

# **Assistive Technology**

**Parents' Guide**

# **Implementation Guidelines**

**State Department of Education  
Division of Special Education  
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## **Assistive Technology: Information for Parents and Teachers:**

This document is written for teachers and parents of students with disabilities. Its goal is to provide information about **best practices** in selecting and using assistive devices and services that will help students make progress in school programs.

Special thanks should be given for information produced by Ms. Joy Zabala, Quality Indicators for Assistive Technology ([www.QIAT.org](http://www.QIAT.org)) and the assistance of Mrs. Sandra Ourth, Speech and Language Pathologist and Assistive Technology Coordinator for Shelby County, Tennessee Schools. This document relies heavily on the information provided by Mrs. Ourth and Ms. Zabala.

### **What is Assistive Technology? (AT)**

Students with disabilities have greater needs for technology for a variety of reasons such as:

- Getting into and moving around the school

- Being comfortably seated and ready to learn and participate

- Hearing and seeing what is going on in the classroom and school

- Being able to communicate with classmates and teachers

- ... and many other reasons.

Generally, Assistive Technology (AT) can be defined as equipment and procedures that allow persons with disabilities to use his/her abilities in school, the home, and the work place, to help with being successful and self-sufficient in these settings. In the educational setting AT is provided to an individual student to assist him/her to meet the goals of the Individualized Education Program (**IEP**) and to participate in the general school program to the maximum extent possible.

Assistive devices include a wide spectrum of low-technology devices as well as electronic devices that the child uses to talk and make his/her needs known and to respond to the teacher when appropriate. Assistive Technology can be a ramp at the school door, water fountains and lavatories that allow a wheel chair to be rolled into position, special or modified seating, a device that makes the teacher's voice louder, a page turner made from a dowel rod and a rubber eraser, and many other devices.

Assistive Technology devices are often called either low-tech or high-tech. Low-tech refers to devices that are relatively simple, such as built-up handles for eating and writing utensils. High-tech devices generally require some training in order to use them. High-tech equipment can include computers, Braille readers, and voice output communication aides.

## **What is the role of the public school system in providing Assistive Technology?**

Federal and state laws require schools to provide students with disabilities with a Free, Appropriate, Public, Education (**FAPE**) in the Least Restrictive Environment (**LRE**). Here's a low-tech summary of FAPE and LRE:

**FREE** means that the education program is provided at no cost to the parents of students having a disability.

**APPROPRIATE** means that the educational program should match the child's strengths and needs, and include a plan so that the child can make progress toward his/her individual goals.

**PUBLIC** means that the child should participate and make progress as much as possible in the general education program with his/her classmates (age-mates).

**EDUCATION** means that the child with a disability should have the opportunity to learn skills that will help him/her to be successful in life.

**Least Restrictive Environment (LRE)** means that the child with a disability should be educated in a setting that is, as much as possible, like a general school and classroom.

## **What are the school system's general responsibilities?**

- ◆ Conduct evaluations,
- ◆ Help students learn by considering their special needs,
- ◆ Allow students to do the same kinds of things that other students their age do in the school, and
- ◆ Provide technology and training that is required for students to learn and participate.

Students with disabilities will have an **Individualized Education Program (IEP)** that spells out what the child and his/her teachers are working to accomplish. All students are expected to progress in the general curriculum to the maximum extent possible. This requirement includes students with disabilities. Some students with disabilities will not require the use of assistive devices or services. It all depends on the needs and abilities of the student. The need for assistive devices is determined by the child's IEP Team.

The student's Individualized Education Program is developed in a meeting of parents, teacher(s), related services personnel, and school administrators. The IEP must show that AT was considered. Some school systems have an AT checklist where potential learner needs are listed. Using a checklist helps to remind the Individualized Education Program Team of possible problem areas where assistive technology might apply.

## **What are the laws that spell out the procedures for educating students with disabilities?**

◆ **The Individuals with Disabilities Education Act (IDEA)** is the Federal law covering this area. IDEA was written to cover any need the student with a disability has in learning and making progress in school including:

- ◆ Development of basic self-help skills,
- ◆ Development of appropriate social integration skills,
- ◆ Progressing in the general curriculum and achieving the IEP Goals, and
- ◆ Acquiring appropriate pre-vocational skills.

Devices and equipment can play a critical role in insuring the provision of appropriate learning experiences for students with disabilities in public school settings. Students with disabilities must be provided with support and assistance that will help in meeting these basic goals. The child may be eligible to receive appropriate therapy services, behavior intervention training, appropriate adaptive equipment, and/or other assistive services based on his/her individual needs. The IEP Team decides the specific interventions.

◆ **The Vocational Rehabilitation Act of 1973 (Section 504)** is a civil rights law that insures that persons with disabilities cannot be excluded from any program they may need that receives federal financial assistance. In other words, government supported programs must be accessible to persons with disabilities. “Section 504” and IDEA are the two laws that pertain on the whole to programs for students with disabilities.

## **Where is Assistive Technology included in the student's IEP?**

There are three possibilities. They are:

- ◆ As a part of the special education program, or
- ◆ As a related service, or
- ◆ As a supplemental aid or service to allow a student to be educated in the Least Restrictive Environment.

NOTE: The IEP should not specify the particular brand name of an AT device to be used by the student. The development of the student's skills using an assistive device may require that he/she move to another device. The student can do this without holding another IEP Team meeting if the general category of device is used instead of a particular device name.

## **Why is there an emphasis on using Assistive Technology?**

**Technology is to be used as a tool to assist in the accomplishment of tasks that would be difficult or impossible without assistance. AT is related to function, not to a disability. (Zabala 1996)**

## **What are the categories and uses of assistive devices?**

### **Augmentative / Alternative Communication (AAC) Devices are provided:**

- To establish a means for communication and social interaction,
- To promote language development
- To support cognitive development (learning)
- To enhance work and educational opportunities
- To facilitate speech development
- To clarify speech production
- To enhance participation in society

### **Written Communication Technology Devices are provided:**

- To establish or enhance means of written communication for educational and vocational interactions,
- To clarify content of written production,
- To provide a channel to support and demonstrate cognitive development (learning),
- To enhance work and educational opportunities, and
- To enhance potential for participation through telecommunications and networking.

### **Vision Equipment Devices are provided:**

- To promote interaction in educational, vocational and social environments,
- To convert non-accessible materials into an accessible form (large print, voice output, or Braille) for everyday use, and
- To produce accessible materials for later use.

### **Assistive Listening Devices are provided:**

- To amplify sounds and conversations, and
- To alert to sounds of warning or danger.

### **Environmental Control Devices are provided:** (heat, cooling, lights etc.)

- To achieve a greater degree of independence in activities of daily life, and
- To increase the quality of life in the areas of recreation, communication, and general knowledge.

### **What are some misconceptions about technology?**

Misconceptions about Assistive Technology services and devices limit its use as a solution for persons with disabilities:

- One source, person, or agency has all the answers.
- Technology use depends on knowledge of computers.
- Technology should be introduced only when prerequisite skills are developed.
- Funding must be assured before technology is implemented.
- Product descriptions are always accurate.
- Technology is a panacea: It will “cure” the disability.
- The device will be used when it is provided.
- The same technology/device must be used every year.

## **When should a student be assessed for Assistive Technology?**

A student should be assessed or evaluated for Assistive Technology when the IEP Team determines that a disability is impacting or will impact the potential of the student. As stated earlier, every student who has an IEP must be given Assistive Technology consideration and that consideration must be noted on the IEP.

## **The Assistive Technology evaluation should contain recommendations based on outcomes: What does the student need to do, and what type of technology is required for the student to accomplish the tasks?**

Any AT assessment should be considered a dynamic process that occurs over time. It is not a one-time event. Needs and abilities of the student will change, and so will technology change. These circumstances require that the student's progress be regularly noted over time.

## **Who conducts the Assistive Technology assessment?**

The Assistive Technology assessment is conducted by a team of persons with knowledge appropriate to the needs of the child. The need for Assistive Technology is decided on a case-by-case basis. Assessment information is contributed by:

- ◆ **Parents and other family members.** The IDEA legislation places great emphasis on participation by parents in all parts of the child's IEP. Parents are essential to insuring the success of the student. Parents and family members must act as the overseers of the child's progress, and they must be the primary advocates for the child. Parents must understand the expectations of the IEP and see that the work required by the IEP is completed according to the IEP schedule.
- ◆ **Professionals will participate as needed and will be determined by the nature of the suspected problem.**

**NOTE: Professionals listed are for your information. Only appropriate ones will be selected as members of the AT Evaluation Team.**

**The Audiologist** - Evaluates and recommends treatment of hearing loss.

**Educators** (Teacher(s) in the general program and the child's special education teacher(s)) - provide information on in-class work, weaknesses and successes, comments on communication skills needed to succeed, and changes in the classroom environment. The teacher is important to deciding the long-term transition needs of the child.

**The Occupational Therapist (OT)** - Provides information on the child's abilities to work in the school. OT's provides information on muscle control of the child and teach parents and teachers about positioning the child. The OT may modify an assistive device so that the child can be comfortable and productive.

**The Vision Specialist** - Measures the child's ability to see and his/her ability to understand what is seen. The Vision Specialist may recommend that the child is seated in an area to avoid glare, or the specialist may recommend more or different lighting in the child's work areas. If a magnification or written communication device is indicated, the Vision Specialist will recommend it.

**The Physical Therapist (PT)** - Measures muscle strength, range of motion, balance, rigidity, flexibility, and coordination. The PT may suggest activities that will reduce stress and help build strength in the child's muscles. The PT will also help to train the teachers, the student, and the family in using a wheel chair and other devices.

**The Speech and Language Pathologist (SLP)** - is an expert in language production and understanding. The SLP will make determinations about the child's ability to understand and to produce spoken language. Both are essential to success in school and in life. The SLP can provide speech therapy and activities that help the child communicate.

**The Physician** - has information about general health and medical expectations. The doctor can write prescriptions for assistive devices that are medically essential for the child to function in school and in daily living.

**The Psychologist** - measures the ability of the child to learn and may assist in counseling the family.

◆ **Other specialists who may be consulted:**

**Social Worker** - The Department of Children's Services employs persons who look at the child's living situation and determines the need for additional community resources. The Social Worker is often the coordinator of community services for the family and the child.

**The Rehabilitation Counselor** - The Department of Vocational Rehabilitation Services may assist with the identification of career goals, assess the student's potential to hold a job, help in deciding the changes that must be made about work or an independent living situation so that the person with disabilities can be as independent as possible.

**The Transition Specialist** - Helps to develop Transition plans for students with disabilities. When the child reaches the age of 14, the IEP must have a statement of the "*...transition service needs...that focuses on the child's courses of study.*" At age 16 the child's IEP must "*... include a statement of needed transition services including, when appropriate, a statement of interagency responsibilities or needed linkages.*" (*IDEA Regulations*)

The goal of the legislation (IDEA) is to have parents, the child, and school personnel start planning the outcomes of the student's educational program early in the student's school experience. The student may be going to college or other post-secondary training, or he/she may be getting a job after leaving the school program. In either case the transition to the new setting needs a lot of planning and preparation by everyone involved.

## **Who pays for the Assistive Technology services and devices?**

The IEP Team must determine the Assistive Technology services and category of devices that are appropriate for the student's use. The local school system is primarily responsible for providing funding for AT services and devices that are not otherwise defined as "medically necessary."

There are other sources for funding of AT devices depending on the eligibility requirements of the potential funding source. Some examples are:

- ◆ TennCare (Medicaid in Tennessee); based on eligibility
- ◆ Private Insurance Policies; based on medical necessity
- ◆ Vocational Rehabilitation; based on eligibility.

The local school system and the parents of the child with a disability need to determine the appropriate AT funding source. The local school system cannot require the family to use their own resources or their health insurance to purchase an assistive device that is specified in the child's IEP. But, the local school system may ask the parents to explore the possibility of funding by the family health insurance. Family insurance cannot be used if the deductible is reduced by the purchase and/or the parents are required to pay extra premiums or any other related expenses.

Assistive devices purchased by the family, their medical insurance, or by TennCare become the property of the family. Equipment purchased by the local school system is the property of the school system. The local school system needs to establish working relationships with all the potential funding agencies so that getting the funds for an AT service or device is handled smoothly.

## **Does the child get to take home an Assistive Technology device that belongs to the school system?**

The IEP team decides whether the student needs the assistive device to complete homework assignments or other activities that contribute to achieving the goals of the student's IEP. If so, the student should use the AT device at home.

## **Who is responsible for repairing school system owned AT that gets damaged?**

The local school system is responsible for repairing and/or replacing system-owned AT devices that get damaged. Repair of family owned devices is the responsibility of the local school system **if the IEP Team decides that the device is essential to reaching the goals in the IEP.**

A wide range of AT devices is routinely used by certain students. Devices occasionally need repair and may require an extended period of time to be repaired. The rules require that FAPE be delivered as specified in the child's IEP, and a long period of time when FAPE is not being delivered due to repair, violates the rules, and puts the local school system at risk for litigation.

It is necessary for local school systems to maintain or have access to backup units of routinely used assistive technology devices to avoid this situation.

**What does the State of Tennessee plan to do to promote the use of Assistive Technology?**

## **The Tennessee Assistive Technology Network**

The TN Dept of Education, Division of Special Education provides partial support for these AT Service Centers. If you live within the region served by any of these centers please contact them for information and assistance concerning AT services for a student having a disability.

**University of Memphis**  
**Dr. Sandra Cooley-Nichols 901-678-2862**

**Jackson / Madison County Schools -Jackson, TN.**  
**Diane Hale 731-423-8412**

**East Tennessee State University in Johnson City**  
**Dr. Lori Marks 423-439-7685**

**Anderson County Schools in Clinton**  
**Ann McRae 865-463-2815**

**Little Tennessee Valley Educational Cooperative in Loudon**  
**Janice Reece 865-458-8900**

**Putnam County Schools in Cookeville**  
**Ms. Kathleen Airhart 931-528-6269**

**Gibson County Schools District in Trenton**  
**Bettye Green 731-855-0665**

**Maury County Schools in Columbia**  
**Paula Belew 931-380-2872**

**Wilson County Schools in Lebanon**  
**Ruth Cardwell / Amy Baugh 615-443-6195**

**Jefferson County Schools in Dandridge**  
**Ms. Mandy Schneitman 865-397-3194**

**Sequatchie Valley AT Consortium**  
**Jean Turney in Marion Co. 423-942-3434**

For further information contact:

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