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Ohio AT Network

ASSISTIVE TECHNOLOGY RESOURCE GUIDE

Assistive Technology Resource Manual

Index

This manual is provided for all school districts in Ohio as a resource and reference guide in the assistive technology (AT) decision-making process for students with disabilities. General information is included on the legal implications and the school district's responsibility to consider the assistive technology needs of all students who are receiving special education services. The local school district must provide for the specific needs of students with disabilities through a team process, including assessment and implementation. Local educators and related service providers must make sound judgments on assistive technology solutions that will be a part of the student's individualized education program (IEP).

Section 1:
Introduction to Assistive Technology

What is Assistive Technology?

Any adaptive device or service that increases participation, achievement or independence for a student with a disability may be considered assistive technology (AT). Adaptations may be as simple as a pencil grip or as complex as an adapted computer system.

For a school district, consideration of AT is required during the development of every individualized education program (IEP). This is the responsibility of the IEP team that determines the special education services necessary for each student with disabilities to receive a free and appropriate public education. If the team determines that the student needs AT, the school district must provide the necessary devices and services. Given this requirement, it is imperative that administrators, teachers and related service develop skills and knowledge related to AT.

The legal definition of assistive technology was originally issued in the Technology Related Assistance Act of 1988 (Tech Act). It is the accepted definition and as such is used in all other related legislation, including the Individuals with Disabilities Education Act (IDEA, 2004), which mandates the special education and related services that school districts must provide for students' unique needs.

> **Assistive technology device means 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 the functional capabilities of a child with a disability. The term does not include a medical device that is surgically implanted, or the replacement of that device.**
>
> *(IDEA, 2004, Part A, Definitions, 300.5; Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-01 (B)(2).)*

What are Assistive Technology Services?

The definition of assistive technology includes both the devices and services that are necessary for a student to maximize participation and progress in the educational program.

> **Assistive technology service means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device.**
>
> (IDEA, 2004, Part A, Definitions, 300.6; *Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-01 (B)(3).)*

The school district is responsible for:

- **Evaluating the needs;**
    - o Evaluating the needs of a child with a disability, including a functional evaluation in the student's customary environment

- **Obtaining/acquiring the device;**
    - o Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices for students with disabilities

- **Providing necessary modification and customization;**
    - o Selecting, designing, fitting, customizing, adapting, and applying use of assistive technology equipment

- **Training the student to use the device;**
    - o Training or technical assistance for a student with a disability or, if appropriate, that student's family

- **Training for professionals;**
    - o Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that student

- **Coordinating therapies, interventions, or services with assistive technology;**
    - o Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs

- **Maintenance, repair, and replacement as needed.**
    - o Maintaining, repairing, or replacing assistive technology

(IDEA, 2004, Part A, Definitions, 300.6)

Levels of Assistive Technology

The focus of this manual is to address the types of AT that are relevant to the educational needs of a student. However, it is important to understand the scope of AT as it applies to all aspects of a student's life. Assistive technology impacts many areas of a student's life, and consideration of these adaptations must be influenced by his/her specific needs.

> Never use a high technology solution for a low technology problem.

Assistive technology solutions may be described by the "level," which is generally a correlation between:

- **the technological difficulty of the device itself and**

- **the level of technical training the student needs to implement the device.**

In some instances, all levels of AT are needed. However, it is never reasonable to use a complex, costly piece of equipment when a simple, easy-to-use device can bring about the desired results. The continuum of options must always be considered, and the selection of equipment should be a match between the student's abilities and the purpose of the AT in enabling the student to participate in the educational setting.

Low technology refers to devices that are easy to use and generally do not require electrical power. The training period for use of such devices is relatively short. Many times these are simply referred to as accommodations or modifications, and educators may not realize that they have already considered and implemented AT. A creative teacher will often utilize "common sense" accommodations that allow students to accomplish given tasks within the classroom. Often low-tech systems are the foundation for other levels of assistive technology, developing skills that can be transferred into more significant phases of independence or participation.

Higher-level technology systems incorporate a wide range of levels for all aspects of life skills. These systems may involve complex construction or internal structures. Manufacturers specialize in equipment to accommodate specific disability conditions and the performance tasks to be accomplished. Such devices may require specific training in order for the user to take full advantage of their capabilities. However, most are "user friendly" which means that the user does not have to understand how the device works in order to use it successfully.

Overview of Assistive Technology

It is helpful to classify AT according to the task it enables the student to perform. The list included below is only an example of AT systems that may be considered. It is not inclusive of ALL AT options that are available.

Seating and Positioning:

These types of AT may allow the student greater access to the educational activities.

- non-slip surface on chair (e.g., Dycem)
- blocks for feet
- bolster or rolled towel for positioning
- adapted or alternate chair
- side-lying frames
- standing frame
- floor sitter
- chair insert
- wheelchairs
- custom fitted wheelchair
- straps
- head supports
- trays
- adapted desk/table
- bean bag chairs

Activities of Daily Living (ADL's)

Items that allow independence in the area of daily living.

- adapted eating utensils
- adapted drinking devices
- adaptive dressing devices
- specially designed toilet seats
- restroom modifications
- aids for grooming
- robotic and electronic feeders
- adapted cooking tools
- universal cuff to hold items

Environmental Control

Enables the student to perform independent use of equipment in the classroom and home.

- switch interfaces for appliances (e.g., VCR's, tape recorders)
- adaptable on/off switches
- remote control switch access
- switch latch timers
- switch interface for battery operated devices

Mobility
For individuals with physical disabilities, these items may be considered to enable the student to get around the classroom and school environment.

- walkers
- grab rails
- manual or powered wheelchairs
- powered recreational vehicles
- building modifications and adaptations

For individuals with vision impairments, mobility aids may be necessary to navigate the school.
- white canes
- electronic image sensors
- telescopic aids

Visual Aids
Enables students with visual impairment to gain information from educational activities.

- increased contrast
- enlarged images
- use of tactile and auditory materials
- books on tape
- eye glasses
- magnifier
- large print books
- low vision aids
- screen magnifier
- screen magnification software
- Closed Circuit TV (CCTV)
- screen reader
- braille keyboard or notetaker
- braille translator software
- braille printer/embosser
- brailled materials
- scanners
- optical character readers
- reading machine

Assistive Listening
Assists the student in gaining auditory-presented educational information.

- hearing aids
- classroom amplification
- personal FM system
- captioning
- signaling device
- TDD/TTY
- screen flash on computer
- phone amplification

Augmentative Communication
Assists students in effectively communicating when spoken communication is not effective.

- communication boards and wallets with pictures, words or letters
- eye gaze board
- simple voice output device
- electronic communication devices
- speech synthesizers for typing
- communication enhancement software
- computer based communication systems

Physical Education, Leisure, and Play
Enhances the student's social interaction and participation in recreational activities.

- adapted toys and games
- adapted puzzles
- switch activations with battery interrupter
- adapted sporting equipment
- universal cuff to hold crayons, markers
- modified stampers and scissors
- beeping balls
- arm support for drawing
- graphic design software (e.g., Kid Pix)
- adaptive computer games

Writing
Adapted modes to produce text material.

- pencil with adaptive grip
- adapted paper (e.g., raised lines, highlighting)
- slantboard
- typewriter
- portable word processor
- talking word processing
- computer with word processing
- word processing with spell/grammar checking
- word prediction
- electronic dictionary/ thesaurus/spell checker
- word cards/ word book/ word wall
- voice recognition software
- braille keyboard or notetaker
- braille printer

Reading
Adaptations to reading materials which make it accessible.

- change in text size, spacing, color, background color
- use of pictures with text
- adapted page turning
- book stands
- talking electronic dictionary
- scanner with talking word processor
- electronic text books
- highlighted text
- recorded material
- multimedia presentation formats
- books on tape, CD, or MP3
- optical character reader
- brailled books
- CCTV
- screen reader/text reader

Learning/Studying
Assists the students in organizing and completing educational tasks.

- picture/print schedules
- low tech aids (e.g., page tabs, color coding)
- highlighted text
- voice output reminder
- electronic organizer
- low or mid tech timer
- software for organizing ideas
- software for concept development

Computer Access

Means for the student to access the computer. This may include input and output.

- keyboard with built in accessibility options on standard computer
- keyguard
- arm support
- track ball/ track pad
- joystick with onscreen keyboard
- alternate keyboard (e.g., IntelliKeys)
- mouth stick/headpointer
- head mouse/ head master, tracker
- touch screen
- voice recognition software
- switch with Morse code
- switch with scanning
- screen reader
- word prediction/abbreviated expansion

Resources

"Computer Resources for People With Disabilities." The Alliance for Technology Access. Petaluma, CA. http://www.ataccess.org

"Closing the Gap: Resource Directory." Closing the Gap, Inc. Henderson, MN. http://www.closingthegap.com.

Section 2:
Legal Issues

This section includes a review of legislation, including four laws that have improved the civil rights of people with disabilities. These laws are:

- **Americans with Disabilities Act**

- **Assistive Technology Act**

- **Rehabilitation Act**

- **Individuals with Disabilities Education Act (IDEA), 2004**

School districts must be knowledgeable about the laws that regulate and form special education services, as well as the legal implications related to the applications of AT.

Americans with Disabilities Act (ADA)

ADA, which was signed into law in July 1990, provides civil rights protection against discrimination for individuals with disabilities similar to the protection provided on the basis of race, gender, age, nationality, and religion. It mandates accessibility and accommodation requirements in public facilities, employment, state and local government services, transportation, and communication.

All new construction and modifications must be accessible to individuals with disabilities. For existing facilities, barriers to services must be removed if readily achievable. Public accommodations including facilities such as restaurants, hotels, grocery stores, retail stores, etc., as well as privately owned transportation systems, must comply with ADA requirements.

ADA protects individuals with disabilities from employment discrimination based on the disability alone when the person is qualified to perform the essential functions of the job, with or without reasonable accommodations. These accommodations may include the use of assistive technology and technology access, unless the changes create an undue hardship for the employer.

Resources:
ADA Hotlinks and Document Center. http://www.jan.wvu.edu/links/adalinks.htm

ADA Home Page. http://www.ada.gov/

Assistive Technology Act (Tech Act)

The Technology-Related Assistance for Individuals with Disabilities Act of 1988 (reauthorized in 1994) was passed by Congress to increase access to, availability of, and funding for assistive technology through state efforts and national initiatives. It forms the basis for the Assistive Technology Act, signed into law in 1998 (amended 2004). This law affirms that technology is a valuable tool that can be used to improve the lives of Americans with disabilities.

The Tech Act continues to support states in sustaining and strengthening their capacity to address the AT needs of individuals with disabilities. The act provides federal funds to assist states in developing *consumer responsive* systems of access to AT, services, and information.

Ohio's Tech Act project is:

Assistive Technology of Ohio
445 East Dublin Granville Rd., Building L
Worthington, OH 43085
Executive Director: William Darling, Ph.D.
Phone/TTY: 614.293.9134
http://www.atohio.org

Resource:
The Association of Assistive Technology Act Programs (ATAP).
http://www.ataporg.org/

Rehabilitation Act

The Rehabilitation Act was originally signed into law in 1973. The 1992 amendments are built on the presumption of an individual's ability to achieve employment and other rehabilitative goals regardless of the severity of the disability. Vocational rehabilitation agencies are required to focus on solutions and the attainment of employment outcomes, unless the agency can "unequivocally demonstrate" that no possibility of employment exits for a particular individual. Careful consideration is to be made of options for training, assistive technology, reasonable accommodations, and supports.

Students who do not qualify for special education may still be eligible for accommodations under Title V of the Rehab Act, commonly referred to as Section 504. This section provides that ...

> *"no otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

In 1998, Congress amended the Rehabilitation Act to require that all federal agencies remove barriers to make electronic and information technology accessible to people with disabilities. Section 508 establishes requirements for electronic and information technology developed, maintained, procured, or used by the federal government. Section 508 requires federal electronic and information technology to be accessible to people with disabilities, including employees and members of the public. This web accessibility mandate has had significant impact on the design of web sites.

Resources:
The Rehabilitation Act.   http://www.ed.gov/policy/speced/reg/narrative.html

Section 508. http://www.section508.gov/

Section 504. http://www.ed.gov/about/offices/list/ocr/504faq.html

Individuals with Disabilities Education Act (IDEA)

IDEA is the safeguard for every student with a disability to receive a free, appropriate public education (FAPE). Historically known as The Education for All Handicapped Children Act of 1975 (Public Law 94-142), the basic provisions of IDEA have remained the same since its inception. IDEA requires school districts to provide special education and related services based on the individualized education program (IEP) designed to meet the student's unique needs. IEP goals are identified and implemented to facilitate student access and progress in the general education curriculum.

Assistive technology was not originally included in IDEA, but was later written into the law and placed in the section entitled "Related Services." In a 1990 policy letter, the Office of Special Education in the U.S. Department of Education referred to the Tech Act definition of assistive technology in clarifying the students' right to AT in the IEP. This laid the groundwork for the inclusion of specific language for AT devices and services in the 1990 Amendments to IDEA. Finally, it was moved into its own section, Section 300.5 and 300.6, where it is defined. The 1997 Amendments to IDEA specifically required that AT be considered for every student with a disability as part of the IEP process. Assistive technology may be considered as either special education and related services or as supplementary aids and services.

In Ohio, mandates of IDEA are presented in the Operating Standards for Ohio School Districts Serving Children with Disabilities (2007). The purpose of these operating standards is to ensure that all children with disabilities residing in Ohio between the ages of 3 and 21 years have available to them a free appropriate public education (FAPE), as provided by Part B of the Individuals with Disabilities Education Act, as amended by the Individuals with Disabilities Education Improvement Act of 2004. These Ohio rules will be referenced in legal areas of this document.

IDEA Definition of Assistive Technology

While IDEA continues to define an assistive technology device in the Tech Act terminology, an exception was added in IDEA 2004. The definition now states:

> "Assistive technology device means 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 the functional capabilities of a child with a disability. *The term does not include a medical device that is surgically implanted, or the replacement of that device.*" (IDEA 2004; 300.5; *Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-* 01 (B)(2).

The exclusion of medical devices that are surgically implanted is usually thought to apply to cochlear implants. A similar exclusion exits in the definition of related services; however, students with cochlear implants deserve the same array of services as students with a hearing aid, as determined by the IEP team.

There is no federal "approved list" of AT devices and services covered by IDEA. Assistive technology can be quite simple and inexpensive, or it can include more sophisticated devices.

Historically, the US Department of Education has ruled that districts are not required to provide a personally prescribed device that would be required whether or not the student is at school. However, because the definition does not include this limitation, there could be requirements for a district. For example, if a student required a hearing aid or eye glasses in order to receive a free and appropriate public education (FAPE), then the district must provide it at no cost to the student or parents.

Determination regarding the provision of assistive technology for a student with a disability must be made on an individual basis. As such, it is important to recognize that the definition of assistive technology includes devices *and* services. These defined services assure that appropriate processes are in place for evaluation, acquisition and implementation of AT that will foster student achievement within the educational program.

This federal definition of assistive technology devices and services is identical to the definition provided in the Ohio Operating Standards for School Districts Serving Children with Disabilities.

IDEA and Consideration of Assistive Technology

The requirement that *every* student with a disability must be "considered" for assistive technology during the development, review of revision of the IEP remains in the IDEA 2004.

> **"In developing the child's IEP, the IEP team must consider whether the child needs assistive technology devices and services."**
> IDEA 2004; 300.324 (a)(2)(v); Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-07 (L)(b)(v)

The IEP team must evaluate the specific needs of each student and determine criteria to establish whether specific assistive technology devices/services are necessary to meet the specific needs of a student. This consideration must be conducted on each student's IEP at least annually.

Neither IDEA nor the Operating Standards for Ohio Schools Service Children with Disabilities (2007) provides specific guidance for how this consideration is to be conducted. On the special factors page of the Ohio IEP document, the team checks the box "assistive technology devices and services" if this has been incorporated into the body of the IEP document.

An Assistive Technology Consideration Flowchart is included in Section 5 of this manual that may guide an IEP team in making consideration of a student's need for assistive technology during the IEP process. Questions that should be ask include:

- What is it that we expect the student to be able to do in the educational program, that he/she is unable to do because of his/her disability?
- What special strategies or accommodations have been tried to meet the special education need? Is it working?
- What are the reasons that the present accommodations are not meeting the student's needs?
- Does this collaborative team have the necessary resources to define the need and plan intervention strategies at this time with consideration for assistive technology?

It may be necessary for an IEP team to seek additional assessment before necessary assistive technologies can be documented in the IEP. Section 6 of this manual provides guidance on steps of an AT assessment process. Additionally, Assistive Technology Assessment Guides forms are located in Appendix A.

Additional resources to support the IEP in the AT Consideration process:

WATI Assistive Technology Consideration Guide.
http://www.wati.org/Products/pdf/Assessment_Forms_only.pdf

Georgia Project for Assistive Technology (GPAT) Assistive Technology Consideration Resource Guide
http://coefaculty.valdosta.edu/spe/ATRB/AT_considerati_resource.htm

IDEA Implications for Assistive Technology

The implications for assistive technology as part of special education services are inherent within the basic premises of IDEA.

> - **All students with disabilities are entitled to a free and appropriate public education (FAPE) appropriate to their needs.**
>
> IDEA (2004) 300.17; Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-09(A).

All children are entitled to a FAPE "regardless of the severity of their disabilities. (*Timothy W. v. Rochester N.H. School Dist. 1989).* It is the responsibility of the IEP team to determine what constitutes "appropriate". This must be done on a case-by-case basis for each student and included in the IEP.

In the *Board of Education v. Rowley (1982)*, the court stated that IDEA guarantees a "basic floor of opportunity," providing the same opportunities that other students have through specialized instruction and related services that are individually designed to provide educational benefit to the student. The court did not rule that maximization of opportunities for student with disabilities was required. However, the program must be based on the student's unique individual needs and be designed to enable the student to benefit from an education. In other words, the student must be making progress. Therefore, more than a minimal benefit is required for the program to be appropriate. In determining what is appropriate, the school district must be able to answer the following two questions:

- Did the district comply with the IDEA's procedures?
- Was the IEP reasonably calculated to enable the child to benefit?

With regard to AT, the relationship between the educational needs of the student and the AT device or service must be considered. The basic standard to be met is whether or not the student needs the AT to receive a FAPE. (*Sch. Bd. of Ind. Sch. Dist. No. 11, Anoka-Hennepin v. Pachl. 2002) (Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-02 (F)(2)*

"Free" as related to AT means that the devices and services, if deemed appropriate, must be provided at no cost to parents. This is defined in the list of AT services, including purchase or acquisition, maintenance and repair. It also requires that the school assume the costs for assessment, therapies, and related services as needed to implement the use of necessary AT.

IDEA 97 specified that the school may use Medicaid or the private insurance of the parents for special education, including assistive technology. However, the US Department of Education has stated that this use must be voluntary on the part of the parents. Furthermore, the district cannot deny services if the parents refuse to authorize use of Medicaid or private insurance. Such use also cannot result in any cost to the parents (e.g., co-payment, deductible). Medicaid and private insurance are viable options for obtaining Augmentative and Alternative Communication (AAC) devices since these may be considered "medically necessary." Medicaid or private insurance does not cover "educationally necessary" items.

The US Department of Education has stated that if an IEP team determines that an AT device is needed for home use in order to for a student to receive FAPE, the assistive technology must be provided, again at no cost to the parents. An example might be when a student needs the device at home to complete homework assignments.

> - **To the maximum extent possible, students with disabilities should be educated with students without disabilities, as close to home as possible, and in the least restrictive environment. (LRE)**
>
> IDEA (2004) 300.114; Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-09 (A).

IDEA requires that students receive their educational services in the least restrictive environment (LRE). Therefore, removal from the general education classroom is to occur only when the student cannot be successfully educated in that setting even with supplemental aids and services. IDEA 97 further emphasized that a student with disabilities cannot be removed from an age-appropriate regular classroom "solely because of needed modifications in the general curriculum." The statute explains that supplementary aids and services are to be made available in the regular education classes to enable the students with disabilities to be educated with non-disabled peers to the maximum extent possible. Assistive technology is included in the definition of "supplementary aids and services" and must be considered for the ways it will enable the student to be educated in the general education program.

When determining the LRE for a student, the program must be appropriate to meet the individual needs of the student. Therefore the district must have available a continuum of alternative placements (e.g. services In regular class, separate class). The burden is on the school district to prove that the regular education environment is not beneficial to the student. The school district must also determine if the support of AT will enable the student to remain in the regular education environment. The implications are that there must be district-wide awareness of the types of AT devices available and how they might benefit a student in the classroom.

In whatever setting the IEP team determines is the LRE, the school must provide the necessary supports and tools for learning to take place.

> - **Students with disabilities must be provided supplementary services and aids that permit them to benefit from their education.**
>
> IDEA (200) 300.320; Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-07 (H)(1)(e).

IDEA 97 defined supplementary aids and services to means aids, services, and other supports that are provided in regular education classes, other education-related settings, and in extracurricular and nonacademic settings, to enable children with disabilities to be educated with non-disabled children to the maximum extent appropriate. (IDEA, 300.114) As stated before, AT is included in this definition. With the clarification that supports are to be provided in other settings, it is also clear that the student should be able to use a device (such as an AAC device) in after school and nonacademic functions.

All supplementary aids and services are to be listed in the IEP. This may also include AT devices and supports, such as in-service training for the teaching staff. All personnel working with the student should be trained on the implementation of the AT in the classroom. In order for the device to be effectively used, these significant people must be familiar with the device and ways in which it will enable the student to benefit from his/her educational program.

> - **With a parent's informed consent, a fair assessment must be completed to determine the student's educational needs.**
>
> IDEA (2004) 614; Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-06 (A)(4)

Evaluation provides the foundation for the IEP. The term "assistive technology" is not specifically mentioned in the section titled "Evaluation Procedures," but the section does state that the student shall be assessed in all areas related to the suspected disability, including motor abilities, communicative status, and academic performance. Providing appropriate AT begins with a comprehensive assessment.

Key principles on assessment in IDEA are:

1. Evaluation instruments must be administered by trained personnel.
2. Instruments include those designed to assess areas of specific need and not merely those that provide an intelligence quotient.
3. A multidisciplinary team or group of persons shall conduct the evaluation.
4. No single instrument should be the sole criterion for decision-making.

The AT evaluation team must be knowledgeable about the specific area of disability and the technology devices and services that may enable the student to benefit from his/her educational program. If the school district does not employ personnel who can properly evaluate the AT needs of the student, it is its responsibility to obtain such services. Assessment should be completed in the student's customary environment and should remain part of a team process that considers the global educational needs of the student.

A parent has the right to an independent AT evaluation at the district's expense, if they disagree with the evaluation conducted by the district.

> - **If a student is identified as having exceptional educational needs, an Individualized Education Program (IEP) must be prepared annually.**
>
> **IDEA (2004) 300.320;** Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-07 (A).

The IEP must include the goals for the student, the services the student will receive, and how and where the student will receive these services. The IEP team must consider and determine modifications or tools that are needed for the student to achieve these goals. The IEP must specify what AT devices or systems are needed to maintain educational goals and learning.

Assistive technology may be included in the IEP either as part of the student's goals and objectives, a related service, or as a supplementary aid or service. The basic criterion is that the student needs the assistive technology to benefit from special education and this must be documented in the IEP.

Assistive Technology and Section 504

Section 504 was included in the Rehabilitation Act of 1973. Section 504 prohibits discrimination on the basis of disability in any program receiving special funds, including public school districts.

To be eligible for services under IDEA, a student's disability must meet the definition of one of the several disabilities listed and must require special education services. Under Section 504, on the other hand, students with disabilities are eligible even if they do not need any special education services. Therefore, students who do not meet the criteria under IDEA, but who still need some specialized assistance (including AT), are covered by Section 504. If a student with a disability who is not receiving special education services needs an AT device to fully participate in school activities, Section 504 may require that the school provide the device and any training needed to effectively use the device at no cost and be responsible for repairs and maintenance.

Determining Educational Relevance of Assistive Technology Devices and Services

The school district must answer four specific questions when determining whether AT is educationally necessary for a student:

1. Is the provision of an assistive technology device or service essential for the student to receive FAPE?
2. Is an assistive technology device or service necessary for the student to be educated within the least restrictive environment?
3. Are the assistive technology devices and/or services a necessary related service?
4. Given assistive technology service and/or devices, will the person with disabilities have access to school programs and activities?

If the answer to any of the above questions is **yes**, then the assistive technology device and/or service are legally required, and is the responsibility of the school district.

(Adapted from AC Chambers, "Has Assistive Technology Been Considered?")

Ten Assistive Technology Realities	
Reality 1:	Determining when a device is needed for FAPE is no easy task.
Reality 2:	There is no cookbook for including assistive technology in the IEP.
Reality 3:	There are no IDEA exemptions for personal use devices.
Reality 4:	The difference between "medically necessary" and "educationally necessary" is clear as mud.
Reality 5:	If it is in the IEP, the school MUST make sure the device is available and functioning properly.....regardless of who paid for it or owns the device (school, family, etc.)
Reality 6:	If you name a specific brand name device in an IEP, that is the device the school is obligated to provide.
Reality 7:	Schools cannot limit assistive technology to in-school-use....but not all devices available at school must go home.
Reality 8:	A computer is not the answer to every assistive technology need.
Reality 9:	There is no magic wizard with all the assistive technology expertise and certainly no assistive technology credential that makes someone an expert in all areas of assistive technology.
Reality 10:	Knowledge is protection against litigation, and knowledge helps you do what is right for kids/

(Source: Diane Golden, Missouri Assistive Technology Project, Kansas City, MO)

Implications of Case Law with Relation to Assistive Technology/Computer Provision

The implications from past case law suggest how the courts may rule on future decisions related to computer provisions.

1. Courts are likely to rule that a student with a physical disability will need a computer in order to provide a basic floor of opportunity.

2. Courts are likely to rule for provision of a computer when it is part of a product system.

3. Courts may rule that a computer is necessary when it will increase the student's access to a least restrictive environment.

4. Courts are likely to rule for a computer if a teacher views the computer as necessary for that student.

5. If a teacher rejects the suggestion of a computer as a result of not knowing how to use the computer, courts may view that as a denial of a related service necessary for a FAPE.

6. Courts are likely to award a computer if it is listed in a well-written IEP that is reasonably calculated to provide some benefit to the student.

Resources:
The Public School's Special Education System as an Assistive Technology Funding Source: The Cutting Edge. Neighborhood Legal Services, Inc. (April 2003)
http://www.nls.org/specedat.htm

"A Review of Case Law Related to Computer Provision," University of New Mexico, 1997.

Related Issues in IDEA 2004

Universal Design: IDEA 2004 refers to the definition of Universal Design that is used in the Assistive Technology Act of 1998.

> "The term 'universal design' means a concept or philosophy for designing and delivering products and services that are usable by people with the widest range of functional capabilities, which include products and services that are directly accessible (without requiring assistive technologies) and products and services that are made usable with assistive technologies."
> *(Section 3 of the Assistive Technology Act of 1998; Operating Standards for Ohio Schools Service Children with Disabilities (2007) 3301-51-01 (64)).*

Within IDEA 2004, the law states that state educational agencies (or local agencies in the case of district assessments) shall, to the extent feasible, use universal design principles in developing and administering any statewide assessment.

With an increased emphasis on the universal design of products and services, some students with disabilities may be able to access and use educational materials without the need to add special AT.
For additional information on Universal Design for Learning: http://www.cast.org

Accessibility to Print Materials: One of the most significant assistive technology related additions to IDEA 2004 is the provision for providing accessible instructional materials to blind persons or other persons with print disabilities in a timely manner and free of charge. Print instructional materials means printed textbooks and related printed core materials that are written and published primarily for use in elementary school and secondary school instruction and are required by a state education agency (SEA) or local education agency (LEA) for use by students in the classroom. The law specifies that materials will be formatted to the National Instructional Materials Accessibility Standard (NIMAS) to be used in the preparation of electronic files suitable and used solely for efficient conversion into specialized formats such as Braille and text-to-speech.

The law also establishes and supports a National Instructional Materials Access Center (NIMAC) through the American Printing House for the Blind. NIMAC's duties are to receive and maintain a catalog of print instructional materials prepared in NIMAS and to provide access to print instructional materials, including textbooks, in accessible media, free of charge, to blind or other persons with print disabilities in elementary schools and secondary schools.

For additional information on NIMAS/NIMAC, see http://nimas.cast.org/about/index.html
For information on NIMAS/NIMAC in Ohio:
Cheryl Boley, Director, Braille Production Program
Ohio State School for the Blind
Columbus, OH 43214   (614) 644-8461

Section 3:
Assistive Technology Funding

Implications for the School District

Under IDEA, the special education program lists a variety of assessments and services that school system must provide so students with disabilities may receive a "free and appropriate public education" (FAPE). School placement decisions, goods, and services to be provided are written out in the IEP according to the determinations of the IEP team. The AT needs of the student must be considered at least annually at the review of the IEP.

Assistive technology devices and services must be provided when appropriate. Determination of when this is, and exactly what technology to use, is extremely individualized. Securing funding for AT must be preferenced by a clear identification of the needs, and determination of the goals that will be accomplished.

Cost may be an issue in the AT process, but it cannot be a controlling factor. If more than one option will provide for the provision of FAPE, then cost may be a legitimate factor in determining whether a particular device or service is appropriate. Cases must be considered on an individual basis, with the components of IDEA being followed. Cost may not be a factor when the alternative will deny the provision of FAPE.

The school district is responsible for providing for the AT needs of the student. However, the school district may utilize alternative funding sources as long as the use of such funds does not result in a reduction of medical or other types of assistance to the student or the family. Additionally, if a parent provides the AT device in order for the IEP to be implemented, the school district must assume responsibility for repair and maintenance. Possible outside funding sources that the school district may be able to access are outlined in this section. The purpose for using the AT will determine the potential funding sources.

Other Resources:
Family Information Guide to Assistive Technology. Family Center on Technology and Disability (2005)
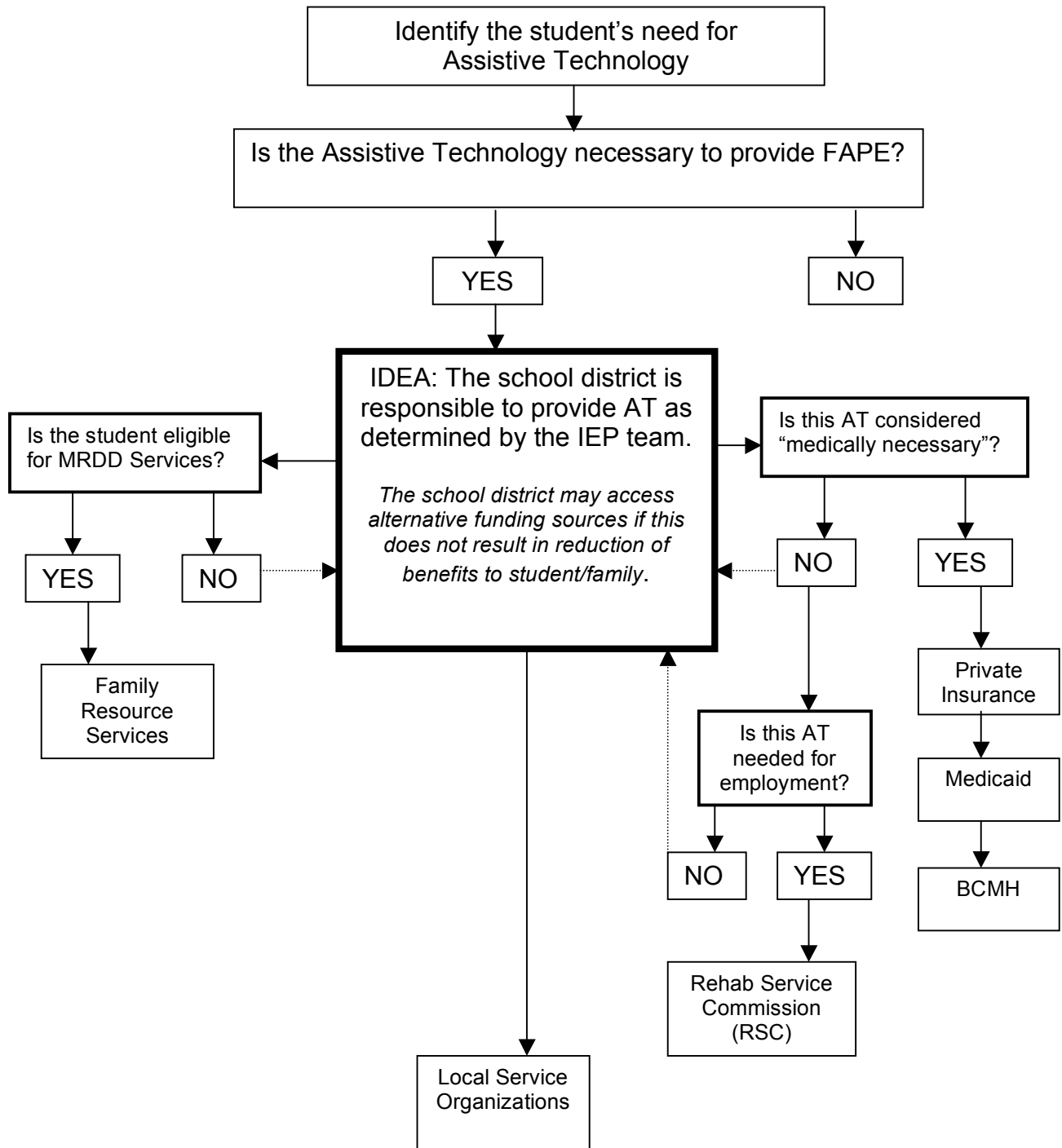http://www.fctd.info/resources/fig/Sec3.htm

Funding of AT Booklet Series. Neighborhood Legal Services, Inc.
http://www.nls.org/booklets.htm

Ohio Legal Right Services
http://www.olrs.ohio.gov/ASP/olrs_AssistiveTech.asp

Funding at a Glance

```
                    ┌────────────────────────────────┐
                    │   Identify the student's need for│
                    │      Assistive Technology       │
                    └────────────────┬───────────────┘
                                     │
                                     ▼
        ┌────────────────────────────────────────────────────────────┐
        │   Is the Assistive Technology necessary to provide FAPE?    │
        └──────────────────┬─────────────────────────┬───────────────┘
                           │                         │
                           ▼                         ▼
                     ┌──────────┐              ┌──────────┐
                     │   YES    │              │   NO     │
                     └────┬─────┘              └──────────┘
                          │
                          ▼
┌───────────────────┐  ╔════════════════════════════╗  ┌──────────────────┐
│ Is the student    │  ║  IDEA: The school district  ║  │ Is this AT        │
│ eligible for MRDD │◄─║  is responsible to provide  ║─►│ considered        │
│ Services?         │  ║  AT as determined by the    ║  │ "medically        │
└──┬─────────┬──────┘  ║  IEP team.                  ║  │ necessary"?       │
   │         │         ║                             ║  └───┬──────────┬────┘
   ▼         ▼         ║  The school district may    ║      │          │
┌──────┐ ┌──────┐      ║  access alternative funding ║      ▼          ▼
│ YES  │ │  NO  │····► ║  sources if this does not   ║◄·· ┌─────┐  ┌─────┐
└──┬───┘ └──────┘      ║  result in reduction of     ║    │ NO  │  │ YES │
   │                   ║  benefits to student/family.║    └──┬──┘  └──┬──┘
   ▼                   ╚═════════════╤═══════════════╝       │        │
┌──────────┐                         │                       ▼        ▼
│ Family   │                         │              ┌───────────┐ ┌──────────┐
│ Resource │                         │              │ Is this AT│ │ Private  │
│ Services │                         │              │ needed for│ │ Insurance│
└──────────┘                         │              │ employment│ └────┬─────┘
                                     │              │    ?      │      │
                                     │              └──┬─────┬──┘      ▼
                                     │                 │     │    ┌──────────┐
                                     │                 ▼     ▼    │ Medicaid │
                                     │              ┌────┐ ┌────┐ └────┬─────┘
                                     │              │ NO │ │YES │      │
                                     │              └────┘ └─┬──┘      ▼
                                     ▼                       ▼    ┌──────────┐
                              ┌──────────┐           ┌──────────┐ │  BCMH    │
                              │ Local    │           │ Rehab    │ └──────────┘
                              │ Service  │           │ Service  │
                              │Organizat.│           │Commission│
                              └──────────┘           │  (RSC)   │
                                                     └──────────┘
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Medicaid – Department of Job and Family Services

Medicaid is a national program of medical assistance for low-income individuals, including persons with disabilities. Many individuals with disabilities may qualify for Medicaid under waiver options when they do not qualify due to family income. Medicaid is administered by each state, and the rules vary from state to state.

In Ohio, Medicaid is administered by the Ohio Department of Job and Family Services (ODJFS). Information on eligibility for Medicaid may be obtained by calling your county office of the Department of Job and Family Services.

As part of Medicaid, the Individual Options Waiver (IO Waiver) is for people with mental retardation or developmental disabilities who meet the waiver's eligibility requirements. Services provided through this waiver allow people to stay in their homes and get support rather than living in an Intermediate Care Facility (ICF/MR). This waiver is administered by the Ohio Department of Mental Retardation and Developmental Disabilities (ODMRDD).

Ohio's Medicaid will provide for certain assistive technologies that are considered medically necessary. Most of these qualify under durable medical equipment. Life sustaining equipment, such as those for breathing or feeding, are covered technologies. Medicaid will fund prescribed wheelchairs, including customizations and modifications, on five-year intervals. Wheelchair recommendations must include a physician's prescription and an evaluation from a physical therapist on seating involvement. Funding applications for medically necessary technologies are submitted by the vendor.

Augmentative communication is covered by Medicaid because it has the capacity of being described as a "medical necessity." The rules for provision of a "Speech Generating Device" (SGD) in Ohio are separate from other areas of Medicaid funding, and rules for application are specific for an SGD. Under Ohio's Medicaid rule, an SGD may be prescribed to facilitate basic communication if the individual is unable to use typical modes to "express basic needs and wants, transfer information, achieve social closeness, or demonstrate social etiquette."

The SGD application must be completed by an evaluation team, led by a licensed speech-language pathologist (SLP). A licensed SLP is defined as one who possesses licensure by the Ohio State Board of SLP&A and Certificate of Clinical Competency (CCC) from the American Speech and Hearing Association (ASHA), or is completing a program of supervised work experience (CFY) from the above licensure agencies. In addition, the licensed SLP must document experience with SGD service delivery.

For an SGD application, a physician's prescription is required based on an evaluation of the individual's communication abilities and needs made by this licensed SLP. Medicaid is a "third-party payment" program. Medicaid will only make payment to

recognized "second parties," which, in the case of an SGD, is the vendor. When an SGD is acquired through Medicaid, it remains the property of the individual/family.

Limitations on coverage of SGD's include printers, environmental control devices, and personal computer systems, unless adapted for use as an SGD. Medicaid does have provisions for repair of SGD's.

The rules for Ohio's Medicaid are specific and generally more inclusive on medical technologies than coverage through private health insurance. Individuals who have private insurance in addition to Medicaid must first file with their insurance companies. Medicaid will pick up costs of covered items that are not provided by insurance. Medicaid will also pay for maintenance and modifications

Educational equipment/aids are considered essentially "non-medical" and, are therefore, not covered in Medicaid funding.

Several vendors have specific funding information that can assist a team in completing the AAC/SGD evaluation and submitting a report for Medicaid, including the following:

>Prentke Romich Company
>http://www.prentrom.com/funding/medicaid/oh

>Dynavox
>http://www.dynavoxtech.com/funding/Default.aspx

Contact your local office of the Department of Job and Family Services for more information on eligibility for Medicaid. The Ohio Department web site is located at: http://jfs.ohio.gov/

Private Insurance

Private Insurance is a contract between the individual/family and the company. The insurance policy coverage, enrollment requirements, and co-payment requirements will vary between each. Medical insurance is based on the "medical necessity" of services and equipment. Private medical insurance may provide certain types of assistive technology under three categories of funding: prosthesis, durable medical equipment, and speech and language therapy.

Individual policies vary on the types of AT that are covered and the co-payment requirements. Many types of life-sustaining technologies and wheelchairs are covered because they are medically necessary. These types of equipment must include a physician's prescription, other assessment information that is specified by the company (e.g., physical therapy report), and vendor's prices.

Augmentative communication devices may be considered eligible items with some companies. Documentation to be sent to a private medical insurance company should include a physician's prescription, a description of the client's profile, including motor, sensory, and communication status, and a description of the individual's communication limitations. Emphasis should be made on the medical needs that will be met with the use of this communication device. Private insurance companies often utilize the guidelines for "medical necessity" that have been adopted by Medicaid. In the request for funding, include the recommendations and vendor prices and information. Also, include the name of the evaluation team leader and contact information. Medical reviewers will often request further clarification/information.

A school district may request but cannot require parents to use private insurance to pay for a student's required services or devices. In many cases, the parents are willing to pursue this avenue for a communication device since they will retain ownership. If the device is used at school to provide for the goals of the IEP, the district is responsible to pay for repair and maintenance of the device. These decisions should be addressed in all instances when the family is providing the funding source for equipment that will be used at school.

If funding is denied upon initial request, the decision may be appealed. Appealing is not uncommon, and the company will have an appeals process. Many appeals for AT are successful. When considering appealing, determine the reason behind the denial and proceed from there.

Private insurance companies will not consider AT equipment that is primarily educational in nature (e.g., computers for input/output).

Bureau for Children with Medical Handicaps (BCMH)

The Bureau for Children with Medical Handicaps is located within the Ohio Department of Health. This agency provides services to children with special health needs. BCMH is coordinated at the local level through the county health nurses.

BCMH operates under two programs: Diagnostic and Treatment. Any Ohio resident who is under 21 years of age and has a possible medical handicap is eligible for diagnostic services. Financial eligibility must be established for the treatment program. A physician who is approved by BCMH must make a referral for both service areas, and diagnostic and treatment services must be provided by qualified BCMH providers.

BCMH operates as the "payer of last resort," meaning that all other third-party resources must be pursued before BCMH authorization is considered. Third-part entities include government agencies such as Medicaid, Vocational Rehabilitation, Education, Early Intervention, etc.

BCMH may provide medically necessary services and assistive technologies, including durable medical equipment, medical supplies, and medical appliances. This includes wheelchairs, braces, prosthetic devices, glasses, and hearing aids. In 1997, BCMH established guidelines for augmentative communication devices. These are now included in the list of covered items. Required documentation is the same as that described for the Medicaid rule for SGDs.

Further information may be obtained by contacting your local Health Department, or

> Ohio Department of Health
> Bureau for Children with Medical Handicaps
> 246 N. High Street
> Columbus, OH 43215
> 614-466-1700
> http://www.odh.ohio.gov/odhPrograms/cmh/cwmh/bcmh1.aspx

A Handbook for Families of Children with Special Health Care Needs in Ohio: Programs and Services
http://olrs.ohio.gov/other/HandbookParentPacketRevJan06.pdf

Family Support Services (MR/DD)

In 1983, Ohio established a family support program, commonly referred to as the Family Support Services (FSS), designed to assist families caring for an individual with a developmental disability at home. The support provided with FSS funds enhances the quality of life for the entire family unit, and includes respite care, adaptive equipment, home modifications to accommodate the family member with a disability, special diets, and other services/ items that are individualized to meet the needs of the family. It is through this program families may obtain AT services and devices. Guidelines for the program are equipment and services that promote self-sufficiency and inclusion, prevent or reduce inappropriate institutional care, or further the unity of the family.

Family Support Services are regulated by County Boards of Mental Retardation and Developmental Disabilities (MR/DD). The family member with a disability must qualify for MR/DD services by being evaluated under the Children's Ohio Eligibility Determination Instrument (COEDI). A family may apply for family support services by contacting a case manager at the county board of MR/DD. Depending on the family's taxable income, a percentage of co-payment may be required for services or equipment requested. Some counties have a maximum amount that families may receive, generally ranging from $500 to $2500. Each County Board of MR/DD may establish local policies in this regard.

Families may utilize their family resource money allotments for the purchase of AT. Schools may ask parents to pursue this avenue of funding; however, the result should not pose a reduction of funds for other needed items.

For specific information in your county, contact the local MR/DD program.
Ohio Department of MRDD: http://odmrdd.state.oh.us/

Vocational Rehabilitation

Vocational rehabilitation services originated from the Rehabilitation Act of 1973, with the intent to provide training, assessment, placement and other services to people with physical or mental disabilities who could benefit from employment or other identified goals. Emphasis is on economic self-sufficiency, independence, and integration into society.

The Ohio Rehabilitation Services Commission (ORSC) consists of the Bureau of Vocational Rehabilitation (BVR), Bureau of Services for the Visually Impaired (BSVI), and the Bureau of Disability Determination (BDD).

An RSC counselor is the only person who may determine an individual's eligibility for vocational rehabilitation. This eligibility determines that the individual has a disability that results in a substantial barrier to employment and that the individual can benefit from vocational rehabilitation in terms of employment outcomes. This involves a diagnostic assessment and comprehensive assessment, if needed. The results of these assessments are compiled into the Individual Written Rehabilitation Plan (IWRP), which states the employment objectives, long-term rehabilitation goals, intermediate objectives, specific services to be provided, and rehabilitation technology, if appropriate. Rehabilitation Technology many include rehabilitation engineering, assistive technology devices, and/or assistive technology services.

IDEA mandates that an Individual Transition Plan be developed for students by the time they turn age 16, or in Ohio by the age of 14. Vocational Rehabilitation can become involved when this plan is initiated. However, local policy may state that Vocational Rehabilitation will not get involved until 2 years prior to graduation. Other barriers that are often reported for school aged students include that they are too severely disabled to benefit or RSC only considers outside sheltered employment.   The school district may need to operate as an advocate to ensure vocational rehabilitation services can be obtained for a student.

Information regarding vocational rehabilitation services may be obtained from:
Ohio Rehabilitation Services Commission
1-800-282-4536
or (614) 438-1200
http://www.rsc.ohio.gov/index.asp

Social Security Administration

Under the Social Security Act, two programs are available that may benefit individuals with disabilities: Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI). For both programs, eligible individuals must be at least 65 years old, blind, or disabled. Additionally, SSI considers income resources and defines the disability based on the inability to engage in "substantial gainful employment." For children, the impairment must be of "comparable severity" to one that qualifies an adult. SSI and SSDI do not directly provide funding for AT, yet qualifying individuals are then able to access other services and work incentives. Eligibility for SSI or SSDI also brings eligibility for Medicaid and/or Medicare. (See Medicaid)

Social Security provides a booklet that defines the services that are available to children with disabilities and can be viewed at
http://www.ssa.gov/pubs/10026.html - Introduction.

To learn how to apply for Social Security disability benefits or for additional information and brochures about SSDI or SSI, call the Social Security Administration toll-free at 1-800-772-1213 voice or 1-800-325-0778 TTY.

AT OHIO

AT Ohio is funded under the Assistive Technology Act, commonly referred to as the Tech Act. AT Ohio assists in acquiring assistive technologies through programs for low interest loans, equipment exchange, equipment loans and a computer recycling program.

Contact information:
Assistive Technology of Ohio
445 E. Dublin-Granville Road
Building L
Worthington, OH 43085
Phone: 800-784-3425 / 614-293-9134 (voice)
614-293-0767 (TTY)
http://www.atohio.org/

Service Clubs and Organizations

Service clubs and organizations are another source of funding for AT, yet it may be necessary to enlist help from more than one to raise the amount of money needed. Local groups such as the Lions, Sertoma, Shriners, Kiwanis, Rotary, churches, and sororities/fraternities often fill the gap when human service delivery systems fall short. These organizations perceive their role as providing assistance to an individual rather than operating funds for an assistive technology device. Parent/family permission should always be obtained before initiating any contact with local organizations on their behalf.

The types of organizations typically represent a membership and come together to help members of their community. Application tends to be less formal. Become familiar with the various organizations in your community and their interest areas. Decide on the focus of the request in specific and reasonable terms. After the initial contact many organization will ask for a presentation. Clearly describe the individual's need and the necessary funding needed, but try not to ask for the dollar amount for the technology itself. A presentation should be sincere with common language that can be understood by the layperson.

After the presentation, a written letter or thank you should be sent to the person in charge. If the request was granted, a photograph of the technology in use may be appropriate and appreciated.

Steps to Funding

1. Identify and Define the Need

A comprehensive assistive technology assessment process must be completed to identify the student's needs. Concise documentation of this need will facilitate the direction to be taken in obtaining funding. Funding for AT is NEVER impossible if the documented need is clearly defined.

- *Include personal letters of support from parents and educators describing the student's potential and how the assistive technology will increase his/her ability to participate in the specific area of need.*
  - *The individual need should be stated in "medical", "vocational", or "educational" terms, depending on the focus of the funding source.*

2. Identify Equipment and Services Needed

Research and identify the equipment and services required. Obtain pricing information and formal quotes from manufacturers and vendors.

- *Include information flyers describing the equipment.*
- *Take pictures or video of the student using the equipment during a trial period.*
- *Some manufacturers/vendors may provide assistance in the funding pursuit.*

3. Identify Possible Funding Sources

Establish a list of possible funding sources that exist for the student. Consider the medical or educational basis for this equipment. Explore the eligibility of the student for various agencies that may possibly fund equipment or services.

- *Identify someone who will serve as the "Funding Advocate" to coordinate efforts.*

4. Collect and Submit Required Paperwork

Funding sources will require different documentation and format in making application. Identify the exact procedures for a funding source before submitting.

- *It is possible to apply to multiple funding sources at the same time.*
- *Be patient, but persistent in the funding search.*

5. Pursue the Appeals Process

The appeals process is fairly common in securing funding for assistive technology. Often a denial is due to lack of understanding by reviewers of the need or importance of the equipment. Determine the reason for a denial and pursue to clarify.

Funding is ALWAYS available!!!

Local Funding Sources

These forms may be used to record and reference local agencies that may be contacted when seeking funding for AT.

Medicaid:

Description: Must be Medicaid eligible. Funds durable medical equipment and medically related services. Wheelchair applications must be completed through the vendor in conjunction with the student's physical therapist. Speech Generating Device (SGD) applications must be made through an ASHA certified Speech/Language Pathologist and submitted by the vendor.

Contact: Medicaid Application for eligibility must be completed by family at the County Department of Job and Family Services.

Agency_____

Address_____

Telephone_____ FAX_____

Contact Name_____

Bureau for Children with Medical Handicaps (BCMH)

Description: Diagnostic assessment available for any student under 21 years of age with a possible medical handicap. Treatment based on financial eligibility.

Contact: County Health Department.

Agency_____

Address_____

Telephone_____ FAX_____

Contact Name_____

Family Support Services

Description: Student eligibility determined by County Board of Mental Retardation and Developmental Disabilities (MRDD). Assistance monies vary.

Contact: County MRDD.

Agency_____

Address_____

Telephone_____ FAX_____

Contact Name_____

Vocational Rehabilitation: Ohio Rehabilitation Service Commission and Bureau for the Visually Impaired

Description: Eligibility possible when student reaches age 14 or Transition Plan is initiated. Eligibility determined by VR counselor.
Contact: Regional Vocational Rehabilitation office.

Agency_____
Address_____
Telephone_____ FAX_____
Contact Name_____

Used and Recycled Equipment/Loans

Description: Possible equipment and computers; loan programs

Agency: AT Ohio
Web Site: www.atohio.org
Telephone: 1-800-784-3425
 614-293-9134 (voice) 614-293-0767 (TTY)

Agency: Technology Resource Center
Telephone: 937-461-3305

General Information Regarding Funding Options/Loans

Description: State Support Teams (SST) (formerly SERRC) may provide information and assistance in the assessment and funding process, provide loan equipment for trial use, and other resources.

SST Region # ___
Address_____
Telephone_____ FAX_____
Contact Name_____

Description: Information related to assistive technology, loan equipment
Agency: Ohio Center for Autism and Low Incidence (OCALI)
Address: 5220 North High Street, Columbus OH 43214
Telephone: 1-866-886-2254
Contact Name: Jeff McCormick
web: http://www.ocali.org/

Appeals Process

Description: Legal issues

Agency: Ohio Legal Rights Service
Address: 8 E Long Street, Columbus, OH 43215
Telephone: 614-466-7214   FAX: 614-644-1888

Description: _____
Agency_____
Address_____
Telephone_____ FAX_____
Contact Name_____

Community Service Organizations

Organization_____
Address_____
Telephone_____ FAX_____
Contact Name_____
Description: _____

Organization_____
Address_____
Telephone_____ FAX_____
Contact Name_____
Description: _____

Organization_____
Address_____
Telephone_____ FAX_____
Contact Name_____
Description: _____

Section 4:
Guiding Principles in Assistive Technology

The mandates of No Child Left Behind (NCLB) as well as the Individuals with Disabilities Education Act (IDEA, 2004) emphasize high expectations for *all* students and access to the general curriculum to the maximum extent possible. Teachers are expected to facilitate student achievement through high-quality instructional activities. Students typically engage in these activities through participation, communication, and productivity. For students with disabilities, certain aspects of their disability may prohibit them from reaching the desired level of achievement.

Assistive technology offers many students with disabilities the ability to meet their full potential within their educational program. The consideration and provision of AT for students with disabilities is clearly mandated in the law. A great deal of attention has focused on interpretation of these laws to ensure that school districts understand their responsibility. However, many questions remain.

Which students need AT? What kind of technology is needed? What process must be completed to make AT decisions? How will the AT be used in the classroom? Why should AT be included?

There are no quick and easy answers to these questions. However, when a district has a has a well-defined plan for AT, it is fairly certain that service delivery will be legally correct and will ultimately help students with disabilities realize their educational potential.

These overarching guidelines, written by Joy Zabala, should be embraced by all educators as they embark on consideration of the assistive technology needs for individual students with disabilities.
- *The primary goal of assistive technology is the enhancement of capabilities and the removal of barriers to performance.*
- *Assistive technology can be a barrier.*
- *Assistive technology may be applicable to all disability groups and in all phases of education and rehabilitation.*
- *Assistive technology is related to function, not disability.*
- *The least complex intervention needed to remove barriers to performance should be the first consideration.*
- *Assessment and intervention involve a continuous, dynamic process of systematic problem solving.*
- *Regularly scheduled follow-up and adjustments are expected.*
- *Assistive technology does not eliminate the need for social and academic skills instruction.*
- *A team approach is required.*

Quality Indicators for Assistive Technology

The Quality Indicators for Assistive Technology (QIAT) Consortium has defined a set of descriptors that serve as a guide for quality assistive technology services. The basics of these Quality Indicators are included here and should serve to assist districts as they integrate assistive technology service delivery into current district policies and procedures and/or continuous improvement plans. More detailed descriptors can be found at the QIAT webpage, located at http://www.qiat.org. Additionally, QIAT Matrices may be used to guide a collaborative self-assessment conducted by a school district team and used to plan for changes that lead to improvement in attainable steps.

Quality Indicators for Administrative Support

This area defines the critical areas of administrative support and leadership for developing and delivering assistive technology services.

1. The education agency has <u>written procedural guidelines</u> that ensure equitable access to assistive technology devices and services for students with disabilities, if required for a free, appropriate, public education (FAPE).

2. The education agency <u>broadly disseminates</u> clearly defined procedures for accessing and providing assistive technology services and supports the implementation of those guidelines.

3. The education agency includes appropriate assistive technology responsibilities in <u>written descriptions of job requirements</u> for each position in which activities impact assistive technology services.

4. The education agency employs <u>personnel with the competencies</u> needed to support quality assistive technology services within their primary areas of responsibility at all levels of the organization.

5. The education agency includes assistive technology in the technology planning and budgeting process.

6. The education agency provides access to <u>on-going learning opportunities about assistive technology</u> for staff, family, and students.

7. The education agency uses a <u>systematic process to evaluate</u> all components of the agency-wide assistive technology program.

Quality Indicators for Professional Development and Training in Assistive Technology

This area defines the critical elements of quality professional development and training in assistive technology.

1. Comprehensive assistive technology professional development and training <u>support the understanding that assistive technology devices and services enable students to accomplish IEP goals and objectives and make progress in the general curriculum</u>.

2. The education agency has an AT professional development and training <u>plan that identifies the audiences, the purposes, the activities, the expected results, evaluation measures and funding</u> for assistive technology professional development and training.

3. The content of comprehensive AT professional development and training <u>addresses all aspects of the selection, acquisition and use</u> of assistive technology.

4. AT professional development and training address and are <u>aligned with other local, state and national professional development initiatives</u>.

5. Assistive technology professional development and training include <u>ongoing learning opportunities that utilize local, regional, and/or national resources</u>.

6. Professional Development and Training in assistive technology follow <u>research-based models for adult learning</u> that include multiple formats and are delivered at multiple skill levels.

7. The effectiveness of assistive technology professional development and training is <u>evaluated by measuring changes in practice that result in improved student performance</u>.

Additional Quality Indicators can be found in other sections of this manual:

Section 5:
- Quality Indicators for Consideration of Assistive Technology Needs

Section 6:
- Quality Indicators for Assessment of Assistive Technology Needs
- Quality Indicators for Assistive Technology Implementation
- Quality Indicators for Assistive Technology Transition
- Quality Indicators for Evaluation of the Effectiveness of Assistive Technology

Section 7:
- Quality Indicators for Including Assistive Technology in the IEP

Section 5:
Consideration of AT in the IEP Process

AT Consideration: Implications for IEP Teams

Beginning with the reauthorization of IDEA in 1997, the IEP team is required to "consider" the assistive technology needs of every student who is receiving special education services.

    (a) Development of IEP -
        (2) Consideration of special factors. The IEP team must –
            (v) consider whether the child needs assistive technology devices and services.
(IDEA 2004, 300.324)

When addressing "AT consideration" within the IEP process, it is important to realize that consideration is by nature a brief process that can be conducted within every IEP development. There should be at least one person on the IEP team who has some knowledge about AT. AT consideration requires that the team participate in a consistent decision-making process in relation to the student's goals and objectives that facilitate access and progress in the general curriculum.

Prior to AT consideration within the IEP development, the educational team must clearly identify the unique needs of the student and what tasks are to be performed in the educational program. The team must have realistic expectations of what the student should be able to do and establish goals and objectives for specially designed instruction.

Consider these examples:

- *A 7-year-old student with cerebral palsy is unable to use a pencil to write letters or words clearly. He dictates answers to his teacher for many assignments. What expectations should his teacher have for him to independently write answers in his school assignments?* **Should AT be considered?**

- *An 8-year-old student has a severe visual impairment. The text in the second-grade books is too small for this student to recognize. Other students read the text aloud to the student. What expectations for increased independence are there for this student to gain information from text material?* **Should AT be considered?**

- *A 13-year-old student with learning disabilities is able to write assignments. However, because of severe spelling and grammar errors, most of his assignments are unacceptable. What are the expectations for this student to correct spelling and grammar in all assignments?* **Should AT be considered?**

- *A student with developmental disabilities participates in a fourth grade inclusionary classroom. The parents want the student to participate in all activities that the other students are doing. The subject material is cognitively becoming difficult for the student. Therefore, a full time aide assists the student so that assignments can be completed. Are the curriculum expectations appropriate for this student? **Should AT be considered?***

- *A student in the Intermediate Multiple Disabilities classroom is not able to speak. He initiates a few signs and uses gestures to obtain his wants and desires. He frequently displays behavioral outbursts during classroom activities when others don't understand what he is trying to communicate. Because of this behavior, he is not included in any mainstream settings. What expectations are there for this student to more effectively communicate? **Should AT be considered?***

In each of these instances, the student is unable to participate in classroom activities through typical modes due to his/her disability. Determination of special education services and goals and objectives must be based on a clear understanding of the student's needs and the classroom expectations.

When developing the student's IEP, the Present Levels of Performance should define the educational expectations as well as the student's areas of difficulty due to his/her disability. The educational expectations should start with the expected participation of typical students, and then define what is expected of the student with disabilities. Enabling the student to participate may involve a series of interventions, strategies, modifications, accommodations, as well as assistive technology.

Therefore, consideration of assistive technology must be integrated into the total IEP process, not an afterthought as simply a "special factor."

As the result of AT consideration, the team will come to four possible decisions:

1. AT is not needed. The student is making adequate progress with the available instruction and interventions.
2. AT is needed and is successfully being used. The current devices and services continue to be stated in the IEP.
3. AT may be needed, but the IEP team is unsure of what devices and services are most appropriate. The team will decide on what AT will be tried and gather data to determine what is needed.
4. AT may be needed, but the IEP team is not familiar with what options might be needed. The team will explore resources within or from outside the district to more adequately assess the student's needs for assistive technology.

The Difference Between AT Consideration and Assessment

While AT consideration is generally a brief process, an AT assessment implies a more in-depth look at the student's abilities and needs for AT. The IEP team must understand the necessary steps to take in obtaining this assessment. The decision to complete an assessment that "extends" beyond the immediate IEP process must also be written into the IEP document, indicating the areas of concern that will be explored. The existing IEP team may complete the assessment procedures. However, if knowledgeable resource persons are not presently on the team, outside professionals might need to be contacted.

Quality Indicators for Consideration of Assistive Technology Needs

The following Quality indicators should be reviewed and adhered to by all IEP team members as they consider a student's AT needs. Additional details on these Quality Indicators can be obtained at http://www.qiat.org.

1. Assistive technology devices and services are <u>considered for all students with disabilities</u> regardless of type or severity of disability.

2. During the development of the individualized educational program, the IEP team consistently uses a <u>collaborative decision-making process</u> that supports systematic consideration of each student's possible need for assistive technology devices and services.

3. IEP team members have the <u>collective knowledge and skills</u> needed to make informed assistive technology decisions and seek assistance when needed.

4. Decisions regarding the need for assistive technology devices and services are <u>based on the student's IEP goals and objectives, access to curricular and extracurricular activities, and progress in the general education curriculum.</u>

5. The IEP team <u>gathers and analyzes data</u> about the student, customary environments, educational goals, and tasks when considering a student's need for assistive technology devices and services.

6. When assistive technology is needed, the IEP team <u>explores a range</u> of assistive technology devices, services, and other supports that address identified needs.

7. The assistive technology consideration process and <u>results are documented in the IEP</u> and include a rationale for the decision and supporting evidence.

Documenting AT Consideration

Within the IEP document, provision is made for the regard of special factors, which includes the consideration of the student's need for assistive technology. This is the statement that is listed on the special factors page of the IEP:

Assistive Technology services and devices:
> ❑ Discussed and Applicable / Incorporated into the IEP

This simple check system does not offer any suggested means for the IEP team to reach a conclusion or documentation that the student's AT needs have been considered. The *"Consideration for Assistive Technology Flowchart,"* located on page 51, outlines a process that IEP teams should follow in making consideration for assistive technology.
This assures that the consideration for AT has been conducted.

A. What is it that we expect the student to be able to do in the educational program that he/she is unable to do because of his/her disability related to:

__ Writing   __Reading   __ Communication   __ Learning/Studying   __Math
__Vision   __Hearing   __ other _____

The specific tasks that the student needs to do should be defined and described. "Other" areas of need may be related to life skills areas, such as mobility, seating and positioning, environmental control, or activities of daily living.

B. What current special strategies, accommodations or assistive technologies have been tried to meet the special education need?

The IEP team should recognize and discuss the current strategies, accommodations, or assistive technologies that are currently in place to facilitate achievement of the student's educational expectations.   This may also include current assistive technology devices or services.

- **"Is it working?"**

Have current strategies and tools enabled the student to accomplish the goals and objectives at the desired level of independence? If the answer to this question is "yes," the IEP must contain documentation to support this conclusion. If the answer is "no," the IEP team should continue to ask questions to determine the best course of action. The team should explore the reasons why the present accommodations are not meeting the student's needs. For example, the student's abilities may have changed or a new level of expected participation is in order.

C. Are there concerns that need further examination related to the tasks or expectations defined in Step A?

The team should be specific in determining the concerns that exist. Describe the team's new expectations for the student as related to the tasks that were previously defined.

D. Are there new or additional technologies to be implemented?

If the team has the collaborative knowledge to identify new or additional technologies, these should be discussed at this time. If the team is not prepared to include these in the IEP, discussion should follow on what extended consideration and/or assessment is needed.

E. Does this collaborative team have the resources to extend the consideration for new/additional assistive technology?

The IEP team must now determine if the decisions regarding AT can be recommended during the immediate IEP process or if extended assessment is necessary to make determinations on AT devices and services that will match the current concerns.

The existing team may remain the same during the extended assessment and decision-making process, or additional assistance may be required. Not every team can be expected to know everything about all possible AT devices and systems. The individual variables and expertise of the team must be considered at this point as to the appropriate course of action.

F. Recommended assistive technologies must be defined and documented in the IEP, which may be part of the student's goals, objectives, or services.

Any current, new and/or additional assistive technologies and services that are outlined on the consideration worksheet must be documented within the body of the IEP.

Assistive technology devices and services may be included in the student's goals and objectives, as a related service, or as supplementary aids and services, depending on the situation. The cover item, "Discussed and Applicable / Incorporated into the IEP" may now be checked once the information is in the IEP.

It is important to realize that consideration of assistive technology in the educational program must be ongoing. As the needs of the student change, or at the least during an annual IEP review, the process of consideration must continue. The question "Is the student's educational need being met?" will prevail.

Consideration for Assistive Technology Flowchart

Student Name_____Date _____

A. **What is it that we expect the student to be able to do in the educational program that he/she is unable to do because of his/her disability related to:** __ Writing __Reading __ Communication __ Learning/Studying __Math __Vision __Hearing __ Other _____ **Define Tasks:**			

B. What current special strategies, accommodations or assistive technologies have been tried to meet the special education need? Is it working? (If yes, go to Section F.).	yes	no	Comments

C. Are there concerns that need further examination related to the tasks expectations defined in Step A? __ yes __no If yes, describe:			

D. Are there new or additional technologies to be implemented? __ yes __ no (Document in the IEP)			

E. If necessary, does this collaborative team have the resources to extend the consideration for new/additional assistive technology? __yes __no Describe Plan for extended consideration/assessment and document in the IEP Services:			

F. Recommended assistive technologies must be defined and documented in the IEP, which may be part of the student's goals, objectives, or services.

Section 6:
The Assistive Technology Decision-Making Process

Overview of the Assistive Technology Process

Selecting and implementing AT requires more than a simple assessment to determine a "match" between the student's abilities and the features of a device. The chosen AT must be a tool that is useful in the individual's environment to perform tasks that the individual participates in. In order to make this type of recommendation, the individual and his/her personal and professional supporters must collaboratively seek to identify the needs and generate solutions that will facilitate the identified goals.

This process is designed to guide educational teams in a systematic consideration and determination of AT for individual students.

1. Initiation of the AT Process

2. Identification of the Team

3. Assessment for Assistive Technology
    a. Student
    b. Environment
    c. Tasks
    d. Tools

4. Discussion of AT Systems and Recommendations

5. Acquisition and Implementation

6. Follow-Up and Ongoing Assessment

Quality Indicators for Assessment of Assistive Technology Needs

The following Quality indicators should be reviewed and adhered to by all team members as they enter into the AT Assessment process.   Additional details on these Quality Indicators can be obtained at http://www.qiat.org.

1. Procedures for all aspects of assistive technology assessment are clearly defined and consistently applied.

2. Assistive technology assessments are conducted by a team with the collective knowledge and skills needed to determine possible assistive technology solutions that address the needs and abilities of the student, demands of the customary environments, educational goals, and related activities.

3. All assistive technology assessments include a functional assessment in the student's customary environments, such as the classroom, lunchroom, playground, home, community setting, or work place.

4. Assistive technology assessments, including needed trials, are completed within reasonable time lines.

5. Recommendations from assistive technology assessments are based on data about the student, environments and tasks.

6. The assessment provides the IEP team with clearly documented recommendations that guide decisions about the selection, acquisition, and use of assistive technology devices and services.

7. Assistive technology needs are reassessed any time changes in the student, the environments and/or the tasks result in the student's needs not being met with current devices and/or services.

Step 1: Initiating the AT Process

Referral to an assistive technology process is generally the result of concern by an educational professional and/or a parent or discussion within an existing team that deals with the needs of a student. This individual or team has noted an area of the student's performance that he/she is unable to participate due to his/her disability. The question being asked is:

"What is it that we expect the student to be able to do within the educational program that he/she isn't able to do because of his/her disability?"

The answer to this question should be specific. It should be based on concerns noted within the educational goals that have been established for the student. Areas that are often considered include:

handwriting	**spelling**
reading	**math**
written expression	**communication**
mobility	**recreation**
seating/positioning	**listening**
seeing	**self care**

Whether this concern is identified in the IEP process, by an individual during instructional periods, or as a part of another teaming practice (e.g., multi-factored evaluations, intervention assistance processes), there needs to be a conscious initiation of the AT assessment and decision making. Failure to formally initiate the concern runs a serious risk that efforts will not be systematically directed and may be dismissed before they are resolved. Any AT decision-making requires the efforts of a dynamic team approach. The selection of devices or equipment should never be based on the recommendations of a single team member. All persons who are involved with the student in the educational program should have input on the selections being made.

Step 2: Identifying the Team

A variety of service delivery models are available for team decision-making. The educational model generally reflects the regulations that are defined in IDEA. Within the model or approach that is utilized by a school district, collaboration is essential in processes for determining appropriate assistive technologies for a student.

> *In the collaborative model, it is assumed that no one person or profession has an adequate knowledge base or sufficient expertise to execute all the functions (assessment, planning, and intervention) associated with providing educational services for students.......All team members are involved in planning and monitoring educational goals and procedures, although each team member's responsibility for the implementation may vary. Team members can be considered as sharing joint ownership and responsibility to intervention objectives. (ASHA, 1991)*

In the collaborative model, all members of the team should contribute their talents to make the process work. At various times throughout the process, the emphasis may be heavier on one member or another. Yet, when information is discussed, each member should be present so that a balance is created to focus on the purpose of the AT process.

Team members will change over time, but the student/family will remain a constant. The entire process should strive to make the student/family an integral part of the system and empower them to make further decisions along the way. The educational team provides the resources and input on the environment and tasks that are needed for the student to reach new levels of achievement.

The recommended team members will vary with each student, depending on the student's needs and abilities and the levels of technology being considered. A team facilitator or leader should be designated who will be responsible for coordinating activities, maintaining timelines, and ensuring that the process continues in a progressive manner. All team members should receive written notification of all team meetings. It is important to encourage members to be actively involved in the process.

The following is a list of potential team members and the roles they may play in the process:

The Student: The student is the only constant on the team. Whenever possible, the student should be an active participant in the decision-making process. The student's opinion should be sought and respected. The student is the one who will benefit from the technology, and will or will not use it.

The Family: The parents or primary caregivers have the most knowledge about the student's everyday life, preferences, and means to deal with his/her disability. Making the family part of the team brings another perspective of the student's life that may not be seen by the educational staff. Varying degrees of active family involvement are understandable and acceptable in the team process.

Classroom teachers: The classroom teacher is responsible for the student's entire educational programming. They have an understanding of the student's abilities and the opportunities for participation in the curriculum. The teacher will also be responsible for implementing educational strategies so that educational, functional, and social goals can be achieved. Both special and regular educators who are involved with the student should be on the team.

Instructional Assistants: Teaching assistants work with the teachers to help implement the curriculum and make student learning possible. They are often the primary facilitators for the use of AT with a student in the classroom. They may be able to provide insight on the daily routine and schedule for the student during the school day.

School Psychologist: The psychologist is able to provide information on the student's cognitive level of functioning and his/her specific learning styles.

Speech/Language Pathologist: Speech/Language Pathologists (SLP) can provide insight on the student's present modes of communication, potential for speech development, and suggest ways to maximize the student's communication ability throughout the day.   They often can assist in the development of vocabulary and design for augmentative communication systems.

Occupational Therapists: Occupational Therapists (OT) provide information on the fine motor skills of a student. They frequently focus on functional use of the upper extremities and can be instrumental in addressing special access needs. OT's may also make consideration of the visual motor integration issues with a student.

Physical Therapists: Physical therapists (PT) are able to evaluate the seating and positioning issues with a student and make recommendations for strategies that increase the student's access to the school environment and activities. They facilitate the student's comfort, proper development, and safety as well as mobility.

Supplemental Service Teachers: These teachers frequently serve as resource or related service providers regarding modifications and adaptations as these relate to the student's visual or auditory needs and learning modalities.

Orientation and Mobility Specialists: These individuals examine the ability of a student with visual impairment to maneuver the environment for safe and efficient travel.

Audiologists: An audiologist tests hearing and recommends assistive listening systems that enhance the student's listening skills.

School Nurse: The school nurse may have input on the medical needs and care of the student at school.

Physician: The physician addresses the medical issues and monitor medical complications. The physician is involved in the prescription of many seating, mobility and augmentative communication devices, as well as funding procurement from third party sources (e.g., Medicaid, health insurance).

Other Medical Personnel: Specialized medical personnel, such as orthopedic specialists or optometrists, may provide specific information related to the student's disability.

Low Vision Specialist: These specialists provide a functional vision evaluation and information on optical aids that are appropriate.

Vocational Counselor/Case Manager: It is particularly important to involve the vocational counselors as the student is reaching the age when transition goals are to be established. They may provide insight and support on vocational options and skills.

School Administrators/Special Education Supervisors: Administrators have various job responsibilities that involve the management of educational programs and fiscal issues. They may be instrumental in supporting the teaming process, scheduling meeting times, and allotting staff time for technical training. The more involved the school administrator is throughout the process, the better the understanding of the student need will be when it is time to procure funding.

School Technology Contact: The school district technology staff may provide technical information and support as considerations are made. This person may later be responsible for technical assistance to maintain the equipment.

Assistive Technology Specialist: An AT specialist may be able to serve as a resource for assistive technology device options, vendors, loan programs, and technical training. A specialist may also be able to assist the team in identifying the student's abilities as they relate to the use of AT.

Assistive Technology Providers: Vendors and distributors of assistive technology equipment may assist in identifying specific features appropriate for a student. They may also provide demonstrations, training, or trial periods of some equipment. A vendor is also responsible for application for funding to Medicaid.

Rehabilitation Engineer: These individuals provide information on customization for access to assistive technology devices and equipment.

Team Decision Making Strategies

(Adapted from Penny Reed, Wisconsin Assistive Technology Initiative)

1. **Establish team meetings at a time that is convenient for all team members. Notify members in writing of the meeting.**
   - **Date**
   - **Time**
   - **Location**

2. **Share roles and responsibilities during the meeting.**
   - **Facilitator**: Ensures that the meeting runs smoothly and efficiently, accomplishing the intended purpose.
   - **Time Keeper**: Keeps the team moving so that discussion moves at a pace that will cover all topic areas in an allotted amount of time.
   - **Recorder**: Writes down information, suggestions and decisions that have been made by the team.

3. **Present information in a written format where everyone can see it.**
   - Chalkboard
   - Flip chart
   - Over head projector

4. **Use brainstorming rules.**
   - Write all ideas down
   - Accept all suggestions
   - Generate as many ideas as possible

5. **Prioritize suggestions and develop an action plan.**
   - Summarize actions to be taken
   - Assign roles and responsibilities

6. **Reach a consensus**
   - Poll members
   - Ask for support, even if they might have preferred another direction

7. **Plan for the next meeting**
   - Summarize and establish action plan
   - Define timeline and responsibilities of action plan
   - Schedule the next meeting, date, time, location

Step 3: Assessment for Assistive Technology

Any educational assessment process must begin with a data collection system that provides information on the identified needs of a student. During an Assistive Technology assessment, information about the **S**tudent, the **E**nvironments, the **T**asks, must be gathered and thoughtfully considered before any appropriate system of **T**ools can be proposed and acted upon. The SETT Framework, developed by Joy Zabala, is an organizational tool used by many teams across the country. It provides a foundation for teams to gather and organize information for good decision-making.

The questions posed in the SETT Framework were developed as a guideline and a place to start. Teams may need to seek answers to other questions as the process proceeds. However, in most instances, the questions will relate to one of the areas of these guidelines.

Overview of SETT

The Student
- What does the student need to do?
- What are the student's current abilities?
- What are the student's special needs?

The Environments
- What is the instructional setting?
- What is the physical arrangement?
- What materials and equipment are currently available?
- What supports are available?
- What are the attitudes and expectations?
- What are the concerns?

The Tasks
- What tasks occur which enable progress toward mastery of IEP goals?
- What tasks are a part of being actively involved in the environments?
- What is everyone else doing?
- What are the critical elements of the activity/task?
- How might the activity be modified to accommodate the student's active participation?

The Tools
- What system of no tech, low tech, and high tech tools should be considered to support the student in doing the identified tasks in these environments?
- What strategies might be used to increase student performance?
- How might these tools be tried out with the student in the customary environments in which they will be used?

Extending the SETT Framework

The Student:
(Discussion should take about 10-15 minutes)

What does the student need to do?
The answer to this question may initially be a general response, such as "to write" or "to talk." While elaboration at this time is desirable, later in the tasks and environments section these issues will be explored more deeply. The goal at this time is to establish consensus about what the purpose of the assistive technology process will be.

What are the student's special needs and current abilities?
This question should generate conversation about the barriers which keep the student from doing whatever needs to be done. It should also focus on the "abilities" that the student possesses. No matter how great the needs, everyone has abilities that can be built upon and enhanced.

Discussion should include all aspects of the student, providing a broad description of what we know and what we need to know. The team may review areas of:
- cognitive abilities
- motor abilities
- sensory abilities
- language abilities
- social/emotional abilities

The team should also determine if additional information on the student's abilities is necessary and designate the person who should be responsible for obtaining this data. The Assessment Guides included at the end of this manual may assist team members in gathering specific information on the student's abilities in reference to the use of assistive technology.

The Environment:
(Discussion should about 5-10 minutes)

What is the instructional setting?
What is the physical arrangement?
The team should outline the environments in which the student functions as well as the physical characteristics of this setting. (e.g., the regular ed classroom for all subject matter; special classroom with one-on-one instruction; cafeteria, playground, etc.)

What materials and equipment are currently available?
What supports are available?
Define the curriculum materials being used, adaptive techniques or equipment available to the class/student, and supports to the instructional program that currently exist. (e.g., full time aide with student; alternate curriculum materials used with the student; peer tutoring; classroom communication device used with all students; computer in classroom)

What are the attitudes and expectations?
Define the expectations that currently exist for the student in the educational settings. Determine if these expectations are realistic or enabling the student to perform at expected levels of independence. The attitudes and expectations of the people who are developing the environments have much to do with the learning opportunities that are offered to other students.

What are the concerns?
Note concerns in the educational setting that should be addressed. Further observation may need to be made of the environment. In order to focus on assistive technology tools which remove barriers, it is first necessary to address the environmental barriers that may exist.

The Tasks
(Discussion should take about 5-10 minutes)

What tasks occur which enable progress toward mastery of goals?
The purpose of this step is to determine what opportunities are present that enable the student to move toward the goals and objectives included in the IEP. If the answer is "none," AT tools will not solve the problem!

What tasks are a part of being actively involved in the environments?
What is everyone else doing?
One place to begin when considering the tasks is to identify "what everyone else is doing." Participation in the same activity does not always lead to the same results for all participants. Are there goals for the student that can be accomplished within the activities that are being done by other students?

What are the critical elements of the activity?
At this point, the team should list the elements of the activity that the student should be expected to perform. Further task analysis may be recommended to more clearly identify the task skills that are needed.

The information that has been complied on the **student**, **environments**, and **tasks** should provide a clear picture of the educational expectations for the individual student and areas of need that should be addressed. It does well to remember at this point that, while the assistive technology assessment may be an "extension" of other teaming processes, it also is an integral part of ALL processes.

The information from this part of the assessment process may be summarized on the SETT form *Assessment Summary of Student Need for Assistive Technology* included on page 64.

Data Gathering Techniques

When developing a system to collect information related to AT, keep in mind the SETT framework, collecting information on the student's abilities, the environments the student participates in, and the tasks that he/she is expected to perform. A variety of techniques may be utilized in obtaining this data.

> **Observation:** Observations of the student in natural settings will yield information on the student's abilities to participate in various activities. It will also provide an opportunity to view the participation patterns of peers. Work samples offer support to compare the student's performance with what is expected of others in the classroom.

> **Interaction:** Interacting with the student may provide an opportunity to elicit behaviors that might not typically be seen. Direct assessment involves an interactive process. When considering the assistive technology needs of a student, engage the student in tasks similar to what is required in the classroom, creating opportunities for the student to try assistive modifications that might be beneficial. A variety of assistive technology device may need to be available for this assessment period.

> **Interviews:** Asking specific questions of the student, family, or school personnel will generate information specific to the needs, abilities, interests, and participation patterns of the student.

> **Record Review:** Past history, medical, or specialized assessment information may be included in records that provide insight on the various aspects of the student.

Another resource that can assist the team in effective data gathering processes is *How Do You Know It, How Can You Show It?* available from the Wisconsin Assistive Technology Initiative (WATI) at http://www.wati.org/products/products.html.

Assistive Technology Process
Assessment Summary of Student Need for Assistive Technology

Name _____ Date _____
Use this form to analyze data and define the specific needs the student has for assistive technology.

STUDENT   Area(s) of Need _____

ENVIRONMENTS	TASKS

Specific Concerns/Needs: *What do we want the student to do?*

Adapted from Joy Zabala, 1998

Assistive Technology Assessment Guides

An *"Assistive Technology Assessment Guide"* is included in Appendix A of this manual. It should clearly be considered only a "guide" to data gathering. Other methods of standardized or informal assessment may and should be included as determined necessary. The guide will provide one approach that systematically enables the team to consider and gather information that is needed.

Now that the team is satisfied with clearly defined needs and abilities of the student, consideration should progress to the assessment of **Tools** that may be applicable to assist the student in attaining the expected educational goals. The team needs to match the educational needs with features of AT tools, strategies to be considered, and availability of equipment for trial periods. These potential tools may be outlined on the form *Assessment for Assistive Technology Tool System* that is found on page 67.

The Tools

What system of no tech, low tech, and high tech tools should be considered to support the student in doing the identified tasks in these environments?
Unfortunately, the tools aspect of the assessment process is where many teams want to start! Without a clear understanding of the student, environments, and tasks, the process will not effectively generate the answers to the question posed here.

Additional data may need to be obtained to make a precise determination of the possible tools that are applicable. Available assistive technologies are ever-changing and advancing. There is no one person who can know everything about every possible AT device and/or service. If the team feels they have exhausted their knowledge base and resources to make specific tool selections, they may need to seek input from other agencies or persons who have experience in the area of assistive technology being considered.

Keeping the required features of a system in mind, the team may find it helpful to brainstorm options that will assist the student in achieving the desired level of performance. This list should be recorded on a wall chart or board where all team members can see it. Next, the list may be categorized, beginning with the simplest, least intrusive suggestions, and advancing to high tech alternatives. Samples of continuum charts are included on page 68, as well as a worksheet for teams to develop a continuum of solutions on page 69. The team will now discuss the possible solutions and will select those that should be tried.

When developing a continuum of assistive technology solutions, it is likely that several options will be utilized. Consider the activity, the task requirements, and make decisions for each situation that will provide the most appropriate means of participation without changing the critical elements of the activity.

What strategies might be used to increase student performance?
No-tech strategies, including modifications and adaptations to the educational program, should also be considered as part of the Tools assessment. The team should be careful that they are not so caught up in the "high tech" devices, that they forget to note the obvious strategies that will provide the student with increased learning opportunities. These strategies may be considered in addition to AT devices, or individually to eliminate barriers that currently exist.

Assistive technology decision-making is a match between the student's abilities, needs, and expectations and features that facilitate input and processing. The team must keep in mind that this may include both devices and services. A system of tools must work in combination to assist a student in moving forward.

How might these tools be tried out with the student in the customary environments in which they will be used?
The team may determine that a trial period should be implemented with certain AT and strategies. The team should consider what options are accessible for trial periods. The tools that are systematically and programmatically available to all students should be explored. Can these tools be used by the student and, if so, what additional accommodations are needed for the student to participate in the required tasks? What features may be added to these existing technologies?

Trial use of equipment may also be available through the regional State Support Teams. Links to State Support Teams can be found at http://www.ocali.org. The Ohio Center for Autism and Low Incidence has an extensive loan library of assistive technology equipment. These devices can be checked out online from the OCALI webpage at http://www.ocali.org.

Several manufacturers and vendors of equipment will also provide loans to school districts for trial periods. Information on vendors can be located at http://www.ocali.org/.

For every trial period, the team should determine the training needed for staff and families, the time frame for a fair trial, and the criteria for data collection that will be used in determining success. All team members should understand the criteria so that it can be recognized for decision-making.

Assistive Technology Process
Assessment for Assistive Technology Tool System

Name _____   Date _____

Area of Need _____

Specific Tasks: State in terms of what the student is expected to do	No-Low-High Tech Tools Options/Solutions and Features	Availability for Trial Use	Results

Samples of Continuums

Alternatives for Handwriting Difficulties	Alternatives for Verbal Communication
Regular pencil or pen Pencil grip, larger size Word processor through keyboard Computer with keyguard, support for arm Enlarged keyboard Voice recognition software	Manual signs Photograph cards Picture symbol boards Single message voice output device Voice Output device with multiple overlays Dynamic display voice output device

Alternatives for Reading Difficulties	Alternatives for Vision Difficulties/Reading
Peer reading of materials Highlighting key words Tape recorded text material Franklin text-to-speech device Talking word processing program	Text enlargement on copy machine Word cards written in larger form Use of thick markers for text Peer reading Tape recorded text materials Talking Word processing Screen reading software

Solution Continuum

Student _____ Date _____

1. Identify the area of student needs (e.g., handwriting, speech reading) and generate a continuum of assistive technology options, including no-tech, low tech and high tech considerations. Begin with the simplest, least intrusive solutions.
2. Discuss the suggested solutions and make conclusions on the effectiveness of this solution.

Alternatives for:	Conclusions

Step 4: Discussion of AT Systems and Recommendations

As the assessment portion of the assistive technology process is progressing, the team must now begin to focus on deciding which solutions will enable the student to complete identified tasks.

With the data gathered, the team has a clear picture of the student's needs and abilities, the tasks required in different activities, and is formulating views on assistive technology options that may be considered for the student. During this phase of the process, the team must:

- o define the features that need to be added to the student's tool system;
- o specify a continuum of no-tech, low tech, and high tech solutions and strategies;
- o make recommendations for acquisition and implementation.

Criteria for Selection

There are several questions or criteria that the team may want to address as solutions are being considered. These involve the device, the manufacturer, and the student.

Device:
1. Is the design appropriate to meet the student's needs/abilities?
2. Will the device stand up to portability and durability requirements?
3. What is the reliability of the device?
4. Does the device have expansion or upgrade capabilities?
5. Will the device place restrictions on the student's other areas of functioning?
6. Is software support available?
7. Does the device have academic relevance?
8. Is repair easily accessible?
9. Is operation and programming easy to do?
10. Is the device compatible with other existing adaptive technologies?

Manufacturer/Vendor
1. Is the device reasonably priced?
2. Is training and technical support available?
3. Are loaners/rentals available during repair?
4. Is there an adequate warranty?

Student:
1. Are operational demands minimal?
2. Do the technological capabilities match the student's needs/abilities?
3. Is the student satisfied with the device?
4. Are the parents satisfied with the device?
5. Will the technology prepare the student for future needs?
6. Does the device allow for independent use?
7. Is the system compatible with other technologies in the home/community?

A team consensus on all AT recommendations should be obtained. If the process has progressed efficiently to this point, no team participant should have to respond, "I don't know enough to make that decision." Everyone should understand the needs of the student and the applications of the suggested technologies, and feel comfortable in making a recommendation decision.

The team may utilize the information that has been summarized in the assessment process. This will keep the team focus on the results of the assessment, which specified the student's abilities and educational needs, as well as the generation and trial use of AT tool options.

The team should keep in mind that modifications, strategies, and services are as important to the decision-making process as the technology equipment that is being recommended. All recommendations should be recorded, including a brief sentence on how the AT will enable the student to more successfully participate in the educational program.

Step 5: Acquisition and Implementation

Essentially, the implementation process is well underway before reaching this step. As assessment and trial periods have been progressing, the team has been establishing new strategies and techniques that increase the student's participation in the educational program. Specific plans must be outlined to facilitate the ongoing implementation, including acquisition of personal devices, and inclusion of the goals in the IEP.

The team must determine the plan and actions that are necessary to obtain assistive technology devices that have been recommended. A written action plan may also be needed to detail the responsibilities of each person. Without group memory, important details are easily forgotten or overlooked.

1. Identify source of equipment and costs.
    a. Locate vendor or manufacturer
    b. Obtain a price quote in writing
2. Identify possible funding sources
    (Refer to the funding section to determine appropriate sources)
    a. Determine person(s) who will seek funding sources
3. Order equipment
4. Plan for training as needed.
5. Set up equipment
6. Establish technical support system

The selected assistive technology and services need for successful implementation must be recorded in the student's IEP. Further information on including AT in the IEP can be found in Section 7 of this manual.

Quality Indicators for Assistive Technology Implementation

Assistive technology implementation pertains to the ways that assistive technology devices and services, as included in the IEP (including goals/objectives, related services, supplementary aids and services and accommodations or modifications) are delivered and integrated into the student's educational program. Additional details on these Quality Indicators can be obtained at http://www.qiat.org.

1. Assistive technology implementation proceeds according to a <u>collaboratively developed plan.</u>

2. Assistive technology is <u>integrated</u> into the curriculum and daily activities of the student across environments.

3. Persons supporting the student across all environments in which the assistive technology is expected to be used <u>share responsibility</u> for implementation of the plan.

4. Persons supporting the student provide opportunities for the student to use a <u>variety of strategies–including assistive technology</u>– and to learn which strategies are most effective for particular circumstances and tasks.

5. <u>Training</u> for the student, family and staff are an integral part of implementation.

6. Assistive technology implementation is initially based on assessment <u>data</u> and is adjusted based on performance data.

7. Assistive technology implementation includes <u>management and maintenance of equipment</u> and materials.

Step 6: Follow Up and Ongoing Assessment

The first weeks after implementation of AT equipment are generally the times when the majority of questions arise. This is the time to "work out the bugs" and make changes that will increase the team's and the student's level of confidence. Training of staff and families may also be going on at this time. As questions arise, these should be written down to be addressed. Chances are if one person has a question, others will benefit from the response.

A follow-up meeting should be scheduled after initial implementation. At this time, the entire team should be present, bringing data collection records. A journal entry format will enable responsible persons to make note of the results of the AT on the student's performance in the classroom. Team members should address:

- successful solutions and activities that have occurred
- solutions that did not work, with a discussion of "why"
- possible problems and changes that are necessary

Assessment for AT is an ongoing process. When changes in the student's abilities and/or educational needs are noted, steps should be taken to determine what additional information is needed or which changes to the implementation of AT should be considered.

Maintaining equipment in operational order is important. The team should establish a system designating the procedures that will be followed if technical issues occur. Local troubleshooting is always desirable and a necessary outcome. Many times a specialized service provider or technology coordinator can locate and correct problems that occur.

Information on warranty and service contacts should be maintained. This includes the results of service or technical support that has been provided over time.
The Technical Support Data form at the end of this seciton can be used to record equipment information.

Quality Indicators for Evaluation of the Effectiveness of Assistive Technology

Evaluating the effectiveness of the AT devices and services that are provided to individual students includes data collection, documentation and analysis to monitor changes in student performance resulting from the implementation of assistive technology services. Student performance is reviewed in order to identify if, when, or where modifications and revisions to the implementation are needed. Additional details on these Quality Indicators can be obtained at http://www.qiat.org.

1. Team members share <u>clearly defined responsibilities</u> to ensure that data are collected, evaluated, and interpreted by capable and credible team members.

2. Data are collected on specific student achievement that has been identified by the team and is <u>related to one or more goals</u>.

3. Evaluation of effectiveness includes the <u>quantitative and qualitative measurement of changes</u> in the student's performance and achievement.

4. Effectiveness is evaluated <u>across environments</u> during naturally occurring and structured activities.

5. Data are collected to provide teams with a means for <u>analyzing student achievement and identifying supports and barriers</u> that influence assistive technology use to determine what changes, if any, are needed.

6. <u>Changes are made</u> in the student's assistive technology services and educational program when evaluation data indicate that such changes are needed to improve student achievement.

7. Evaluation of effectiveness is a dynamic, responsive, <u>ongoing process</u> that is reviewed periodically.

Assistive Technology
Technical Support Data

Student Name: _____

Equipment Name: _____
Serial Number: _____ Purchase date: _____
Manufacturer: _____
     Address: _____
                        _____
     Telephone: _____

Vendor: _____
     Address: _____
                        _____
     Telephone: _____
Purchased by: _____
Warranty Information: (* maintain copy of original invoice)

Technical Support: _____
     Telephone: _____

Training Received:

Date:	Provided by:	Provided to:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Person/Agency Responsible for maintenance and repair:

_____

Service Record

Date	Problem	Result
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Transitions

Transitions occur frequently in schools—each time a new school year begins, a student changes classes or teachers, new staff is added, the student enters a new building, etc. When AT is necessary for a student to achieve in the educational setting, transitions should be carefully planned. In particular, the records that have been kept on the student are critical for new staff to review as they will enable the staff to realize the abilities of the student, expectations in the educational program, and ways that the AT facilitates expected participation by the student. In turn, the incoming staff should examine the environment and tasks that are required in the new setting. In short, collaboration between "old" and "new" must take place.

Issues that should be addressed during transitions include those that have been identified in the SETT framework:

> **The Student:** current abilities, special needs.
>
> **The Environments**: examine the transitioning environments and identify the instructional settings and physical arrangements; identify concerns to be addressed.
>
> **The Tasks**: examine the task requirements that may differ in the new setting and how these vary from current expectations.
>
> **The Tools:** Describe the assistive technology systems that are being utilized and how these enable the student to participate in the educational requirements. Determine the training that is necessary for the new staff. Provide information on technical support that is available.

*The Assistive Technology process **IS** ongoing!!!*

<div style="border: 1px solid black;">

Quality Indicators for Assistive Technology Transition

Transition plans for students who use assistive technology address the ways the student's use of assistive technology devices and services are transferred from one setting to another. Additional details on these Quality Indicators can be obtained at http://www.qiat.org.

1. <u>Transition plans address assistive technology needs</u> of the student, including roles and training needs of team members, subsequent steps in assistive technology use, and follow-up after transition takes place.

2. Transition <u>planning empowers the student</u> using assistive technology <u>to participate</u> in the transition planning at a level appropriate to age and ability.

3. <u>Advocacy related to assistive technology use is recognized as critical</u> and planned for by the teams involved in transition.

4. <u>AT requirements in the receiving environment</u> are identified during the transition planning process.

5. Transition planning for students using assistive technology proceeds according to an <u>individualized timeline</u>.

6. Transition plans address specific <u>equipment, training and funding issues</u> such as transfer or acquisition of assistive technology, manuals and support documents.

</div>

Planning for the Future

The educational process must prepare students for their future, with the inclusion of AT if required. For many students, utilization of AT is a lifetime need. Goals that are established should reflect the future vocational and/or daily living needs that each student may have. Increased independence is ultimately desirable. Educators must not wait for the "next team" to plan for the future and consider what skills the student must gain to reach his/her potential. The final question must be "**What is the student able to achieve with this assistive technology that will facilitate attainment of future aspirations?"**

Section 7:
Writing Assistive Technology into the IEP

The IEP must include a description of assistive technology devices or services, or both, to be provided if such devices and/or services are required as part of the special education program. IDEA requirements for school districts state:

> *Assistive Technology*
> *(a) Each public agency shall ensure that assistive devices or assistive technology services or both ...are made available to a student with a disability if required as part of the child's--*
> > *(1) Special education,*
> > *(2) Related services, or*
> > *(3) Supplementary aids and services.*
> *(b) On a case-by-case basis, the use of school-purchased assistive technology devices in a child's home or in a setting is required if the child's IEP team determines that the child needs access to those devices in order to receive FAPE.*
> > > *(IDEA 300.105)*

There is no clear-cut criterion for where assistive technology devices and services should be written in the IEP. Necessary assistive technology may be included in several sections of the IEP:

- Present Level of Performance
- Goals
- Objectives
- Services
- Supplementary aids and services

Quality Indicators for Including Assistive Technology in the IEP

The following Quality indicators should be reviewed and adhered to by all IEP team members as they write assistive technology in the IEP. Additional details on these Quality Indicators can be obtained at http://www.qiat.org.

1. The education agency has <u>guidelines for documenting</u> assistive technology needs in the IEP and requires their consistent application.

2. All <u>services</u> that the IEP team determines are needed to support the selection, acquisition, and use of assistive technology devices are designated in the IEP.

3. The IEP illustrates that assistive technology is a <u>tool to support achievement of goals</u> and progress in the general curriculum by establishing a clear relationship between student needs, assistive technology devices and services, and the student's goals and objectives.

4. IEP content regarding assistive technology use is written in language that describes how assistive technology contributes to achievement of <u>measurable and observable outcomes</u>.

5. Assistive technology is included in the IEP in a manner that provides a <u>clear and complete description</u> of the devices and services to be provided and used to address student needs and achieve expected results.

Present Level of Performance (PLP)

If the IEP has been well written prior to the consideration of AT, the information within the present level of performance (PLP) should already provide a clear description of the student's abilities. If not, the data that has been collected during the AT assessment process should be included. Modifications, accommodations, or AT that are currently implemented should be included in the PLP, as well as a statement indicating why this is effective or further needs that should be addressed.

The following are examples of ways that assistive technology may be written in the PLP:

A. Example of a PLP for written communication:

"Using a typewriter, Jon types simple sentences for creative writing activities. He does not have a means to make error corrections to his written work when using the typewriter." (Need: a means to correct errors in written work.)

B. Example of a PLP for reading difficulty:

"Tim has a measured reading level of second grade which is significantly below his sixth grade level placement. He is able to respond to questions related to grade level text material that has been read to him by a peer or teacher." (Need: a more independent means to gain information from sixth grade text material.)

C. Example of a PLP for visual and motor difficulties:

"Bill is able to read grade level text material when enlarged to 1 inch using a CCTV. Due to motor difficulties related to his cerebral palsy, he is assisted by a teaching assistant to maneuver all text which is presented on the CCTV. (Need: independently access enlarged text)

D. Example of a PLP for augmentative communication needs:

"Susie responds to yes/no questions with appropriate headshakes. She indicates her wants and needs by pointing and gestures in her environment or by pointing to picture symbols in a manual communication book."
(Need: She needs a more effective means to clarify her messages and provide information within her daily activities.)

E. Example of PLP including an augmentative communication device:

"Brent activates a Dynavox using a head switch at his left temple to scan and convey messages about his basic needs, for social interactions, and responses to classroom activities."
(Need: He needs additional word based vocabulary available to more adequately generate 2-5 word messages about his daily activities.)

The PLP is the documented statement of present abilities that lead to the needs that will be addressed in the goals and objectives of the IEP. If AT has not been considered, it should be addressed in the AT consideration process, which focuses on these areas of need. If the team recommends extended assessment, then a statement of this nature may be included in the PLP.

A. Example of PLP indicating need for extended assessment:

"Due to his fine motor difficulty when writing, Nick dictates paragraph forms to his resource teacher. A more independent mode of writing is needed for Nick and further assessment is necessary to determine accommodations that will enable him to complete paragraphs without assistance."

B. Example of a PLP indicating need to explore assistive technologies for self help skills:

"Kyle enjoys the interactions with peers during lunch in the school cafeteria. Due to his motor difficulties, he is fed by a teaching assistant. Exploration of adapted utensils may facilitate more independence while eating."

In some instances, the IEP team will identify the present modifications, accommodations, and/or AT, and determine that no further accommodations are needed. The PLP should indicate this conclusion, and the special factors of the IEP can be marked to indicate that AT has been discussed and incorporated into the IEP. This type of accommodation may also be listed in the Services if no further special education instruction is required for the student to achieve a goal.

A. Example of PLP indicating adequate consideration and inclusion of assistive technology:

"Using a pencil grip, Julie is able to perform all written assignments in her first grade classroom."

B. Example of a PLP with modifications for auditory difficulties:

"Angie has a severe hearing loss in both ears for which she wears hearing aids. She is able to adequately hear and understand general classroom lecture and discussion when wearing a Telex FM auditory training unit.

Student Needs

The IEP team should clearly identify the specific needs of the student. This is a direct relationship to what has been stated in the PLP. These are the areas that may be considered for assistive technology and will be addressed as goals for the student.

Goals and Objectives

Goals and objectives should include the tasks or skills the student is expected to achieve during the IEP period. These are defined by the needs identified in the PLP. The goals and objectives should include student performance tasks that will represent the specially designed instruction for the student. The goal should state a specific measurable task that the student will achieve. The objectives are the steps or measurable phases that the student will perform to reach the goal.

Remember, goals and objectives are measured skills that the student will achieve. If you have included a goal/objective that is stated in terms of what the paraprofessional or teacher will do, it is not written as a student performance task. (The assistance required by adults is a "service.")

Example of an objective that is NOT student performance:
Objective: "The teaching assistant will check operation of the FM system daily."

The following are examples of assistive technologies and modifications that may be included in the goals and objectives of the IEP.

A. Example of a goal for physical access:
Goal: "Using his power wheelchair, Tom will independently maneuver around the school and classroom environments."

Objective: "Tom will enter and exit the cafeteria and select a seat of choice at the table."

B. Example of a goal for reading:
Goal: Using Braille text books, Jeannie will independently read subject matter assignments."

Objective: "Jeannie will orally respond to 3 questions from unit material read."

C. Example of a goal for augmentative communication:
Goal: Sarah will activate keys on her Vantage communication device to participate in a three turn conversational exchange.

Objective: "Using her Vantage, Sarah will initiate a social greeting with a classmate daily."

Objective: "Using her Vantage, Sarah will respond to social rituals from a classmate."

D. Example of a reading goal:
Goal: "Melissa will listen to passages in a talking word processing program by activating a switch 4 times in a 5 minute session."

E. Example of an objective for written communication:
Goal: "In creative writing assignments, Jon will write a 5 sentence paragraph."

Objective: "Jon will use a spelling and grammar checker to identify and correct errors in sentences."

F. Example of an objective for written expression:
Goal: "Amy will write a 5 sentence paragraph on one topic."

Objective: "Amy will dictate sentences to a scribe, verbally marking appropriate punctuation, using adequate volume to be understood."

G. Example of an objective for self help skills:
Goal: "Bob will participate in daily living activities related to his care."

Objective: "After food has been placed in a blender, Bob will maintain activation of a single switch attached to an appliance adapter for two minutes in order to puree food for his lunch."

H. Example of writing/spelling objective:
Goal: "Carol will compose a 6 word sentence with correct spelling."

Objective: "Using Co-Writer word prediction, Carol will select a given word choice after identifying and typing the initial letter of the word."

A series of objectives may be included under one goal. Each one of these objectives may have a different accommodation or assistive technology that will facilitate student achievement.

I. Example of multiple accommodations within objectives:
Goal: "Terry will correctly complete fourth grade level math computation problems."

Objective: "Terry will read math story problems when presented on a CCTV and identify the process to complete the problem."

Objective: "Terry will accurately calculate math calculation problems using a large key talking calculator.

Services

The Services column on the IEP includes any service provider, specially designed instruction, accommodation, or AT that is necessary for the student to be able to achieve the goals and objectives set forth. It is important that all areas be written on the IEP specific to the goal or objective that it is related to. If a specific piece of technology or software is required for the student, then this should be named in the Services column. The amount of time and frequency of related service providers to address the goal should also be included here.

While AT may be written in to the goals and objectives of the IEP, it is often appropriate to include the AT in the Services column. In this way, the focus of the student performance task will be clearly identified in the goals and objectives. Any training for the student and others for effective use of the device should be included in the services.

Examples of Services that reflect on the goals and objectives:

"Jeff will write a five sentence paragraph with appropriate sentence order and spelling."	Personal laptop computer Word processing program Spelling and grammar checker
"Jeff will write a five sentence paragraph with appropriate sentence order and spelling."	Classroom computer Intellikeys & single switch Set up by teaching assistant.
"Jeff will write a five sentence paragraph with appropriate sentence order and spelling."	Writing materials positioned on slant board with 45 degree angle; Adapted paper with raised lines.
"Nicki will read and report on grade level literature books."	Books on tape from Recording for the Blind and Dyslexic
"Nicki will read and report on grade level literature books."	Braille books SST training 30 minutes weekly on Braille.

The following are examples of services that may be provided in order to assure the set up, functioning, or training of assistive technology devices:

- Resource teacher will instruct on computer functions, during 20 minute period daily.

- Technology Coordinator will be available for computer problems, as requested.

- AT Specialist for Consult as requested by IEP team.

- Physical Therapist consult weekly 30 minutes on power wheelchair training.

- Teaching Assistant will facilitate set up of Dynavox and switch each morning.

- Home room teacher performs daily check on FM unit functioning. Educational Audiologist quarterly consult or as requested.

Appendix A:
Assistive Technology Assessment Guides

Assistive Technology Assessment Guide
Student Information

Student Information

Name_____ Date of Birth_____
Parent /Guardian _____
Address_____
_____
Telephone_____

Disability: (check all that apply)
❏ Speech/Language   ❏ Learning Disability   ❏ Developmental Disability
❏ Multiple Disability   ❏ Hearing Impairment   ❏ Vision Impairment
❏ Orthopedic Disability   ❏ Autism   ❏ Traumatic Brain Injury
❏ Other Health Impaired   ❏ Other_____

Program Placement _____
       Level: ❏ Early Childhood   ❏ Elementary   ❏ Middle/Junior High
          ❏ High School   ❏ Transition to Post Secondary

Grade Placement _____

Classroom Placement
      ❏ Regular Ed Classroom
          ❏ with instructional support (aide)
      ❏ Supplemental Services
      ❏ Individual/Small Group Instruction
      ❏ Special Class Learning Center
      ❏ Separate Facility:_____
      ❏ Home Instruction
      ❏ Approved private school on a residential basis

Extent of participation in general education programming: _____
_____

Related Services currently receiving:
      ❏ Occupational therapy   ❏ Physical Therapy   ❏ Speech/Language
      ❏ other_____

School District of Residence_____County _____

School/Building Attending _____

School Address_____

Telephone_____

Medical Considerations

Diagnosis (primary and secondary)_____

Medical Concerns_____

Medical Prognosis_____

Current Medications_____

Health Insurance Company_____

Medicaid: Number_____

Vocational Services (if applicable)

Training Program_____ Location_____

Place of Employment_____ Location_____

Job Description_____

Supported Services_____

Case Manager_____ Telephone_____

Residential Setting

❑ Home, living with _____

❑ Nursing home   ❑ Residential facility   ❑ Group home

Community Involvement Activities_____

Cognitive Level of Functioning

Psychological Testing completed by_____

        Date_____

Statement of level of functioning and/or behaviors that indicate level.

_____

_____

Behaviors

Describe student's behavior or attention as it applies to the current need.

_____

_____

_____

Experience With Assistive Technologies
Currently Used Technologies (check all that applies)
❑ Communication boards ❑ Voice Output Communication Device
      ❑ Computer: Platform_____
      including..... ❑ voice output   ❑ screen enlargement   ❑ Braille output
❑ Low Vision aids   ❑ Amplification systems
❑ Manual wheelchair   ❑ Power wheelchair
❑ Environmental control units   ❑ Writing aids
❑ Other: _____

Previously Used/Tried Technologies

Assistive Technology	Length of Use	Results
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

What information do you hope to gain from this assessment? _____

_____

_____

Select the best statements about what you want assistive technology to do for this student then complete the appropriate assessment data gathering pages.

❑ Provide or augment verbal communication
❑ Provide or augment written communication
❑ Assist with reading text material
❑ Alter visual materials
❑ Assist with hearing
❑ Provide appropriate seating
❑ Provide for assisted mobility
❑ Provide for computer access
❑ Other: _____

Person completing this form_____ Relationship_____

Auditory Assessment Guide
Current Abilities

Student _____ Date_____

Completed by_____ Position_____

Auditory Acuity:
    ❏ Normal Acuity   ❏ Normal Middle Ear functioning
    ❏ Unable to test
    ❏ Identified hearing loss: ❏ right ear   severity: _____
                                  ❏ left ear   severity:_____

    Onset of hearing loss:_____ Etiology_____

    Date of last audiological exam: _____ (attach)

    Report indicates.... (Include SRT, discrimination ability)_____

    _____

    If acuity is not measured, describe behaviors that indicate level of hearing:

Amplification Being Used: Level of Effectiveness:
    ❏ None   _____

    ❏ Hearing aids: ❏ right   _____

                    ❏ left   _____

    ❏ FM system   _____

    ❏ Sound field system   _____

    ❏ Other _____   _____

Auditory Abilities:
    ❏ Attends to sounds: ❏ high pitch ❏ low pitch ❏ voices
    ❏ background noises
    ❏ Discriminates environmental vs. non-environmental sounds
    ❏ Turns head toward sound
    ❏ Hears some speech sounds
    ❏ Understands synthesized speech

Eye Control and Attention to Communication:
    ❏ poor   ❏ inconsistent   ❏ limited   ❏ good   ❏ excellent

Auditory Assessment Guide
page 2

Understands communication via what modes:
      ❑ speech   ❑ lip-reading   ❑ signing   ❑ required interpreter
      ❑ written   ❑ gestures/body language   ❑ environmental cues
      ❑ other: _____
      Describe efficiency:

Expressive communication via what modes:
      ❑ speech   ❑ signing: (type)_____
      ❑ written   ❑ gestures/body language   picture cues
      ❑ other: _____
      Describe efficiency:

      ❑ further receptive/expressive communication information is needed.
      ❑ further pragmatic communication information is needed.

Auditory concerns impact:
      ❑ reading   ❑ writing   ❑ access to instructional materials
      ❑ ability to gain information in classroom instruction   ❑ discussion
      ❑ speech   ❑ vocabulary/language   ❑ daily living activities
      ❑ use of communication system   ❑ receptive/expressive discrepancies
      ❑ computer access
      ❑ other: _____

Discussion of auditory abilities:

Vision Assessment Guide
Current Abilities

Student _____ Date_____
Completed by_____ Position_____

❑ Diagnosed Visual Disorder: _____
       Date of last vision report: _____ (attach)
       Report indicates.... _____

       _____

Visual Acuity:
       ❑ acuity normal, based on school screening
       ❑ wears glasses
       ❑ acuity cannot be corrected
       ❑ vision uncertain
       If acuity is not measured, describe behaviors that indicate level of vision:

Functional Vision Skills:
       ❑ localizes objects   ❑ adequate visual scanning   ❑ able to track objects
       ❑ recognizes persons   ❑ recognizes objects
       ❑ attends to actions in environment
       ❑ vision interferes with daily living activities
       ❑ vision interferes with mobility

Visual Abilities:
       ❑ can read standard text print   ❑ text must be enlarged: _____
       ❑ requires special lighting
       ❑ requires materials at an angle: _____
       ❑ recognizes photos   ❑ recognizes line drawings
           at what size: _____
       ❑ recognizes letters at _____pt. on computer screen
       ❑ recognizes single letters   ❑ recognizes letters in words
       ❑ recognizes words   ❑ recognizes words in connected form
       ❑ Prefers: ❑ black letters on white   ❑ white on black   ❑ other_____
       ❑ tilts head when reading
       ❑ uses only one eye: ❑ right   ❑ left
       ❑ cannot read text   ❑ requires taped material
       ❑ requires Braille instruction

Visual Adaptations Currently Utilized: Level of Proficiency:

❏ Enlarged text material

_____

❏ CCTV

_____

❏ Hand held magnification

_____

❏ Screen access software

_____

❏ Speech synthesizer

_____

❏ Screen enlargement

_____

❏ Brailler

_____

❏ Braille 'N Print

_____

❏ Brailler 'N Speak

_____

❏ Braille textbooks

_____

❏ Highlighting

_____

❏ Taped instruction

_____

❏ Text-to-speech software

_____

❏ Other:

_____   _____

_____   _____

_____   _____

_____   _____

Visual concerns impact:
    ❏ reading   ❏ writing   ❏ access to instructional materials
    ❏ mobility   ❏ daily living activities
    ❏ use of communication system   ❏ computer access
    ❏ other: _____

Discussion of visual concerns:

Seating and Positioning Assessment Guide
Current Abilities

Student _____ Date_____
Completed by_____ Position_____
Appropriate seating and positioning may affect a student's educational performance. Completion of this section may require input from physical and/or occupational therapists.

Current Seating and Positioning: (Check all that apply)
❑ Sits in regular chair with feet on floor
❑ Sits in regular chair with pelvic belt or footrest
❑ Sits in adapted chair   ❑ Needs adapted chair
❑ Sits in wheelchair part of the day   ❑ Sits in wheelchair most of the day
❑ Wheelchair needs to be adapted to fit
❑ Wheelchair is in process of being adapted to fit
❑ Spends part of the day out of chair due to prescribed positions
❑ Spends part of the day out of chair due to discomfort
❑ Enjoys many positions during the day based on activity
❑ Has limited opportunities for other positions
❑ Alternate positions include: ❑ standing frame   ❑ sidelying ❑ tumbleform chair
         ❑ beanbag chair   ❑ floor mats   ❑ other: _____
❑ Uses regular desk
❑ Uses adapted desk with height adjustment
❑ Use tray on wheelchair for desktop
❑ Uses adapted table
❑ Desktop space is not available
❑ Desktop space not required at this time

Description of seating:
❑ Seating provides trunk support
❑ Seating allows feet to be on floor or foot rest
❑ Seating provides 90/90/90 degree position
❑ Concerns about student's seating is noted
❑ Student has difficulty using table or desk
❑ Student has difficulty achieving head control
❑ Fatigue is a concern in relation to seating/positioning

Discussion on seating and positioning as it relates to educational performance:

Mobility Assessment Guide
Current Abilities

Student _____ Date_____
Completed by_____ Position_____
Input on mobility may be required from an occupational or physical therapist or mobility specialist.

Mobility: (check all that applies)
❑ Walks independently   ❑ Walks, with unusually gait
❑ Walks with assistance   ❑ Walks with appliance
❑ Needs extra time to reach destination
❑ Uses manual chair independently   ❑ Is pushed in manual wheelchair
❑ Has potential to use power wheelchair, but has not had opportunity
❑ Uses power wheelchair independently
❑ Learning to use power wheelchair
❑ Requires supervision when using power wheelchair
❑ Uses mobility device to get around environment
❑ Transfers independently   ❑ Assists in transfers
❑ Bears weight during transfer   ❑ Requires total assist in transfer
❑ Has difficulty walking up and down stairs
❑ Fatigues easily when walking distances
❑ Visual concerns make independent mobility difficult

Concerns about mobility:
❑ Fatigue prohibits student from necessary mobility
❑ Seems to have more difficulty than in the past
❑ Student complains of pain/discomfort
❑ Change in schedule requires more time for travel
❑ Change in location/building has created challenges to getting around
❑ Transition to new school requires consideration of mobility needs

Discussion of mobility issues:

Motor Access Assessment Guide
Current Abilities

Student _____ Date_____
Completed by_____ Position_____

Motor access abilities are noted for use of a computer or communication device. Input from an Occupational Therapist or person familiar with access devices may be required to complete this section. Direct Selection is always the most desirable mode. However, if this is not possible, a controlled switch site should be explored.

Fine Motor Abilities:
Voluntary, isolated, controlled movement is possible with:
> ❑ left hand ❑ right hand ❑ eyes
> ❑ left arm ❑ right arm ❑ head
> ❑ left leg ❑ right leg ❑ mouth
> ❑ left foot ❑ right foot ❑ tongue
> ❑ fingers on left hand: _____

> ❑ fingers on right hand: _____

> ❑ other: _____

Activities where movements were noted:

Preferred mode of access at this time: _____
> ❑ adequate ❑ further evaluation is needed

Range of Motion:
> ❑ small (1-4 inches) ❑ medium (5-9 inches) ❑ large (10-14 inches)
> Describe range where most motor control is noted:

Abnormal reflexes and muscle tone: ❑ yes ❑ no
> Describe reflexes and tone that interfere with access:

Accuracy: ❑ good ❑ fair ❑ poor
> Describe reliability and consistency in performing motor tasks:

Fatigue: ❑ not a factor ❑ minor concern ❑ significant concern
> Describe fatigue in motor tasks:

Assisted Direct Selection: ❏ not needed
Types of assistance that has been tried:
    ❏ keyguard   ❏ head pointer
    ❏ hand pointers/splints   ❏ chin pointer
    ❏ other: _____
    Which worked? _____
    ❏ Further assessment is needed

Size of grid:
Smallest key space student can accurately access:
    ❏ 1/2 inch   ❏ 1 inch   ❏ 2 inch   ❏ 3 inch   ❏ 4 inch

Optimal grid size:
        number of key spaces per page: _____

                number of spaces across: _____

                number of spaces down: _____

Scanning: ❏ will need   ❏ not needed   ❏ further assessment is needed
        Preferred control body site: _____

        Other possible sites: _____

Type of switch:
    ❏ touch   ❏ light touch   ❏ wobble   ❏ rocker
    ❏ joystick   ❏ lever   ❏ head switch   ❏ sip/puff
    ❏ other: _____

Discussion of access concerns:

Academic Assessment Guide
Current Abilities

Student _____ Date_____

Completed by_____ Position_____

Use of other standardized and informal assessment should be completed as necessary to define the student's current academic functioning.

Current Grade level: _____

Special Education instruction provided:
- ❑ special class   ❑ tutoring   ❑ remedial instruction
- ❑ classroom instructional support   ❑ educational aide in classroom
- ❑ other: _____

Pre-Reading/Reading Level: _____
Reading Skills:
- ❑ recognizes pictures
- ❑ understands basic concepts
- ❑ auditory discrimination of sounds
- ❑ selects initial letters of words
- ❑ applies letter/sound decoding skills
- ❑ sight word recognition
- ❑ reads sentences
- ❑ comprehends what is read   ❑ comprehension is difficult
- ❑ reads expected levels of subject matter material
- ❑ comprehends what is read to student
- ❑ currently has no functional reading skills

Reading modifications that are included in the classroom:

Spelling Level: _____
Spelling Skills:
- ❑ spelling is commensurate with reading ability
- ❑ spelling is significantly below reading level
- ❑ learns weekly spelling words by rote
- ❑ learns weekly spelling words through decoding
- ❑ applies spelling to daily activities
- ❑ currently has no functional spelling skills

Spelling modifications that are included in the classroom:

Academic Assessment Guide
page 2

Written Expression:
❏ does not write sentence forms   ❏ writes simple sentence forms
❏ writes sentence forms appropriate for grade
❏ difficulty writing on lines/given spaces
❏ spacing between words is lacking
❏ letter formations are legible   ❏ inadequate letter formations
❏ grammar errors noted   ❏ punctuation errors noted
❏ writes acceptable paragraphs on given topic
❏ paragraph forms stray from topic
❏ overall paragraph content is lower than expectations
❏ difficulty transferring verbal into written forms
❏ currently has no functional writing skills
Written expression modifications that are included in the classroom:

Math Level: _____
Math Skills:
❏ skills at expected grade level   ❏ skills at expected ability level
❏ knows addition/subtraction facts   ❏ knows multiplication/division facts
❏ uses calculator for computation
❏ relies on manipulatives for computations
❏ understands story problems
❏ expected to participate in higher level math skills
Math modifications that are included in the classroom:

Classroom Organizational Skills:
❏ keeps materials organized   ❏ comes prepared for class
❏ has difficulty organizing materials for classes
❏ assignments/homework frequently incomplete
❏ listens attentively in class
❏ frequently off task during instructional periods
❏ requires close supervision for completion of tasks

Classroom organizational modifications that are included in the classroom:

Written Communication Assessment Guide
Current Abilities

Student _____ Date_____
Completed by_____ Position_____

Present modes that student does written work:
    ❏ handwriting   ❏ dictation   ❏ keyboarding
    ❏ other: _____

Current Writing Ability (include writing sample)
    Dominant hand: ❏ right   ❏ left   ❏ unsure
    Pencil Grip: ❏ appropriate   ❏ other: _____

    ❏ Does not hold pencil   ❏ Prints   preferred__
    ❏ Holds pencil, but does not write   ❏ Cursive   preferred__
    ❏ Copies simple shapes   ❏ Writes name
    ❏ Writing is illegible   ❏ Writes words/sentences
    ❏ Writing limited due to fatigue   ❏ Writes independently and legibly
    ❏ Writing is slow and difficult

Describe:
    letter formations_____

    size_____

    spacing_____

Adaptations Used
    ❏ pencil grip   ❏ splint/pencil holder   ❏ special paper
    ❏ markers   ❏ paper holder   ❏ slant board

    ❏ other: _____

Related concerns:
    ❏ vision   ❏ processing   ❏ spelling   ❏ fine motor
    ❏ other: _____

    Describe:

Written Communication Assessment Guide
page 2

Current Keyboarding Ability

- ❏ Does not type
- ❏ Types slowly
    - one hand   two hands
- ❏ Types with one finger
- ❏ Types with 10 finger typing
- ❏ Recognizes and locates letters
- ❏ Accidentally hits unwanted keys
- ❏ Activates desired keys on command
- ❏ Requires arm/wrist support
- ❏ Unable to use regular keyboard

Alternate Keyboards Used

- ❏ Enlarged keyboard
- ❏ Switch access/scanning
- ❏ Mini-keyboard
- ❏ Other: _____
- ❏ None
- ❏ Touch Screen
- ❏ Keyboard with head or mouthstick
- ❏ Joystick access

Keyboard Layout: ❏ QWERTY   ❏ ABC   ❏ Frequency Of Use (FOU)

Other Adaptations:

Current Computer Use

- ❏ Has never used a computer
- ❏ Uses computer at home
- ❏ Uses computer for word processing

Platform_____

- ❏ Uses computer at school
- ❏ Uses computer for games

Mouse Use

- ❏ External with hand
- ❏ Track pad   Track ball
- ❏ Unable to use mouse
- ❏ Visually unable to track arrow
- ❏ Unable to click

Word Processing Skills

Uses functions:
- ❏ space   ❏ delete   ❏ return   ❏ shift   ❏ arrows
- ❏ save   ❏ open/new ❏ highlighting

Text Size: ❏ Normal (12 point)   ❏ Enlarged

- ❏ Further assessment of computer and keyboarding skills is needed.

Computer-Assisted Writing
Assessment Guide

Student_____ Date_____

Completed by_____ Position_____

Computer Assisted Writing assessment should be completed by a team of individuals who are familiar with the scope of alternate access options.

Keyboard:
    ❏ Regular   ❏ Enlarged   ❏ Mini
    ❏ Direct Selection
        ❏ One hand   fingers used: _____
        ❏ Two hands: ❏ single digit

    ❏ two handed keyboarding

    ❏ Assisted Direct Selection
        ❏ Hand pointer   ❏ Head pointer   ❏ Mouthstick
        ❏ Other: _____

    ❏ Keyguard required
Visual keys: ❏ Regular   ❏ Zoom caps
Layout: ❏ Qwerty   ❏ ABC   ❏ FOU

Key Sizes: _____ Key Spacing_____
Mouse Access: ❏ Regular   ❏ Trackball   ❏ Track pad
    ❏ Other: _____   ❏ Unable to use

❏ On **Screen Keyboard**
    Access: ❏ Mouse   ❏ Trackball ❏ Joystick
        ❏ Single Switch/Scanning

    Scanning Options:
      Optimal control site: _____

      Type of Switch: _____

      Mounting Position: _____

      Mode of Input: ❏ visual   ❏ auditory
      Mode of Scan: ❏ linear   ❏ step
                 ❏ row/column ❏ block/quadrant
      Switch Activation: ❏ momentary   ❏ sustained step
      Layout: ❏ QWERTY   ❏ ABC

      Key Sizes: _____ Key Spacing_____

Computer Assisted Writing
 page 2

Word Processing:
Functions: is able to use....
❏ space ❏ delete ❏ return ❏ shift ❏ arrows
❏ save ❏ open/New ❏ highlighting

Text Size: Optimal_____ Minimal_____
Other concerns:
❏ Background color_____ ❏ Text color_____
❏ Text-to-speech _____

Word Prediction:
Reading ability_____
Spelling ability_____
Features:
Number of choices____ Size_____
Arrangement: ❏ lower ❏ upper ❏ side
Scanning: ❏ visual ❏ auditory

Comparison of word processing/word prediction:
Speed:

Accuracy:

Computer Accessibility Issues
Range of Motion:
❏ adequate ❏ limited to _____inches

Seating and Positioning concerns:
❏ regular seating ❏ regular desk
❏ special desk ❏ special seating
❏ wheelchair: ❏ manual ❏ power ❏ mounting required

Portability:
❏ stationary ❏ multiple site locations ❏ home use
❏ laptop ❏ desktop ❏ word processing keyboard
❏ independent ❏ in transport ❏ carry case required

Durability:

Computer Assisted Writing
 page 3

Dictation/Speech Recognition

Speech:
   ❑ adequate intelligibility   ❑ sound errors apparent
   ❑ adequate sentence structure   ❑ reduced sentence forms
   ❑ adequate volume   ❑ concerns: _____
   ❑ adequate breathe support   ❑ concerns: _____
   ❑ adequate phonation   ❑ concerns: _____

Vision:
   ❑ adequate at 12-point   ❑ enlarged: _____
   ❑ adequate tracking   ❑ concerns: _____
   ❑ adequate scanning   ❑ concerns: _____

Reading/Spelling:
   ❑ adequate sight recognition   ❑ concerns: _____
   ❑ adequate decoding   ❑ concerns: _____
   ❑ recognizes errors   ❑ concerns: _____
   ❑ corrects errors   ❑ concerns: _____

Paragraph/Sentence generation:
   ❑ formulates sentences   ❑ recognizes sentence forms
   ❑ recognizes paragraph form   ❑ maintains a topic
   ❑ uses capitalization   ❑ uses punctuation
   ❑ uses new paragraph   ❑ uses new line
   ❑ spoken versus written forms understood   ❑ concerns:

Voice Recognition
   ❑ notes errors   ❑ corrects errors: ❑ scratch that   ❑ oops
   ❑ begin dictation   ❑ stop dictation
   ❑ dictates without word interjections   ❑ frequent interjections noted

Impressions:

Augmentative and Alternative Communication Assessment Guide Current Abilities

Student _____ Date_____
Completed by_____ Position_____
Input from a Speech/Language Pathologist should be obtained for completion of this section.

Present Modes of Communication: (check all that apply)
- ❑ semi-intelligible speech   ❑ single word utterances
- ❑ telegraphic word combinations ❑ intelligible speech
- ❑ facial expressions   ❑ changes in body position or breathing pattern
- ❑ eye gaze   ❑ vocalizations
- ❑ gestures   ❑ pointing
- ❑ sign language   ❑ sign language approximations
- ❑ reliable yes/no   How? _____
- ❑ communication boards/pictures   objects /tangibles
- ❑ writing
- ❑ AAC device: _____
  - ❑ classroom device   ❑ personal device

Primary Mode of Communication: _____
Prognosis for Speech: ❑ good   ❑ guarded   ❑ poor   ❑ severely limited
Communication attempts are understood by:

	Most of the time	Part of the time	Rarely
Strangers	❑	❑	❑
Teachers	❑	❑	❑
Peers	❑	❑	❑
Parents	❑	❑	❑
Siblings	❑	❑	❑

Receptive Language Level:
    Approximate Age: _____ Test: _____
    Estimated vocabulary understanding: _____
    Or give description of behaviors that indicate level:

Expressive Language Level:
    Approximate Age: _____ Test: _____
    Or give description of behaviors that indicate level:

    Ability to combine words/symbols to create novel messages:

Interactive Skills

Student demonstrates a desire to communicate:
❏ always ❏ frequently ❏ occasionally ❏ seldom ❏ never
Initiates interactions:
❏ always ❏ frequently ❏ occasionally ❏ seldom ❏ never
Responds to communication interactions:
❏ always ❏ frequently ❏ occasionally ❏ seldom ❏ never
Interacts with peers:
❏ always ❏ frequently ❏ occasionally ❏ seldom ❏ never
Asks questions:
❏ always ❏ frequently ❏ occasionally ❏ seldom ❏ never
Attempts to repair communication breakdowns:
❏ always ❏ frequently ❏ occasionally ❏ seldom ❏ never

Communication Function Needs: (check functions that present modes are inadequate)

❏ gain attention
❏ express basic needs/wants
❏ respond yes/no
❏ give personal information
❏ express feelings
❏ social rituals
❏ other: _____

❏ respond to questions
❏ ask questions
❏ give information
❏ participate in classroom activities
❏ participate in community activities
❏ participate in vocational activities
❏ conversational interactions

Describe emotional status as it relates to communication:
_____
_____

Describe the individual's potential as an augmentative communicator:
_____
_____

Past history of AAC use: Include aided and unaided systems

System	Length of Time	Results
_____	_____	_____
_____	_____	_____
_____	_____	_____

AAC Assessment Guide
Device Information

Name_____ Date of Evaluation_____

Evaluating Team Members_____
AAC Device Assessment should be obtained by a team of individuals who are familiar with device features and capabilities. Trial use is recommended.

Language Features   **Notations**

A. Representational Symbol Form
> ❏ picture/symbols
>> ❏ black/white   ❏ concrete
>> ❏ color   ❏ abstract
>
> ❏ alphabet/numbers
>
> ❏ spoken choices (auditory scan)

B. Vocabulary Encoding
> ❏ levels/locations/pages
> ❏ symbol sequencing

C. Message Production
> ❏ letters   ❏ phrases
> ❏ words   ❏ sentences

D. Vocabulary Expansion
> ❏ preprogrammed
> ❏ fully programmable
> ❏ combination

C. Rate Enhancement
> ❏ simple symbols selections/sequencing
> ❏ abbreviation expansion
> ❏ word prediction
> ❏ semantic encoding
> ❏ icon prediction

AAC Assessment
Device Information
page 2

Selection Techniques and Strategies   **Notations**

A. Input Technique

❏ **Direct Selection**
    ❏ finger (which?)_____
    ❏ thumb
    ❏ fist

    ❏ Assisted Direct Selection
        ❏ joystick
        ❏ trackball
        ❏ infrared head pointing

❏ **Single Switch Scanning**
    Optimal controlled body site: _____
    Type of switch: _____
    Mount for switch_____
    Mode of Scan: ❏ visual   ❏ auditory
    Presentation of Scan: ❏ linear   ❏ step
            ❏ row column   ❏ block/quadrant
    Switch activation: ❏ momentary   ❏ sustained
            ❏ step

B. Overlay or Keyboard Features
    ❏ membrane   ❏ key

        ❏ single level overlay
        ❏ multiple overlays
        ❏ dynamic display
        ❏ overlay exchange
                ❏ independent
                ❏ with assistance

Range of Motion
    ❏ small <6" ❏ medium 6-14"   ❏ large >14"

AAC Assessment
Device Information
page 3

Selection Techniques and Strategies   **Notations**

B. Overlay or Keyboard Features

    Number of key spaces_____
        (maximum /overlay)

    Key sizes_____
        (minimum possible)

    Key spacing
        ❑ Visual delineation
        ❑ Keyguard

    ❑ alphabet layout
        ❑ ABC
        ❑ QWERTY

    ❑ viewing angle/mounting position:

    ❑ moisture guard required

Device Construction   **Notations**

Weight/Size considerations:

Durability:

Mounting Considerations
    Wheelchair tubing type/size_____
        ❑ swing away   ❑ rear mount
        ❑ desktop mount
        ❑ walker mount

Portability
    ❑ independent   ❑ in transport   ❑ stationary
    ❑ carry case required

Output Modes   **Notations**

A. Speech Output
    ❏ digitized   ❏ synthesized   ❏ either   ❏ both
    ❏ male   ❏ female   ❏ child

    ❏ high intelligibility required
    ❏ volume control required

    ❏ auditory prompts

B. Visual Display
    ❏ static   ❏ dynamic
        ❏ liquid crystal display
        ❏ monochrome screen
        ❏ color screen
        ❏ active matrix

    ❏ print out capabilities

C. Integration with other technologies
    ❏ computer
        type_____
    ❏ environmental control units
    ❏ telephone
    ❏ adaptations to wheelchair

Assistive Technology Assessment Guide
Current Abilities
Summary

Name_____ Date_____

❑ Auditory Abilities:

❑ Visual Abilities:

❑ Seating And Positioning:

❑ Mobility:

❑ Academic Abilities:

❑ Written Communication Abilities:

❑ Augmentative and Alternative Communication Abilities:

❑ Motor Access Abilities:

Appendix B:
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