

What Parents Need to Know About Assistive Technology

What is Assistive Technology

Broadly defined, assistive technology includes any device or piece of equipment that increases the independence of a person with disabilities. Assistive technology for the disabled, of course, is not new. For instance, the wheelchair has long been an indispensable assistive device for those with impaired mobility.

- Assistive technology has increased enormously the ability of those with disabilities to lead independent lives.
- Computer-based environmental control units allow users to turn on lights and appliances and open doors from a wheelchair.
- Augmentative communication devices enable those who cannot speak to voice thoughts and needs using touch- or light-activated keyboards coupled to synthetic speech systems.
- Screen reading programs for the blind, screen magnification systems for those with low vision, and special ability switches that permit the mobility impaired to use a computer are only a few examples of the technology by which the individuals gain access to the computer screen and keyboard.

Assistive technology (AT) used by children with disabilities ages 5-11

Assistive Technology:

- Promotes independent participation in elementary classrooms
- Provides both routine and customized access to the general curricula for students with disabilities
- Increases independent participation in home, school and community environments
- Assistive technology has the potential to augment abilities and, bypass or compensate for barriers that disabilities create (Lewis, 1994).
- For children with disabilities in public school classrooms, assistive technologies are their tools to extend their physical, social and communicative abilities.
- Provides the means for academic and cooperative inclusion.

What Are Assistive Technology Devices?

Any item, piece of equipment, or product system, whether acquired commercially or off the shelf, modified or customized, that increases, maintains, or improves functional capabilities of individuals with disabilities.

Assistive technology devices can be anything from: a simple tool with no moving parts (e.g., a toothbrush with a built-up handle) to a sophisticated mechanical/electronic system (e.g., a robotic arm).

Simple, mechanical devices are often referred to as "low tech" devices while computer-driven or complex assistive technology may be called "high tech."

For example students can change how they interact with materials by using devices and software that help in:

- Enlarging the size of the text
- Changing the color or font of the text
- Having the text read aloud
- Hearing labels read of pictures/simulations
- Speaking into a computer microphone to write
- Using alternate input options: trackballs, larger keyboards, touch screens, etc.

Device Selection

In determining the assistive technology needs of a child, consider:

- the abilities of a child; his/her interests and preferences
- the family's culture and value system
- the environment it will be used in
- the functional tasks for participating in daily routines
- available materials and technologies
- the barriers to his/her participation
- ongoing intervention and evaluation

To get a better understanding of all the assistive technology available we suggest that you visit the following site.

<http://atto.buffalo.edu>