

Considering Your Child's Need for Assistive Technology

By: G. Bowser and P. Reed (2000)

The 1997 revision of the Individuals with Disabilities Education Act (IDEA) included many new requirements for school districts. One of those new requirements is the group of "special factors" which each IEP team must consider. Assistive technology is one of those special factors. The requirement states simply, "...the IEP Team shall...consider whether the child requires assistive technology devices and services." Although school districts have been required to provide assistive technology devices and services if they are needed for a child to receive a free and appropriate public education (FAPE) since 1990, in many cases assistive technology was treated as a "special" area that was separate from the general delivery of services. In some cases assistive technology was only thought about for children with very severe disabilities or only for those with physical and speech disabilities. The passage of IDEA '97 is the first time that each IEP team in every school district has been specifically required to focus on the need for assistive technology. This is the first time that every IEP team developing programs for children with learning disabilities must ask the question, "Does this child need assistive technology in order to accomplish the educational goals we have set?" So what is assistive technology? How can it help children with learning disabilities?

Assistive technology for children With learning disabilities

Assistive technology is defined in IDEA as follows:

§300.5 Assistive technology device.

As used in this part, 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.

(Authority: 20 U.S.C. 1401(1))

Students with learning disabilities most often have difficulty with functional capabilities such as writing, reading, studying, listening, accessing the curriculum and organizing. While this is a fairly long list of very important skills, the list includes tasks for which most of us already use some kind of technology. The assistive technology devices that might help a student with learning disabilities are often not specialized devices designed for people with disabilities, but are simply readily available technology that might not be commonly used in classrooms or technology that might not be introduced as early as it is needed by a student with learning disabilities. Because the legal definition of assistive technology is very broad, there is sometimes confusion about what is assistive technology as opposed to what is instructional technology. Assistive technology is not technology that helps students practice new skills they are learning. It is not software to practice spelling words or math facts. However, if the child's problem is handwriting, assistive technology might be technology that allows him to keyboard to produce more legible spelling tests or math problems.

When technology is used as assistive technology, it helps a child to do a task that he either cannot perform without it or cannot perform as well without it. Assistive technology often can be used in a variety of environments and can help a child with a task that might be done at school, at home or out in the community. Technology that can be used by students with learning disabilities to compensate for their skill deficits is the most rapidly developing area of assistive technology today. There are literally hundreds of products available. In addition, more products are coming out of the general technology realm with built in accessibility features. Products with voice output or voice recognition such as Microsoft Word and Dragon Dictate are being purchased for general use in school districts and can become assistive technology for a child with a learning disability. The inclusion

of these accessibility features is called "universal design".

Any product with universal design features

- Provides multiple representations of the information being presented.

- Provides multiple or modifiable means of expression and control.

- Provides multiple or modifiable means of motivating and engaging students.

For more information on universal design, you can go to <http://ericec.org/>. This site provides an ERIC topical brief. If you are using items with universal design features, you need to know which features could help to meet the special needs of your child.

A historical perspective

The field of assistive technology is a relative newcomer in education. As soon as electronics and home computers came on the market, people began to see ways that these technologies might help children and adults with severe disabilities to do things that most of us take for granted.

They saw that technology might help to overcome the barriers of hands that could not write or voices that could not speak. The problems to be solved were complicated and so was the technology, so many school districts set up specialized services which required referral to assistive technology specialists in order to identify and access needed assistive technology. The problem with the specialized or "expert" system is that it only allows the IEP team to do two things; 1) decide that there is no need or 2) make a referral to an expert. With this model, children with learning disabilities were often left out of the assistive technology assessment system because their problems didn't seem as critical as those of children who could not walk or see or hear. One other historical factor has limited the use of assistive technology for children with learning disabilities. The families and teachers of children with learning disabilities were sometimes unwilling to allow them to use assistive technology tools to help compensate for a problem.

They worried that if a student used a calculator to do math assignments, they would never learn math facts and processes. They worried that if a student used a computer to produce written work, they would never learn to spell or write with a pencil. The focus was on teaching the child compensatory skills to overcome the disability. Today, research tells us that assistive technology can be a tool to help children acquire the more difficult concepts which they can understand, but which their deficits in reading, writing or processing have prevented them from learning.

The assessment systems developed to take advantage of the skills of experts are often closed systems. They require that if you have an assistive technology question, you go elsewhere to get an assessment. If an expert system is used exclusively, it can sometimes actually make it harder to address the needs of students with learning disabilities. A more open system in which the student's educational team works together to identify problems and look for assistive technology tools makes it easier to address the needs of students with learning disabilities. You and the other members of your child's educational team can probably already identify some tools that are appropriate to your child's educational needs and useful in overcoming the limitations caused by your child's learning disabilities. An open system provides on going information and training about the myriad of assistive technology devices and the rapidly appearing new additions to the field.

Common uses of assistive technology for students with learning disabilities

The assistive technology devices that are most often needed by students with learning disabilities fall into five categories. The categories include the following.

Writing: Handwriting and written communication goals are the most common goals found on IEPs across the nation. When a child has been unsuccessful in learning to put thoughts and words on paper using a pencil or a pen, the IEP team may decide that an assistive technology tool is

needed.

Reading: When a student with learning disabilities has difficulty reading, there are many tools which can help to identify single words, phrases or even read an entire document to the child.

Math: If your child is having trouble with calculations but understands how math may be used to solve problems, there are a variety of tools which may make calculation easier or may even do basic calculations for him.

Studying/Organizing: Many students with learning disabilities have difficulty keeping track of assignments, identifying the most important information to learn and/or organizing thoughts to show what they know.

Listening/Note Taking: When writing is difficult, a student may have a great deal of trouble getting notes on paper. When students are distractible or especially sensitive to noise, even listening can be a problem.

Access to the Curriculum: For some students with learning disabilities, reading can be such a problem that reading difficulties keep the child from getting information that is available to other students. Sometimes an alternative to reading is needed.

What to expect when assistive technology is considered

What should be different in your IEP meeting now that your IEP team is required to consider your child's need for assistive technology? Here are some things that you can expect.

In your IEP meeting at some point there should be a discussion about assistive technology. Generally, this should come after you have agreed upon the goals that your child will be expected to attain in the next twelve months. It is really not possible to make a decision about assistive technology until you can talk about the specific tasks that your child will be trying to accomplish. Remember, the definition of assistive technology is, "any item, piece of equipment, or product system, whether acquired off the

shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of children with disabilities" (20 USC, 1401, Section 602 (1)). The functional capabilities of the child in any situation are directly related to the tasks that he or she is trying to accomplish. There may be different assistive technology to be considered for your child in meeting an arithmetic goal than in meeting a writing goal.

When you do "consider" assistive technology, the consideration should involve some discussion and examination of potential assistive technology tools.

Consideration should not be someone saying, "Assistive technology? No, he doesn't need that." with no discussion. Consideration is defined in the American Heritage Dictionary as "to think carefully about, to form an opinion about, or to look at thoughtfully." We believe that Congress did not choose that word by accident, but clearly intended that there would be some thought about whether assistive technology may be needed by each child. So one thing that should be different, is that assistive technology should be discussed from now on at each IEP meeting.

This "thoughtful look" should certainly include at least a brief discussion of which assistive technology devices are useful for children with disabilities like the ones your child experiences and whether your child needs tools like those. Someone on the IEP team will need to be sufficiently knowledgeable about assistive technology to help lead the discussion. So another thing that may be different in your child's IEP meeting is that someone may bring along specific resource information about assistive technology to help all of you focus on what assistive technology exists for the tasks that are challenging to your child. That information might be books, catalogs, printouts from a web site, or actual hardware or software for you to see. Whether they bring something or not, one thing that you should expect is a brief discussion of assistive technology during which at least one person displays some knowledge about relevant assistive technology.

During an IEP meeting, this discussion should be brief. It should last at least a minute or two, but no more than 15 to 20 minutes. Congress intended that we could do this within the confines of an IEP meeting, so it should not add appreciably to the length of that meeting. If understanding and agreement cannot be reached in twenty minutes, then it is possible that there are questions that need to be addressed at another time. Your IEP team may decide to complete an assistive technology assessment if you feel that you do not have enough information. If that is the decision, it should be written into the IEP with an anticipated date of initiation and completion.

If your IEP team decides that your child will be using assistive technology, you should also expect to talk about assistive technology services. The "consideration" requirement requires IEP teams to consider the support services a student will need in order to use assistive technology which has been included in the IEP. Specific assistive technology services may include:

- an evaluation of your child's need for assistive technology;
- training of your child, members of your family or staff on how to use the assistive technology;
- technical assistance about its operation or use;
- modification or customization of the assistive technology;
- and
- other supports to the school personnel that might be necessary for the assistive technology to be appropriately used.

The supports your child might need are not specified in the law. They could include anything that is needed, for example, printing assignments your child has completed on a portable word processor, scanning new materials into a software program that reads the text or the planning about how and when these things will happen.

Finally, you should expect that someone on the IEP team will know how to locate assistive technology devices and services within your school district. In a small district it may be that the direct service providers who work with your child

(i.e. the teachers, therapists, and aides) will need to provide all of the services themselves. In a larger district, there may be individuals whose entire job is assistive technology. They may need to be contacted through appropriate channels so they can help become a part of your child's educational team.

Preparing for the IEP meeting

A lot of information should be collected before assistive technology is actually included as a part of your child's daily educational program. If questions of assistive technology are raised for the first time during the IEP meeting and you feel your child might need assistive technology, it is a good idea to use the time during the IEP meeting to begin to plan trial periods or an assistive technology assessment rather than to make a final decision. Including assistive technology that your child has never tried in an IEP is very likely to create frustration for you and for your child.

Once evaluation and trial period data has been collected, the team probably has enough information to develop a plan that can succeed. Sometimes the data shows that the assistive technology you tried is not an appropriate solution to the problem. If this happens, your child's team might decide to try other things.

When assistive technology will be considered during your child's IEP meeting, you can prepare for the meeting by asking yourself questions like these.

Do I feel that we have information that points us in the direction of assistive technology that might help my child?

If I believe that assistive technology that can help my child has been identified, do I believe that my child needs to use this assistive technology at home as well as at school? For what specific tasks would it be used? If I believe my child needs assistive technology at home to accomplish IEP goals, how will the use of assistive technology at home impact our family?

Do I need to know how to use the assistive technology my

child is using? How much do I need to know?

Using a form to guide consideration of assistive technology

Many school districts and other groups have developed specific forms to assist the IEP team as they consider each child's need for assistive technology. One example is the Assistive Technology Evaluation Guide for Students With Learning Disabilities. This form was developed as a tool that IEP teams could use to guide them through the consideration process. It asks the team to answer these questions:

What difficulties is the student experiencing in the school environment for which assistive technology intervention is needed?

What strategies, materials, equipment and technology tools has the student already used to address the concerns?

What new or additional assistive technology or accommodations should be tried?

What will the criteria be for determining whether or not the student's needs are being met while using assistive technology during the trial period?

Another example is the AT Consideration Guide that can be downloaded from the [Wisconsin Assistive Technology Initiative's web site](#)

Your role as a parent in developing the assistive technology portion of the IEP is to express your ideas and feelings about the assistive technology being considered. You can contribute information about what you see at home and bring up any concerns you have. It is important that every IEP team member keeps in mind the long-term vision for your child and takes steps toward that vision.

When assistive technology is included in the IEP, you can help clarify the specifics. You can ask questions like the following as the team develops a plan.

For what specific tasks will my child use the assistive technology at school?

When and how often will my child use the assistive technology during the school day?

How long should I expect to wait for the assistive technology to be provided?

What related services, if any, will my child need in order to use the technology effectively?

What other support services will my child need in order to use the technology effectively?

When my child uses this assistive technology in school, what will I have to do to support him/her?

If my child uses assistive technology only at school, how will I know if it is working?

What about skill development? A note of caution

When you have the computer speak the text, the child is not necessarily reading along. When you have the computer write through word prediction or voice recognition, the child is no longer writing in the same way. Even when you decide to use assistive technology, it is important to make sure that the focus doesn't get pulled totally away from skill development. In other words, don't stop teaching and holding the child accountable to learn new skills.

What about statewide assessments?

Assistive technology is a major issue in accommodating for the disabilities of students with disabilities in statewide and district wide assessments. Each state varies somewhat in its guidelines. It is important to know the rules related to using assistive technology in assessments and how that use will impact your child's assessment scores. More important, assistive technology should never be used during assessment until it has been proven effective during routine class assignments. It's unfair to a child to add a new tool to the stresses involved in a testing situation.

What about assistive technology use at home?

IDEA '97 guarantees that AT must be sent home if it is needed. However, the determination of need is based on its relationship to goals and objectives in the IEP. It is within the rights of the school district to provide arrangements to

complete tasks at school if they can be completed at school. For example, if your child has social studies homework, the school district could provide extra time on a computer at school so there is no need for your child to do homework. The school district could provide an Alphasmart 2000 or some other less expensive portable word processor. There is never a specific requirement to provide a computer for your home unless there is no other way for your child to do something required on the IEP.

If assistive technology is sent home with your child, it is your responsibility to ensure that it is used appropriately and kept in good condition. Be prepared to report technical problems and any difficulties you experience to your child's teacher as soon as you can so that the use of assistive technology at home does not become a barrier to your child's achievement rather than a help.

Summary

The requirement for every IEP team to consider the need for assistive technology is a step forward. In many cases a giant step forward, because it has caused school districts to "break out of the box" and begin to think about assistive technology for many children who had previously been overlooked in the provision of assistive technology. It is also an opportunity. It is an opportunity for parents to encourage a thoughtful discussion of the potential use of assistive technology for their child.

It's important to remember that the development of a plan is only the beginning of your child's journey with assistive technology. Learning to use the technology is just like learning to read. It takes time and effort and support from you and your child's teachers. As you begin the journey, we hope the information contained in this article provides you with a useful road map.

Resources

Bowser, G. and Reed, P. , Education Tech Points; A Framework for Assistive Technology Planning, Winchester, OR: Coalition for Assistive Technology in Oregon,(for

information contact Gayl Bowser-541/440-4791 or email at gayl.bowser@douglasesd.k12.or.us.

Council for Exceptional Children, Ensuring Access to the General Education Curriculum,

[Individuals with Disabilities Education Act, Amendments of 1997](#), Public Law No. 105-17, § 602, U.S.C. 1401 [On-line].

Reed, P. and Bowser, G. Assistive Technology Pointers for Parents, Winchester, OR: Coalition for Assistive Technology in Oregon, (2000) (for information contact Gayl Bowser-541/440-4791 or email at

gayl.bowser@douglasesd.k12.or.us.

Reed, P. (ed) Assessing Students' Need for assistive Technology, Oshkosh, WI: [Wisconsin Assistive Technology Initiative](#), 1998

Cumley, Judi and Marcia Obukowicz-Science for Everyone: It Can Be Done, conference reference CTG, 1999 (To be published in the next CTG.)