
GUIDELINES IN SPECIAL EDUCATION

Assistive Technology
for Students with Disabilities

A Primer for Educators

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CONTENTS

I. Introduction	5
II. Definitions	7
III. Legal Responsibilities	11
IV. Assistive Technology as Part of the Special Education Process ...	13
V. Training Issues	25
VI. Equipment Considerations	29
VII. Funding Issues.....	33
VIII. Frequently Asked Questions and Answers.....	37
IX. Technology Accommodations.....	47
X. Appendix A OSEP Letters of Clarification on Assistive Technology	55

I. Introduction

The purpose of the *Guidelines: Assistive Technology for Students with Disabilities* is to provide guidance for assessment and individualized education program (IEP) planning teams regarding the consideration of assistive technology. The *Guidelines* provide (1) recommended practices that will assist teams in making decisions about an individual student's need for assistive technology and (2) a decision-making process that meets the legal requirements of the Individuals with Disabilities Education Act (IDEA).

The need for guidance in the area of assistive technology for all general and special educators is strengthened by new requirements described in the IDEA Amendments of 1997. One of these new requirements indicates that a group of “special factors” must be considered by every IEP team. One of these “special factors” specifies that every student’s IEP team must consider the need for assistive technology devices and services. All IEP teams must have the knowledge and skills to make informed decisions regarding assistive technology for all students with a disability.

Assistive technology devices and services must also be considered for students under Section 504 of the Rehabilitation Act. Information available in the *Guidelines: Assistive Technology for Students with Disabilities* will assist teams that are considering the assistive technology needs of students who have a Section 504 Student Accommodation Plan.

II. Definitions

The purpose of this section is to provide assistive technology terminology as defined by IDEA. Other definitions relating to the special education process can be found in guidelines developed by the North Dakota Department of Public Instruction (see Resource section).

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 functional capabilities of a child with a disability.

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. The term includes the following:

- a) The evaluation of the needs of such child, including a functional evaluation of the child in the child's customary environment
- b) Purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices for a child with a disability
- c) Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing of assistive technology devices
- d) Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs
- e) Training or technical assistance for a child with a disability or, if appropriate, that child's family
- f) 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 child

Free appropriate public education (FAPE) means special education and related services that do the following:

- a. Are provided at public expense, under public supervision and direction, and without charge.
- b. Meet the standards of the State educational agency.
- c. Include appropriate preschool, elementary school, or secondary school education in the State involved.
- d. Are provided in conformity with an individualized education program required under Section 614(d).

Individuals with Disabilities Education Act (IDEA) is the federal special education statute and regulations.

Least Restrictive Environment (LRE)

1. Each local educational agency shall ensure that
 - a. to the maximum extent appropriate, students with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled; and
 - b. special classes, separate schooling, or other removal of students with disabilities from the general educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.
2. Each local educational agency shall ensure that
 - a. each student's educational placement is determined at least annually, is based on his or her individualized education program, and is as close as possible to the student's home;
 - b. various alternative placements are available to the extent necessary to implement the individualized education program for each student with disabilities;
 - c. unless a student's individualized education program requires some other arrangement, the student is educated in the school that he or she would attend if not disabled;
 - d. in selecting the least restrictive environment, consideration is given to any potential harmful effect on the student or on the quality of services which he or she needs; and
 - e. in providing or arranging for the provision of non-academic and extracurricular services and activities, including meals and recess periods, each student with disabilities participates with children without disabilities in those services and activities to the maximum extent appropriate to the needs of that student.

Related services means transportation and any developmental, corrective, and other supportive services that are required to assist a child with a disability to benefit from special education and includes orientation and mobility training, speech-language pathology, audiology, occupational therapy, physical therapy, recreation (including therapeutic recreation), early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, and medical services for diagnostic or evaluation purposes. The term also includes school health services, social work services in schools, and parental counseling and training. This list is not exhaustive and may include other developmental, corrective, or other supportive services if they are required to assist a child with a disability to benefit from special education. While the terms assistive technology devices and services were not specifically used in the original act, they clearly would be a functional part of the services defined (e.g., a communication device to implement a goal as part of speech pathology services) as well as other developmental, corrective, or supportive services.

Section 504 of the Rehabilitation Act is a civil rights law that prohibits discrimination based on a person's disability.

Special education means specially designed instruction, provided at no cost to the parents or guardians, to meet the unique needs of a child with disabilities, including but not limited to instruction conducted in a classroom, home, hospital, institution, or other setting and instruction in physical education.

Supplementary aids and services means aids, services, and other supports that are provided in regular education classes or other education-related settings to enable children with disabilities to be educated with nondisabled children to the maximum extent appropriate.

III. Legal Responsibilities

In accordance with the Individuals with Disabilities Education Act (IDEA), public schools are required to provide assistive technology devices and services to an eligible student under IDEA if the student's Individualized Education Program (IEP) team determines that the student needs an assistive technology device and/or service to receive a free appropriate public education (FAPE). Assistive technology may be a part of a student's special education program, a related service to special education, or a supplementary aid or service. The determination as to what is an appropriate program for each student must be identified in the content of the IEP. IDEA regulations address the school's obligation for assistive technology and read as follows:

IDEA Regulations

Each public agency shall ensure that assistive technology devices or assistive technology services, or both, are made available to a child with a disability if required as a part of the child's

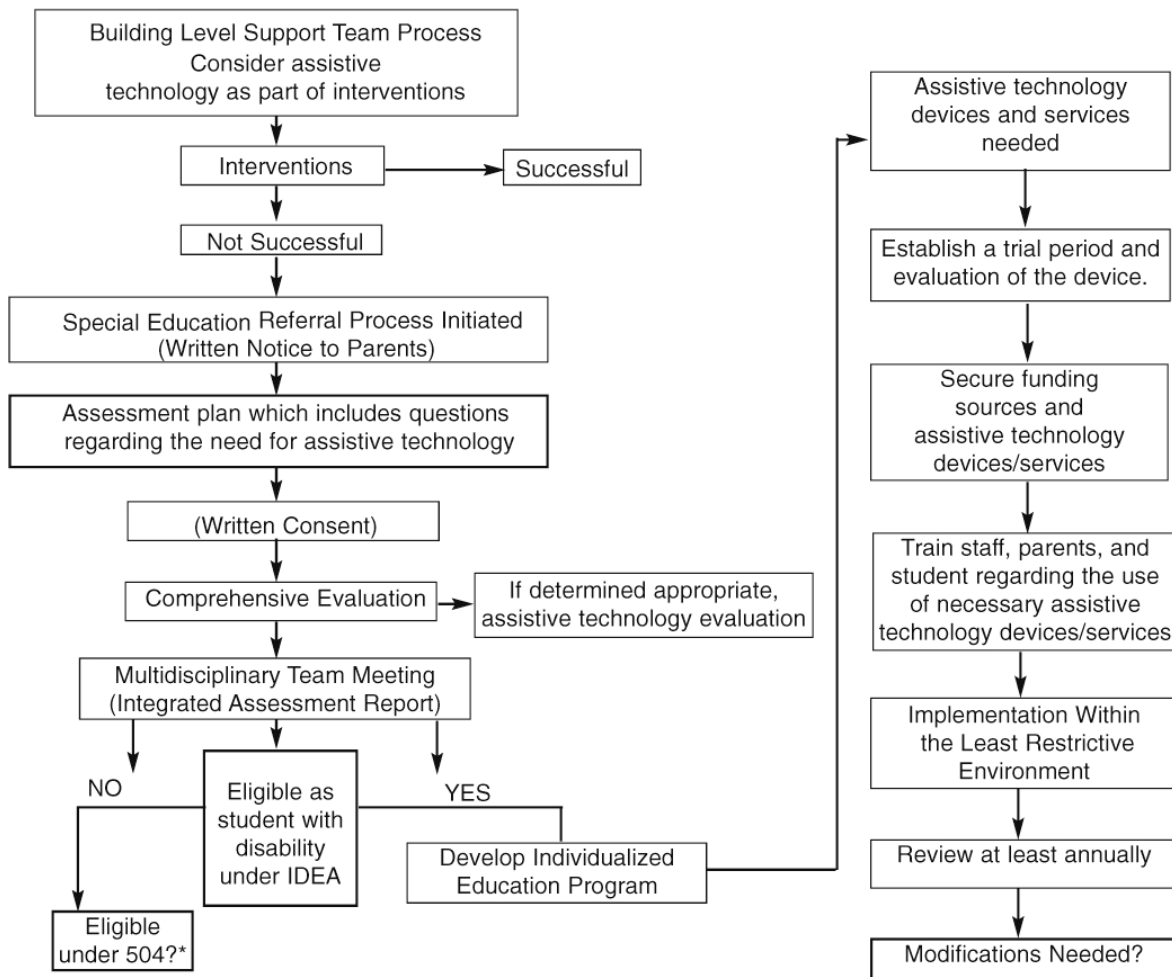
- a. Special education,
- b. Related services, or
- c. Supplementary aids and services.

Assistive technology devices or services also apply to eligible students under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act if there is a physical or mental impairment that substantially limits a major life activity and the student needs a form of assistive technology.

Summaries of the important U.S. Department of Education policy letters that relate to assistive technology have been included for reference in Appendix A.

IV. Assistive Technology as Part of the Special Education Process

The procedures used to identify a student's need for assistive technology under the Individuals with Disabilities Education Act (IDEA), are the same as those used to determine the need for special education and the development of an Individualized Education Program (IEP). It is not a new or different process. The following chart and narrative illustrate how assistive technology considerations can be addressed in the special education process.



A. BUILDING LEVEL SUPPORT TEAM

The Building Level Support Team (BLST) process is a general education activity that is used to provide support to the classroom teacher. Some schools refer to this as the teacher assistance team (TAT) process. The BLST process is a structured problem-solving process used by school professionals and parents to develop interventions for a student who is experiencing difficulty in classroom achievement or behavior. The BLST process occurs prior to a referral for a comprehensive assessment.

As part of the classroom interventions, the BLST should consider a student's need for assistive technology as a means of addressing the specific difficulty the student is experiencing. Sometimes readily available assistive technology utilized in the general education classroom could provide appropriate support, making it unnecessary to refer the student for a special education evaluation. Examples of assistive technology devices that may address a student's needs may include, but are not limited to, devices such as calculators, spell checkers, word processors, tape recorders, slant boards, pencil grips, and other alternative writing tools. BLST members and all classroom teachers should receive training regarding the use of these and other assistive technology devices.

As part of the BLST process, the team should consider the following assistive technology questions.

Technology Questions—General Education Interventions

- ◆ What assistive technology options should be tried before referral?
Example: The student is able to function well academically but exhibits difficulty with handwriting. Would a word processor help to resolve the problem? Is one available for the student to use?
- ◆ If assistive technology was used as part of the intervention strategy, how effective was it in assisting the student to achieve satisfactorily in the classroom?

If the interventions tried by the classroom teacher and the parent do not assist the student in eliminating the difficulty they are experiencing with classroom achievement or behavior, additional information should be obtained through a referral for a comprehensive assessment.

B. REFERRAL FOR ASSESSMENT

Referral is the first point in the process at which parent involvement is required. It is strongly recommended that parents, and the student when appropriate, be involved in the BLST process from the beginning. Referral for assessment may come through different entities: the BLST process, school or agency screenings, a parent request, or through agencies involved with the student. The school district is responsible for informing parents of the referral for assessment. The school must provide parents with a written notice of the referral and a complete listing of due process rights.

A referral begins the process of gathering information about a student in order to decide if the student's learning difficulties are due to a disability. The individual making the referral should document the reasons for referral, describe any options the school personnel considered, including documenting general education interventions, and the reasons why those options were rejected. If assistive devices were used as part of the interventions, the specific device(s) used should be documented on the referral. This will assist members of the evaluation team in determining evaluation needs of the student, as outlined in the assessment plan.

Once a referral for assessment is made, the multidisciplinary team is identified. A multidisciplinary team rather than an individual diagnostician ensures that observations and other sources of data are gathered from a variety of settings in which the student demonstrates strengths and needs. The multidisciplinary team members are active participants in the complete assessment process. If the multidisciplinary team establishes that a referral for assessment is not appropriate, the student is referred back to the Building Level Support Team or considered for eligibility under the Section 504 of the Rehabilitation Act.

Members of the multidisciplinary team should include the student's parent(s), the student's classroom teacher(s), a school administrator, the student (when appropriate), and a teacher or specialist with knowledge in the area(s) of suspected disability. If it is suspected that the student will need an evaluation which could include assistive technology, professionals with knowledge and experience in conducting assessments in assistive technology must be part of the multidisciplinary team.

C. ASSESSMENT PROCESS

Once a referral for assessment is made and a multidisciplinary team is established, the assessment process will begin. The purpose for the assessment is to determine if a disability exists and to provide a basis for appropriate programming.

The assessment process includes these activities:

1. Completion of the **student's demographic** information to provide background on the student
2. Development of a **student profile** to provide a comprehensive picture of information already gathered
3. Indication of patterns of current student functioning and areas where further information is needed
4. Formulation of an **assessment plan** that includes a list of questions regarding the student's performance,
5. Decision regarding how information will be gathered to address these questions and who will gather the information
6. Obtaining **written consent to evaluate** from the parents
7. **Completion of the individualized assessments** as identified in the assessment plan
8. Preparation of an **integrated written assessment report** that addresses all assessment findings

Assistive Technology Considerations in the Assessment Process

Schools must ensure that tests and evaluation materials are selected and administered to accurately reflect the student's educational levels or whatever other factors the test purports to measure. As part of the initial planning for a comprehensive assessment of a student with assistive technology needs, the multidisciplinary team members must consider the following technology questions.

Technology Questions—Initial Assessment Planning

- ◆ Can the student be evaluated accurately with standard assessment procedures without accommodations?
- ◆ If the student uses assistive technology, should it be utilized during the evaluation process? Is the assistive technology functioning appropriately?
- ◆ Did the student have an assistive technology evaluation in the past? What were the results?
- ◆ Is there a need for an assistive technology evaluation?

Once the multidisciplinary team decides that an assistive technology evaluation is needed, the team must decide what questions need to be asked, who will conduct the evaluation, where and when the evaluation should take place, and the timeline for completion of the evaluation.

What should be considered in an assessment plan when addressing assistive technology needs?

An assistive technology assessment must be tailored to the unique needs of the student. Questions to be addressed during the assistive technology assessment are related to the specific tasks the student needs to be able to perform and what, if any, assistive technology would help. There is not a specific “test” for evaluating the need for assistive technology. Therefore, prior to conducting the evaluation, a well developed assessment plan needs to be in place. Listed below are a few of the considerations that need to be addressed as part of the assessment plan.

Technology Questions—Assessment Plan

- ◆ What tasks do we want the student to do that she/he is unable to do?
- ◆ What types of assistive devices may assist the student in doing the task and remaining in the least restrictive environment?
- ◆ Is there a low-technology device that will meet the student’s needs?
- ◆ Is the device(s) suited to the student’s educational needs and abilities?
- ◆ Is the suitability of the assistive technology device appropriate over time?
- ◆ If this is a re-evaluation, what additional information is needed?

Who should conduct an assistive technology evaluation?

When the multidisciplinary team decides, through the assessment planning process, that a student needs an assistive technology evaluation, the team must decide who will provide the assessment. A school district may utilize its own personnel or contract with an outside evaluator for the assistive technology evaluation. In either case, individuals conducting the evaluation must be knowledgeable and have experience in conducting these assessments.

Depending on the unique needs of the student, the assistive technology evaluation may be conducted by a team of individuals, including the family, or it may be conducted by a single individual. It is important to recognize that no one person or discipline will know everything about assistive technology. Therefore, access to knowledgeable people at the local level and through other agencies, programs, and services is essential. Individuals conducting an assistive technology evaluation should have knowledge of and access to an array of assistive technology devices and be familiar with the student's education setting. They should also be knowledgeable about the student's current levels of functioning in all settings and be able to communicate effectively with parents and educators.

If it is necessary for the school to contract with an outside provider for an assistive technology evaluation, a listing of programs and agencies that provide contracted services are identified in the funding section of this document. When contracting with a provider, it is important that the school and the provider have a mutual understanding of the purpose of the evaluation what will be included in the evaluation the methodologies the time frame for completion of the evaluation the information to be included in the written report to the school and the cost of the evaluation.

Questions to Ask in Selecting an Outside Evaluator

- ◆ In what areas of assistive technology do you conduct assessments?
- ◆ Are devices and/or equipment available for use during the actual assessment?
- ◆ Does your assessment include site visits to the student's environment?
- ◆ If a device and/or equipment is recommended as a result of your assessment, do you provide assistance in obtaining funding?
- ◆ If the equipment you recommend is purchased, do you provide training?
- ◆ What age groups do you assess?
- ◆ What type of experience do you have working with assistive technology?
- ◆ What type of training do you have in this area?

Where should the assistive technology assessment take place?

Whether it is school personnel conducting the assistive technology evaluation or an outside evaluator, it is preferable to have the assistive technology evaluation done at the school the student currently attends. The evaluation is being conducted for the purpose of determining assistive technology for the educational setting. If the evaluation cannot be conducted on site, it will be necessary for the school to communicate with the parent(s) the details of the evaluation (e.g., date, time, location, transportation) to ensure that the evaluation can be completed within projected timelines and that all necessary arrangements have been made. If the school and the parent(s) agree that the transportation will be provided by the parent to the evaluation site, the school is obligated to provide for the costs of transportation and other related costs, as appropriate.

D. INTEGRATED WRITTEN ASSESSMENT REPORT

After the completion of an assistive technology evaluation, a report that addresses the evaluation findings will be completed by the professionals conducting the assessments. The written assistive technology report should address the following points:

- ◆ Procedures used to evaluate the student
- ◆ Instruments employed in the evaluation, assuring that a range of levels of technologies have been considered

- ◆ Results of evaluations, including both qualitative and quantitative measures
- ◆ Recommendations for levels of technology appropriate to the student's capabilities and potentials
- ◆ Implications for educational programming, including discussion of both individual technology needs and recommended environmental and instructional modification

The results from the assistive technology evaluation report will become a part of the integrated written assessment report that integrates findings from all sources. The integration of all assessment data ensures that attention has been given to all information shared by team members. In addition, it protects the student from being labeled inappropriately, which might occur if a decision was made by one person or on the basis of one procedure or situation. The integrated written assessment report is not a reiteration of test scores. It is written in a manner that is understandable to parents and other professionals.

When the integrated written assessment report is completed, the team will determine whether the unique educational needs of the student are due to a disability as defined by IDEA. Once a student has been determined to have a disability, the IEP process rather than the assessment process determines whether the student is in need of special education and related services. Students who do not meet the eligibility criteria under IDEA may meet the eligibility requirements under Section 504 of the Rehabilitation Act.

E. INDIVIDUALIZED EDUCATION PROGRAM (IEP)

The purpose of the IEP process is to design an individualized education program to ensure that students with disabilities have adequate educational planning to accommodate their unique instructional needs and that these needs are met in appropriate learning environments. The data gathered from the comprehensive evaluation conducted by the multidisciplinary team must be utilized in the development of the IEP. Therefore, if an assistive technology evaluation was conducted as part of the comprehensive evaluation, the IEP team members must consider the results and recommendations of the evaluation when developing an IEP. At least one IEP team member must be knowledgeable about what assistive technology exists to help the student with specific tasks and to identify needed assistive technology services.

Technology Questions—IEP Considerations

- ◆ If a student has not already had an assistive technology evaluation, is there any reason to believe that the student may require an assistive technology device to accomplish the IEP goals and objectives? If so, the IEP team should discuss referral of the student for an assistive technology evaluation.
- ◆ Is the assistive technology that is being considered needed for the student to meet one or more of the goals of the IEP?
- ◆ If assistive technology is used as part of the student's educational program:
 - ◆ Are assistive technology services needed to enable the student to use the device?
 - ◆ Is the device to be used in the general education curriculum?
 - ◆ Will staff require training to use or help the student use the device? If so, which staff members?
 - ◆ Will training or technical assistance be necessary to assist the family in implementing the use of the technology for the student?
 - ◆ Will the device be necessary for home use by the student in order to complete assignments?
 - ◆ Will goals and objectives be developed specific to teaching the student to use the device?
 - ◆ Does the assistive technology device or service enable the student to be served in the least restrictive environment?

Additional Considerations for IEP Documentation of Assistive Technology Needs

The following are examples of where and how assistive technology needs are documented within the IEP process.

1. **Present Levels of Educational Performance:** These Statements of the student's unique pattern of functioning lay the foundation for succeeding components of the IEP. Statements generated from the integrated written assessment report are incorporated into the present levels of educational performance summary. The results from the assistive technology evaluation report are part of the

integrated written assessment report and the present levels of educational performance.

2. **Goals/Objectives:** Goals are related to the unique needs of the student and are achievable within one calendar year. Objectives are subtasks for an annual goal that form the basis for determining the student's progress. If assistive technology is needed to enhance a student's potential to achieve a goal, it should be viewed as a tool in the learning process and not as a goal itself.
3. **Characteristics of Services:** Characteristics of services become the basis for establishing the least restrictive environments in which the student will receive special education and related services. This essential analysis incorporates how the assistive technology devices and/or services enable the student to participate in a particular setting and who will monitor the progress of objectives relating to assistive technology.
4. **Adaptations of Educational Curriculum and Services:** A summary of adaptations of educational curriculum and services will include how the assistive technology will be used in the student's education program. In this section, the IEP team will include items such as a monitoring plan, for the assistive technology device and a contingency plan which would be implemented if the equipment fails to operate.
5. **Special Education and Related Services:** The team must specify "what" will be provided, "how much time" the service will entail, and "when and where" it will be provided. If assistive technology devices and/or services will facilitate the attainment of objectives specified in the student's IEP, then technical assistance regarding selection, application, and evaluation of identified equipment should be provided. Services required should also be specified. An example of a services relating to assistive technology is parent training, in which the parent might need to learn how to use and care for the device.
6. **Least Restrictive Environment:** The team will determine when the assistive technology devices and/or services will be provided and how their use leads to the least restrictive educational setting for the student and access to the general education curriculum.
7. **IEP Notes:** In the notes or minutes of the IEP meeting, describe the assistive technology device(s) to be provided, the provider (school/parent/other), the funding source and ownership of equipment

(if funds such as Medicaid or private insurance are to be used) and the anticipated date the device will be provided. If funding sources are being explored, record who is responsible for this activity, and timelines. As appropriate, describe the training to be provided to the parent(s) and professionals involved in implementing the student's educational program, including the timelines.

F. IMPLEMENTATION

Consideration should be given for day-to-day equipment operation and maintenance, such as who will check to see if the equipment is operating, what repairs are required, or if backup equipment is needed. It is important to identify, in the IEP, a person who will be responsible for monitoring the assistive technology device as well as its implementation. It may be the special education teacher or another member of the staff who is knowledgeable of the student's program and the device(s) used. A contingency plan should be in place if a piece of equipment fails to operate.

Time should be provided for staff to meet and coordinate the use of the student's technology in all settings. Additionally, education staff need to be aware of other sources of information and support to develop their own expertise in the area of assistive technology. Consideration should be given for the training of professionals and paraeducator staff regarding the use of assistive technology and how to properly integrate these devices into the classroom setting. It is crucial that assistive technology does not become a barrier for the inclusion of a student with a disability into the general education classroom. The following questions should be continually asked by all IEP team members after the use of an assistive technology device has been initiated.

Technology Questions—Implementation of Assistive Technology Devices and Services

- ◆ Are the assistive technology devices and/or services that were provided being utilized?
- ◆ Are the assistive technology devices and/or services functioning as expected?
- ◆ Are the assistive technology devices supporting the student as expected? If no, why not?
- ◆ Who is responsible for each of these actions?
- ◆ Who is responsible for monitoring each aspect of the implementation of assistive technology goals and objectives?
- ◆ How will student progress on IEP goals be reported to the parents?

G. ANNUAL REVIEW

IDEA requires that each student's IEP be reviewed at least annually and more frequently if requested by any IEP team member, including parents. This review should include the evaluation of the effectiveness of the assistive technology that has been implemented and whether any revisions or adjustments need to be made.

Reviews should also occur more frequently if the assistive technology is not operating correctly or the student is ready to advance to a new technology device or service. A review is particularly important if the student is transitioning to a different educational environment. Staff members who are unfamiliar with the devices should be trained and the new setting should be analyzed to ensure its compatibility with the assistive technology.

V. Training Issues

Schools must provide assistive technology services that include, if determined appropriate by the IEP team, "...training or technical assistance for a student with a disability or, if appropriate, that student's family; and 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 students with disabilities." To address training needs, the school should be aware of training resources within its own school, as well as outside resources. Review of training should be regularly scheduled and occur whenever there has been a change in the student's educational program. Retraining may be necessary when the IEP is revised, new staff are employed, or the student's placement is changed.

Since each student's technology needs are unique, the support necessary for implementing technology requires a variety of types of training for school personnel and others. Training can take place on several different levels and for various audiences: general staff training, more specific training for administrators and special education personnel, parent training, Building Level Support Team, related services personnel, student-specific training, and awareness training for peers.

A. GENERAL STAFF TRAINING

It is to the benefit of all educators that they have awareness training regarding assistive technology devices, services and resources. Such awareness training could be provided as a staff inservice training under the school's comprehensive system of personnel development (CSPD) plan under IDEA.

B. ADMINISTRATORS, SPECIAL EDUCATION, AND RELATED SERVICE STAFF

Trainers could use these guidelines as the basis for assistive technology training. It is important that all school districts provide, or make available, inservice training in the following areas:

- ◆ Legal issues relative to assistive technology
- ◆ Awareness training in serving students with assistive technology needs
- ◆ Information on how assistive technology relates to the evaluation process
- ◆ How to write IEPs for students who require use of assistive technology devices
- ◆ The relationship between assistive technology and service options
- ◆ Common assistive technology devices
- ◆ Resources to contact for information on assistive technology
- ◆ Information on how to integrate assistive technology into the regular classroom setting

C. PARENT TRAINING

In some cases, parents will require training so the device may be used at home for the student to complete homework assignments. The parents will become a resource to the student for proper care and maintenance of the device.

D. STUDENT-SPECIFIC TRAINING

School personnel who work with the student should have training on the assistive technology device, as appropriate, and should know who to contact if they need assistance in using the device when working with the student or who to contact if the device needs maintenance or service. Training should include, but not be limited to, the following:

- ◆ Review of the student's educational and assistive technology needs
- ◆ A review of goals and objectives, supplementary aids/services, and/or related services on the IEP
- ◆ Methods to evaluate the effectiveness of the assistive technology
- ◆ Training on how to use and maintain the device

- ◆ Plans for transition from one grade or environment to another
- ◆ Integration of assistive technology into classroom curriculum and activities

E. PEER GROUP AWARENESS TRAINING

Depending on the type of assistive technology used by the student and the student's needs, it may be an advantage to the student if assistive technology information is shared with the student's peer group. Such training will help fellow students to gain an understanding of the student's assistive device, foster acceptance in the social environment, and reduce fears other students may have about socializing with the student who uses technology.

Prior to peer group awareness training, the training should be discussed with the parent and, if appropriate, with the student. The school should invite the parent to participate in the training.

VI. Equipment Considerations

Assistive technology must be evaluated in relation to the student's unique needs, strengths, and weaknesses, and the goals and objectives identified by the IEP team. Technology or equipment that is difficult for the student and staff to operate only becomes a frustration and an eventual hindrance. Trial periods, maintenance of equipment, and liability are three issues the team should consider before purchasing a technology device.

A. TRIAL PERIODS

Trial periods are very useful to determine whether the assistive technology selected is an appropriate choice for the individual. The length of a trial period will vary with each individual, depending on the type of assistive technology. It may be necessary for the student to try several types of technology before the appropriate one can be selected.

There are several factors that may increase the length of the trial period. First, if the technology is complex, the educational staff will need time to become proficient in its use and application. Then the staff must train the individual to use and apply it. Next, it will take a certain amount of time for everyone involved with the individual to be able to evaluate its benefits. The primary issues in evaluating the technology are that the technology meets the individual's needs and that the individual uses the technology.

While it would be helpful if assistive technology companies would allow free trial periods or offer loan devices at no cost, this rarely happens. Companies have a variety of reasons for not doing so. They are concerned that the device would not be returned in good condition, if at all. They also contend that there would be too many requests, and that there are too many people "shopping" for devices. Companies are also concerned that individuals not informed in areas of assistive technology would choose inappropriate equipment in trying to meet the student's needs. Decisions like these would reflect negatively on the company and its equipment. However, some companies will rent their products, and a portion or all of the rental may be applied to the purchase. It is recommended that assistive technology be tried before it is purchased. As an alternate to trial

periods from companies, school districts can access loan libraries from various resources in North Dakota. See the Resource Section for more information. Many of the companies have a return policy. If, within the specified number of days it is decided the assistive technology is not appropriate, it can be returned to the company and all or most of the purchase price will be refunded. Check the company's catalog or call the company to find out exactly what their return policy is. Do not assume that it is 30 days.

As a result of public school purchase practices, difficulties in meeting the return policy timelines of companies may arise. Because public school materials are typically ordered at the end of the school year, orders are processed and arrive during the summer when teachers are not available to examine and use the technology prior to the return policy deadlines.

If you have questions about a company's policies regarding equipment trial periods, loan equipment, rentals, or returns, it is recommended that direct contact be established with that company. In addition, support staff from these companies are available to discuss specific assistive technology issues and provide recommendations. These companies also are frequent participants in conference exhibits, may be willing to demonstrate equipment in other situations, and will provide this information upon request.

B. MAINTENANCE OF EQUIPMENT

You can avoid many problems regarding maintenance and repair of school-owned equipment by asking the right questions before you make the purchase. These questions may include, at a minimum, the following:

1. *What is the warranty?*

Check the length of the warranty and find out exactly what is covered. One-year warranties are common. Extended warranties and service contracts will probably be available. For some devices, the manufacturer suggests annual maintenance. Call someone who owns the device to find out about the costs and types of repairs they have experienced.

2. *What kind of support is provided?*

The manufacturer should have a toll-free help line for you to call with questions about repairs or other problems. Knowledgeable school staff

should be utilized to call the company representative to ask questions about the device or service. At what hours is the help line available?

3. *Is the manual user-friendly?*

Look at the user's manual for the device you may be purchasing. Is it easy to understand? Does it have a section on common questions and answers?

4. *What happens if the device needs repair? Is a loan device available while your device is repaired and returned to you?*

Ask if the company will provide a loan device if your device cannot be repaired within a certain time frame. Some won't but will promise a reasonable turnaround time for repairs. For example, one company promises a two-day turnaround for repairs to their voice-output scanner and overnight shipping both ways. Make sure the company's repair policies are convenient for you.

5. *What if you think you can repair the device yourself?*

If you have problems, you may void your warranty by tinkering with the device.

6. *What is the return policy for the device?*

It is important to know the return policy if the device just isn't the appropriate one for the student. Common return policies for devices can range from 14 to 45 days.

C. LIABILITY

Negligent use by a staff member of a technological device that causes injury to a student is one area of potential liability. School officials should consult their district attorneys and insurance carriers regarding potential liability and insurance coverage limits. Staff who are not covered under school district liability insurance (for claims made against them as individuals) should consider obtaining personal liability policies if they are concerned with potential liability. Such coverage has always been advisable. The increased use of advanced technology is another reason to consider insurance coverage. To lessen the risk of liability and mitigate damages in any lawsuit, a school district should document any training of staff regarding the use of particular assistive devices, including presenter, topic, nature and extent of training, and persons trained.

VII. Funding Issues

If a student eligible under IDEA requires assistive technology to receive a free appropriate public education, the school must provide the appropriate assistive technology and assistive technology services at no cost to the parent(s).

Because some assistive technology devices can be quite expensive, it is important for school districts to be proactive in coordinating efforts to secure supplemental funding. Districts may use State special education funds, local funds, and/or federal funds provided for special education and related services under IDEA for eligible students with disabilities, as well as other available sources of funds.

Funding is available from a variety of public and private sources. The following list includes some of the programs that may pay for equipment if the student meets their requirements.

A. PUBLIC PROGRAMS

Schools—Schools are required to provide appropriate assistive technology for students with disabilities if it is needed for his or her education. The technology must be included in the student's Individualized Education Program (IEP).

School-to-School—Schools should enter into agreements to transfer devices when a student moves from one school district to the next. This also may be applicable when a student transitions from secondary to post-secondary programs.

School-to-Work Transition Programs—Provide job-related training and placement services for teenagers with disabilities to help them move from school to work. For more information contact special education or vocational rehabilitation offices.

Vocational Rehabilitation Services—The State office of Vocational Rehabilitation provides information, evaluation services, training, and funding for technology and education to help individuals go to work or live more independently. Check the telephone directory under State government listings.

Medicaid—Medicaid is a joint federal and State program that covers the cost of some equipment if it is considered medically necessary. For more information about Medicaid and who and what is covered in the State, contact the special education unit director. Parents must give permission to use their private insurance and Medicaid. A parent’s private insurance must be accessed before Medicaid can be used for assistive technology.

Medicare—Although not a usual source of funds for assistive technology, Part B of Medicare provides coverage for some durable medical equipment if it is considered medically necessary and is for use in the person's home. For more information about Medicare benefits, contact your Social Security Administration Regional Office.

B. PRIVATE PROGRAMS

Private Insurance—Some health insurance plans will buy equipment, but it depends on the policy. The equipment must be considered medically necessary and therefore, requires a doctor’s prescription. Parents' private health insurance may only be used with parents' permission.

Nonprofit Disability Associations—There are many disability organizations, some of which may be able to loan equipment or tell about other funding sources or support groups. These groups include, but are not limited to those listed below:

- ◆ National Easter Seal Society
- ◆ March of Dimes
- ◆ Muscular Dystrophy Association
- ◆ United Way
- ◆ United Cerebral Palsy Association
- ◆ Braille Institute

Foundations—Some foundations may offer money to buy assistive technology.

Service Organizations—There are many local service organizations that may provide money to help someone in their community. A list of these groups is available from the local Chamber of Commerce. Examples of these organizations are as follows:

- ◆ Lions Club
- ◆ Masons
- ◆ Veterans of Foreign Wars (VFW)
- ◆ Elks Club
- ◆ Rotary Club
- ◆ Kiwanis
- ◆ Knights of Columbus
- ◆ Shriners

C. OTHER WAYS OF GETTING EQUIPMENT

A local church, high school, neighborhood, labor union, or special interest groups (computer clubs, ham operators, etc.) may plan a fund raiser.

College student organizations (fraternities and sororities or student government volunteer offices) may give money or students' time to help a special cause. Even if money is not available, they may be willing to help organize a fund raiser.

Try to borrow or rent the equipment from an equipment loan program, a dealer, a manufacturer, or another family. Loans are usually for a limited time. If there is a fee for loaned equipment, some vendors will apply the fee to the purchase price.

VIII. Frequently Asked Questions and Answers

FUNDING: RESPONSIBILITY AND RESOURCES

1. **Q. Are schools required to pay for technology devices and services?**

A. It is the responsibility of the school district to provide the equipment, services, or programs identified in the IEP. The school district may pay for the equipment, service, or programs itself; utilize other resources to provide and/or pay for the device and/or services; or cooperatively fund the device(s) and/or services.

Other resources may include, but are not limited to, Medicaid, foundations, fraternal organizations, church or social groups, charitable organizations, businesses, and individuals.

2. **Q. Can schools require the parents to pay for assistive technology device(s) or service(s) identified in the student's IEP or require the parents to use their own private health insurance to pay for the device and/or services.**

A. The “free” in “Free Appropriate Public Education” is significant regarding students with disabilities who may require assistive technology devices or services. As Stated in IDEA and its regulations, all special education and related services identified in the student's IEP must be provided “at no cost to the parents.” The term “free” is interpreted broadly and goes far beyond the simple paying of deductibles and co-payment. The courts have interpreted “free” to apply to, but not be limited to, future insurability, depletion of maximum lifetime caps, raised premiums, discontinuation of policies, and pre-existing condition exclusions. Parents’ health insurance and/or Medicaid may be used to pay for assistive technology devices and services. However, parents must give permission to use their private insurance and Medicaid.

3. **Q. How can school districts use Medicaid funds to purchase assistive technology devices?**

A. A parent's private insurance must be accessed before Medicaid can be used for assistive technology devices.

4. **Q. Are there other options for schools to consider in lieu of purchasing the assistive technology device?**

A. Yes. There are times when the outright purchase of equipment or devices is not necessary or even advisable. In such instances, schools might consider rental or long-term lease options. There are certain advantages worth considering, depending on the individual needs of the student. For example, renting equipment might be a reasonable strategy if the student's needs change significantly or when it is necessary to try out the equipment before purchase for a student. Long-term leasing or lease/purchase agreements also have potential benefits for schools which include no obligation on behalf of the school to purchase the device, reduction of obsolete inventory, flexible leasing terms, use of equipment without a lump-sum purchase, upgrading of equipment as more improved technology becomes available and upgrading of equipment as the student's needs change.

5. **Q. Are group homes a funding source for assistive technology devices/services?**

A. No, but it would be possible to work out agreements with the public or social agencies associated with the group homes.

EQUIPMENT OWNERSHIP AND USE OF EQUIPMENT

6. **Q. Who owns the assistive technology that is purchased for a student?**

A. If the school district purchases the equipment, the equipment belongs to the district. If the device(s) is purchased by using private insurance funds, then the device belongs to the student and is meant for the exclusive use of that student.

7. Q. Can students take the assistive technology device(s) owned by the school to their home?

A. Yes. If the IEP team determines that the student needs access to an assistive technology device at home to implement the educational program, the student may take it home. For example, a student with a physical disability may not be able to complete homework assignments without access to a calculator at home. "If an IEP team determines that a particular assistive technology item is required for home use in order for a particular student to be provided FAPE, the technology must be provided to implement the IEP." (OSEP Letter of Clarification dated 11/27/91).

8. Q. If a piece of assistive technology is no longer needed or relevant to a student and the device was paid for by Medicaid or private insurance, can it be donated for another student's benefit?

A. Yes, it is a parental decision. The parent(s) could donate the device to the school for use by other students with disabilities.

9. Q. When a student moves from one level of schooling to another, such as from elementary school to middle school, does the device follow the student?

A. If an assistive device is necessary to fulfill the requirements of a student's IEP, such a device must be provided in the school the student attends. The same device may not necessarily follow the student from one school to another, but a comparable device that fulfills the IEP requirements would need to be provided in the new school.

10. Q. What happens to assistive technology devices when students leave the school system?

A. If the school district purchased the device, the device is the property of the school. The school could keep the device for use by other students, sell it, or decide to transfer the device to another district in which the student enrolls. If the family purchased the device, it is the property of the student and the family. For secondary students, this issue should be addressed in the transition plan.

REPAIR, MAINTENANCE, INSURANCE

11. Q. Are schools responsible for customization, maintenance, repair, and replacement of assistive technology devices?

A. Assistive technology services such as customization, maintenance, repair, and replacement are included as considerations in the acquisition of equipment or devices purchased/provided by the school. Responsibilities for these services should be discussed at the IEP meeting and identified in the IEP notes or the IEP document.

If family-owned assistive technology is used by the school and is listed in the IEP as necessary for providing free appropriate public education, the school might also be responsible for maintenance, repair, and replacement.

12. Q. If a device is broken and is beyond repair, who replaces the broken device?

A. If an assistive device is necessary for the student's IEP to be implemented, the school district will have to replace a broken device. If the device is broken at home through negligence, the parents could be held responsible for the repair costs.

13. Q. What about the warranty for new equipment?

A. The school should check the length of the warranty and find out exactly what is covered. One-year warranties are common. Extended warranties and service contracts will probably be available. For some devices, the manufacturer suggests annual maintenance. School districts should weigh the cost of warranties with the cost of the device.

14. Q. Should the school district repair a broken piece of equipment?

A. The school may wish to check the warranty for the equipment prior to it making its own repairs. In some cases, warranties can be voided if persons other than the manufacturer attempt to repair the device.

15. Q. Should assistive devices be insured?

A. It is in the school district's best interest to have insurance; however, cost of insurance versus the item(s) expense should be considered. Many insurance policies offer riders at a minimal expense that include assistive technology. Many school district liability policies will cover devices purchased by the district for student use. Devices purchased by other funding sources may or may not be covered while on school premises or involved in school activities. It is important for school staff to investigate the district's property insurance to determine what the policy currently covers and whether the policy insures against loss or damage of assistive devices.

PERSONNEL: TRAINING, QUALIFICATIONS

16. Q. What professionals are considered qualified to assess a student in the area of assistive technology?

A. School districts often have professionals who have received training to conduct assistive technology evaluations and who are able to provide the services identified in the IEP. If a district does not have personnel who are knowledgeable in conducting such evaluations, the district can arrange for such services from other knowledgeable providers.

17. Q. How can a staff member receive individualized training for a specific need?

A. It is the school district's responsibility to train appropriate staff members in proper use of the technology. Requests for this kind of specialized training should be made to the school principal, who is a member of the IEP team, and/or the school district special education director.

18. Q. If a school district decides to develop a team of professionals to review assistive technology needs, who should be included?

A. A school district assistive technology team may include some or all of the following: parents, student, special education teacher, occupational therapist, speech/language pathologist, physical therapist, administrator/principal, school technology coordinator, general education teacher,

school nurse, and maintenance worker. These individuals should receive ongoing training regarding the effective use of assistive technology.

IEP: RELATED ISSUES

19. Q. Under what circumstances may assistive technology be considered a related service?

A. Assistive technology can be a related service if the service is necessary for the student to benefit from his or her education. Training of staff, parents, and the student would be an example of a related service benefiting the student.

20. Q. Can the IEP team refuse to consider assistive technology devices on the IEP?

A. All IEP teams have the responsibility to consider a student's need for assistive technology devices and services and for specifying those devices and services. Therefore, it is important that IEP teams are informed of the requirement to determine if a student needs an assistive technology device and service and the need for an assistive technology evaluation to assist in making the determination.

21. Q. How is assistive technology integrated into the curriculum?

A. The IEP team needs to discuss how the device will be used by the student and how it will be integrated into the curriculum. The IEP team should identify in the IEP document how the device will be used by the student in the classroom. This information should be shared with the general classroom teachers, who are members of the IEP team, so that they are aware of how it is to be used. Assistive technology should be used to help the student be involved in and progress from the general education curriculum.

22. Q. How can continuity be achieved in the student's program with regard to assistive technology devices and services from classroom to classroom, teacher to teacher, school to school, year to year?

A. Each student's IEP must be reviewed no less than annually. At the review, the IEP team should discuss and identify personnel training needs as they relate to the student's movement through the school program. The school should develop policies and procedures to ensure that involved teachers are familiar with the student's assistive technology needs and use of the device(s). This will help to provide continuity. For example, districts may assign case managers to oversee this process, or IEPs may describe the processes as they relate to individual students. Policies and procedures could also outline the process for providing training for new staff that will interact with the student and need to be knowledgeable about the device.

23. Q. How can one distinguish between assistive technology and personal items?

A. Currently, IDEA does not make a distinction between assistive technology devices and personal items. This stems in large part to IDEA's broad definition of assistive technology. If a student with a disability needs an assistive technology device to ensure FAPE, then the school district and parents need to work together to find fiscal resources to purchase the item.

ADMINISTRATIVE ISSUES

24. Q. Who determines how assistive technology will be purchased and with what available funding resources – the IEP team or administration?

A. Once the IEP team makes the determination that assistive technology must be provided as part of the student's IEP, it is the responsibility of school administration, with input from the IEP team, to determine how the assistive technology will be provided and with which funding resources.

25. Q. Is a school district responsible for providing “State-of-the-art” equipment for a student?

A. No. However, the school must provide appropriate technology for the student's needs to ensure FAPE. The decision as to what type of assistive technology is appropriate should be based on the assistive technology

evaluation recommendations and IEP team decision. If a less-expensive device would accomplish the same goals, the IEP team is under no obligation to choose a more expensive option.

26. Q. If a student needs a computer, can a school-owned computer be used in the lab or classroom?

A. Yes, if the student has access to the equipment as needed. If the student does not have the necessary access, then the appropriate equipment should be purchased for the student's use. The IEP team will decide as a group the need and use of computers on a case-by-case basis.

27. Q. Can an assistive technology device be used by more than one student?

A. Yes, an assistive technology device may be shared if it is the property of the school and each student who requires use of the device has access to it as needed.

28. Q. Can an independent evaluation be requested to address assistive technology?

A. Yes. The school district is required to evaluate a student in all areas of suspected disability including, if appropriate, evaluating the student's need for assistive technology. A parent has the right to an independent educational evaluation at public expense if the parent disagrees with an evaluation obtained by the school. However, the school may initiate a hearing to show that its evaluation is appropriate. If the final decision is that the evaluation is appropriate, the parent still has the right to an independent educational evaluation but not at public expense. Individuals conducting the evaluation must be knowledgeable and have experience in conducting these assessments. If the parent obtains an independent educational evaluation at private expense, the results of the evaluation (1) must be considered by the school in any decision made with respect to the provision of FAPE to the child, and (2) may be presented as evidence at a hearing under this subpart regarding that child.

OTHER QUESTIONS

29. Q. What is a product system?

A. A product system is more than one piece of equipment working together to produce a result. Examples are an FM system utilized in conjunction with a student's hearing aid to provide amplification in the classroom or a computer with a voice synthesizer.

30. Q. Can the school require the student to bring a personally owned assistive device, such as a laptop computer, to school to do his/her schoolwork?

A. No. However, the family may wish the child to use his/her own equipment in school since he/she may be most familiar or comfortable with it. The IEP team should decide who is responsible for repair and maintenance of family-owned devices and document that decision.

31. Q. Will the student become too dependent on technology and not learn to use the skills they have?

A. Assistive technology should be used as support for access, learning, and performing daily tasks. If assistive technology is necessary for a student to have access to educational opportunities or to benefit from education, then it is a legitimate support. Some skills are too laborious or taxing to accomplish at a rate or with the degree of proficiency to allow participation in the least restrictive environment. With assistive technology, the student can participate more fully and more closely approximate the levels of achievement and interaction of his or her peers.

IX. Technology Accommodations

This is only a sampling of possible accommodations in assistive technology. The assessment and IEP team must decide which devices and services are appropriate for the individual student.

HANDWRITING

Method Accommodations	Material Accommodations	Technology Accommodations
<p>Peer support Tape paper to desk Chalk board practice</p> <p>Instructional strategies: Tracing exercises "Talk through" letter formation "Walk through" letter formation Write letters in the air Dot-to-dot Multimodality instruction</p> <p>Modifications: Adapt tests to "fill-in-the-blank" Use multiple choice/ true-false Provide additional time Shorten assignments Photo copy notes Try different writing Implements Paper position Student position Peer dictation Cross-age tutoring</p>	<p>Different kinds of paper Different colors of paper Different line spacing/ line colors Pencil holders/grips Large/primary pencils "Chubby" sized crayons Markers Grease pencils Acetate sheets/transparency markers Paper stabilizers Arm stabilizer/arm guide Light pen Dycem for positioning Tactile letters Stencils/templates Clipboards Tracing paper Electric eraser Correction tape/pen/fluid Rubber name stamps Other rubber stamps Bingo blotter to make selections Labels/stickers with name, etc. Automatic number stamp Highlighters Easel Slant board/wedge Personal chalkboard Avoid using short pencils</p>	<p>Typewriter: Typing/keyboarding instruction Positioning device Positioning student Arm stabilization Wrist rests, movable/stationary Custom keyboard Correction tape/pen/fluid</p> <p>Word Processors: Peer support Typing/keyboarding instruction Portable/stationary preferences Lightweight options Down linking to computer Positioning device Positioning student Arm stabilization Wrist rests— movable/stationary Custom keyguard Cross-age tutoring</p>

VISUAL INTEGRATION

Method Accommodations	Material Accommodations	Technology Accommodations
<p>Enlarged worksheets</p> <p>Enlarged reading material</p> <p>Worksheet free of blotches/streaks</p> <p>Font changed on worksheets/tests</p> <p>Double-spaced worksheets/tests</p> <p>Wide margins on worksheets</p> <p>Different colors of paper</p> <p>Lighting changed</p> <p>Different line spacing/color</p> <p>Darker lines on paper</p> <p>Raised lines on paper</p> <p>Limited amount of information on a page</p> <p>“Finger-for-spacing” strategy</p> <p>Peer support</p> <p>Multimodality instruction</p>	<p>Magnifying glass</p> <p>Magnifying bars</p> <p>Page magnifiers</p> <p>Slant boards</p> <p>Easel</p> <p>Paper holders</p> <p>Workstation copy holder</p> <p>Stencils</p> <p>Rulers</p> <p>Colored acetate sheets</p> <p>Colored stickers for visual cues</p> <p>Post-it tape flags</p> <p>Peer support</p> <p>Highlighter</p> <p>Word window</p> <p>Line marker</p> <p>Anti-glare shield on pages</p>	<p>Mini book light</p> <p>Other additional lighting</p> <p>Typewriter:</p> <p>Positioning device</p> <p>Positioning student</p> <p>Key labels</p> <p>Enlarged text output</p> <p>Change fonts</p> <p>Lighting issues</p> <p>Colored paper</p> <p>Correction tape/pen/fluid</p> <p>Typing/keyboarding instruction</p> <p>Peer support</p> <p>Cross-age tutoring</p> <p>Word Processors:</p> <p>Positioning device</p> <p>Positioning student</p> <p>Key labels</p> <p>Portable/stationary preferences</p> <p>Lightweight options</p> <p>Down linking to computer</p> <p>Enlarge text</p> <p>Change font</p> <p>Colored paper</p> <p>Peer support</p> <p>Cross-age tutoring</p> <p>Typing/keyboarding instruction</p>

SPELLING/GRAMMAR/PUNCTUATION

Method Accommodations	Material Accommodations	Technology Accommodations
<p>Instructional strategies:</p> <ul style="list-style-type: none"> Paired word associations Self-verbalization Imagery Mnemonic devices Multimodality instruction Peer support Cross-age tutoring “Word wall” of <ul style="list-style-type: none"> common words Spelling word booklet Problem word lists Word blanks <p>Modifications:</p> <ul style="list-style-type: none"> Extra time for completion Reduced number of words 	<ul style="list-style-type: none"> Flashcards Magnetic board and letters Flannel board and letters Rubber word stamps Rubber letter stamps Peer support Highlighters Personal chalkboard Pocket dictionary Three-ring <ul style="list-style-type: none"> notebook dictionary 	<ul style="list-style-type: none"> Tape recorder Electronic pocket <ul style="list-style-type: none"> spell checkers Electronic dictionary Language Master Speaking Language Master Spelling Ace/Spell Master <p>Word Processors:</p> <ul style="list-style-type: none"> Spell checkers Peer support Cross-age tutoring Typing/keyboarding <ul style="list-style-type: none"> instruction

READING

Method Accommodations	Material Accommodations	Technology Accommodations
<p>Modifications:</p> <ul style="list-style-type: none"> Extra time for completion Shortened assignments Simplified text Highlighted key concepts Chapter outlines <p>Instructional strategies:</p> <ul style="list-style-type: none"> Story frame Before, during, after Echo reading Positive approaches Story mapping Vary approach Multimodality instruction Information organizer Structured study guides “What-you-need-to-know” chart Study carrel for individual work Peer support Cross-age tutoring 	<ul style="list-style-type: none"> Magnifying bars Page magnifiers Colored acetate Word window Line marker Flash cards Letter cards Word cards Sentence cards Tactile letters and words Magnetic board and letters Felt board and letters/words Colored paper clips to mark pages Notebook tabs Post-it tape flags Peer support Highlighter 	<ul style="list-style-type: none"> Digital Book System Tape recorder “Books on Tape” programs record books/reading materials headphones Language Master Speaking Language Master Word Master Electronic dictionary

MATH

Method Accommodations	Material Accommodations	Technology Accommodations
<p>Fewer problems</p> <p>Eliminate the need to copy problems</p> <p>Enlarged worksheets</p> <p>Avoid mixing “signs” on a page</p> <p>Minimize number of items on a page</p> <p>Provide more time for completion</p> <p>Graph paper</p> <p>Raised number lines</p> <p>Large number lines</p> <p>Life-sized number line</p> <p>Mnemonic devices</p> <p>“Two-finger” counting aids</p> <p>instructional strategies</p> <p>multimodality instruction</p> <p>computational aids</p> <p>color coding strategies</p> <p>green marker to start/red to stop</p> <p>peer support</p> <p>cross-age tutoring</p>	<p>Abacus</p> <p>Counters—spools, buttons, etc.</p> <p>Containers for counters</p> <p>Manipulatives</p> <p>Flash cards</p> <p>Set cards</p> <p>Flannel board and numbers</p> <p>Tactile numbers/signs</p> <p>Automatic number stamp</p> <p>Peer support</p> <p>Highlighter</p> <p>Personal chalkboard</p> <p>Number facts charts</p>	<p>Hand-held calculator</p> <p>Calculator with printout</p> <p>Talking calculator</p> <p>Language Master + Math</p> <p>Tape recorder—</p> <p style="padding-left: 20px;">Counting</p> <p style="padding-left: 20px;">Basic facts</p> <p style="padding-left: 20px;">Multiplication tables</p> <p style="padding-left: 20px;">Combinations</p> <p style="padding-left: 20px;">Formulas</p>

WRITTEN EXPRESSION

Method Accommodations	Material Accommodations	Technology Accommodations
<p>Modifications:</p> <ul style="list-style-type: none"> Extra time for completion Shortened assignments <p>Instructional strategies:</p> <ul style="list-style-type: none"> Content outlines “Webbing” strategies Process writing strategies Writing/story starters Positive Approaches Study carrel for individual work Formulate sentences verbally “Finger-for-spacing” strategies Color coding strategies Peer support Cross-age tutoring 	<ul style="list-style-type: none"> Note cards Word cards Sentence cards Clipboards Pocket dictionary Pocket thesaurus Peer support Highlighter 	<ul style="list-style-type: none"> Tape record thoughts before writing Tape record story to proofread headphones Electronic dictionary Word Master Speaking Dictionary Companion Electric Eraser

DAILY ORGANIZATION

Method Accommodations	Material Accommodations	Technology Accommodations
Bulletin board schedule	Pocket organizer/planner	Electronic memo/schedule masters
Pocket schedule	Personal organizer	Electronic pocket organizer/planner
Schedule in notebook	Clipboards	Schedule/assignments on tape
Appointment book	Stapler	Digital diary
Assignment sheets	Peer support	Electric stapler
Reminder cards	Sticky notes for reminders	
Strategies to keep workspace clear	Notebook tables	
Strategies to organize desk	Post-it tape flags	
Study carrel for individual work	Colored paper clips	
Color coding strategies	Highlighter	
Peer support	Storage cubicles	
Cross-age support		
Homework journal		
Structured study guides		
Signs posted and areas labeled in the room		
Schedule taped on the desk.		

X. Appendix A

OSEP Letters of Clarification on Assistive Technology

23 IDELR 565
2 ECLPR ¶ 169

Fisher, Letter to (IEEs/Assistive Technology Devices)
Office of Special Education Programs

Digest of Inquiry
[Date Not Provided]

Must a local school system pay for independent assistive technology evaluations as they must for independent educational evaluations?

Digest of Response
December 4, 1995

Right to IEE Includes Evaluation of Needs for Assistive Technology

A public agency must evaluate a student in all areas of suspected disability, including, if warranted, whether a student's functional capabilities require the use of assistive technology devices or services. Likewise, a parent's right to seek an independent educational evaluation (IEE) includes an assessment that will enable an IEP team to determine a student's needs for assistive technology. The right to an IEE extends to situations where the school neglects to evaluate the student for assistive technology needs as well as instances where the parent disagrees with the school's evaluation in that area. Alternatively, a parent can also request that the school conduct a reevaluation of the student's need for assistive technology.

22 IDELR 888

Naon, Letter to (Assistive Technology Devices)
Office of Special Education Programs

Digest of Inquiry
March 6, 1995

What obligation do educational agencies have to provide assistive technology?
Is there a list of types of assistive technologies and equipment for each type
of disability?

Digest of Response
January 26, 1995

District Must Provide Assistive Technology/Devices Necessary for FAPE
34 CFR 300.5 and 34 CRF 300.6 of the Part B regulations require each public
agency to ensure that a student with a disability receives the assistive technology
devices and services which are necessary for FAPE. The determination as to
whether the assistive technology devices and services are necessary for FAPE is
to be made by the student's IEP team, and the relationship that must exist is
between the student's educational needs and the device or service.

Need for Assistive Technology Devices/Services Must Be Based Upon Individual
There are no predetermined listings of assistive technology devices and or
services which relate to particular types of disabilities. Rather, the need for a
particular device or service must be based upon the unique needs of each
individual student.

22 IDELR 629
2 ECLPR ¶ 100

Bachus, Letter to (Eyeglasses/Hearing Aids)

Digest of Inquiry
April 12, 1994

Is a public agency required to provide eyeglasses to a visually impaired student whose parents cannot afford them? If so, who is responsible for the evaluation expense to determine the need for glasses, and for a hearing aid?

Is a public agency responsible for providing eyeglasses to a student with a disability other than a vision impairment?

Digest of Response

January 13, 1995

LEA Must Provide Eyeglasses if They Are Necessary for FAPE and Included in IEP

If a student with a vision impairment requires eyeglasses regardless of whether he or she was attending school, then a public agency will NOT be required to provide them to the student. However, if the public agency determines that the child with a disability requires eyeglasses in order to receive FAPE and the child's IEP specifies that the child needs eyeglasses, then the public agency must provide the eyeglasses at no cost to the parents and could seek funds from outside of the agency to do so. When evaluating a student, the public agency must assess in all areas related to suspected disability, including if appropriate, vision and hearing. Thus, if the student is suspected to have visual or hearing deficits, then the public agency is responsible for the costs of the vision and hearing assessments.

For Students with Disabilities Other than Visual Impairment, IEP Team Must Determine Whether Eyeglasses Are Necessary for FAPE

The determination as to a public agency's duty to provide eyeglasses to a student with a disability other than a visual impairment is to be made by the student's IEP team in light of a consideration of whether the eyeglasses are necessary in order to receive FAPE.

21 IDELR 1057

2 ECLPR ¶ 68

Anonymous, Letter to (Assistive Technology)

Digest of Inquiry

June 9, 1994

Is a school district responsible for an assistive technology device, purchased by the parent, if that device is utilized by the student in completion of his/her IEP goals and therefore his/her academic work?

Digest of Response

August 9, 1994

Although Not Mandatory, Assuming Liability for Family-Owned Assistive Technology Devices is Reasonable

Although a district must provide assistive technology devices that are necessary for FAPE at no cost to parents, federal law does not specify whether a district must assume responsibility for such a device when it is purchased by the parent and used by the district to implement the student's IEP, either in school or at home. However, it is reasonable for States to require districts to assume such liability, since the district is responsible for providing services and devices specified in a student's IEP, and without the use of the family-owned device, the public agency would be required to provide and maintain a needed device. However, there may be some instances when assuming such liability would create a greater responsibility for the district than exists under federal law.

20 IDELR 1216

2 ECLPR

Seiler, Letter to (Assistive Devices)

Office of Special Education Programs

Digest of Inquiry

April 21, 1993

If a student needs a hearing aid and the device is put on the student's IEP, does the IDEA require the school district to purchase the device?

Digest of Response

November 19, 1993

Hearing Aid Must be Provided at No Cost When Specified in IEP

A hearing aid is considered a covered device under the definition of "assistive technology device." Thus, where a district has determined that a child with a disability requires a hearing aid in order to receive FAPE and the child's IEP specifies that the child needs a hearing aid, the district is responsible for

providing the hearing aid at no cost to the child and his or her parents in accordance with 34 CFR 300.308.

19 IDELR 278

Cohen, Letter to (Assistive Technology)

Digest of Inquiry

April 6, 1992

How can school districts be expected to provide potentially expensive assistive technology services and devices with limited available resources?

Digest of Response

July 9, 1992

Alternate Funding Sources Are Available for Assistive Technology

State and local educational agencies (SEAs and LEAs) may access alternative funding sources such as Medicaid, Maternal and Child Health (MCH), and private insurance proceeds in order to defray the costs of providing assistive technology services and devices to children with disabilities. However, pursuant to 34 CFR 300.601, the use of alternative sources of public funding may not result in a reduction of the medical or other assistance available to children with disabilities or in an alteration of their eligibility under the Medicaid or MHC programs. Furthermore, any use of private insurance proceeds to provide assistive technology services or devices must comply with the Notice of Interpretation on the Use of Insurance Proceeds and must not pose a realistic threat of financial loss to parents of children with disabilities.

18 IDELR 1037

Anonymous, Letter to (Assistive Technology)

Digest of Inquiry

October 18, 1991

Under what circumstances must a local school district allow a student with a hearing impairment to use an FM auditory training system as an assistive technology device?

Digest of Response

April 6, 1992

Use of FM Training System Should Be Discussed During IEP Process

If a student with a hearing impairment has a current IEP, but the IEP does not discuss the use of an FM auditory training system, then the parent may request that an IEP meeting be convened to consider the use of such a system. On the other hand, if the student does not have a current IEP, the parent may request an evaluation and, if a disability is identified, an IEP must be developed, at which time the use of an FM system can be discussed. In either case, if the parent believes that the student is entitled to, but is not receiving FAPE due to the denial of an FM system, then a request can be made to the school district to conduct an impartial due process hearing, or a complaint can be filed with the State educational agency.

18 IDELR 627

1 ECLPR ¶ 245

Anonymous, Letter to (Assistive Technology)

Office of Special Education Programs

Digest of Inquiry

[Date Not Provided]

Is a school district responsible to provide assistive technology devices for home use?

May a school board overrule a determination by an IEP team that a child with a disability needs access to an assistive technology device at home?

What is the time limit on implementation of an IEP?

Digest of Response

November 27, 1991

Assistive Technology Devices May Be Required for Home Use

If an IEP team determines that a child with a disability needs access to an assistive technology device at home as a matter of FAPE, then the school district must provide the device for home use in order to implement the child's IEP.

School Board May Not Change IEP Team's Determination

Under Part B, a school board has no authority to unilaterally change any Statement of special education or related services contained in an IEP, including a Statement of a child's need to have access to an assistive technology device at home. Without reconvening the IEP team, the school board may not change the IEP, and the school district is obligated to implement the IEP requirements, regardless of the school board's objections.

IEPs Must Generally Be Implemented Immediately

Under Reg. 300.342(b), an IEP must be in effect before the provision of special education or related services and must be implemented as soon as possible following the conclusion of the IEP meeting(s). In accordance with Appendix C to the Part 300 regulations, an IEP should generally be implemented without delay after being finalized, although a reasonable delay may be permissible in limited circumstances.

16 EHLR 1317

1 ECLPR ¶ 119

Goodman, Letter to (Assistive Technology)

Digest of Inquiry

[Date Not Provided]

Must a school district determine the need for "assistive technology" on a case-by-case basis for eligible children with handicaps?

Digest of Response

August 10, 1990

"Assistive Technology" Provided on Case-by-Case Basis

While neither EHA-B nor its implementing regulations define "assistive technology," such assistance might qualify as special education, a related service, or a supplementary aid or service, in accordance with the definitions supplied by the Technology-Related Assistance for Individuals with Disabilities Act. If a type of "assistive technology" is covered by EHA-B, then the determination of a child's need for such assistance must be made on a case-by-case basis in connection with the development of the child's IEP.

