehicle Modifications: Adaptive driving aids, hand controls, wheelchair and other lifts, modified vans, or other motor vehicles used for personal transportation.

Sources:

Washington Assistive Technology Alliance

Minnesota STAR Program

(<http://www.admin.state.mn.us/assistivetech/atech.htm>)

South Carolina Assistive Technology Project (<http://www.sc.edu/scatp/what.htm>)