This paper discusses the difficulties many school districts have in fully complying with the assistive technology requirements of the Individuals with Disabilities Education Act (IDEA), especially the broadened requirement in IDEA '97 to consider the need for assistive technology in developing each Individualized Education Program for students with disabilities. It recommends the following six steps to effectively improving assistive technology services in schools for students with disabilities: (1) develop a shared vision of what those services should be by either using the set of Quality Indicators of Assistive Technology Services or the School District Profile of Assistive Technology Services to determine goals; (2) create a leadership team to direct the implementation of that vision; (3) develop necessary policies, procedures, and forms to guide district staff in the provision of assistive technology devices and services; (4) assure access to assistive technology for both trial and on going use; (5) provide training to all staff tailored to their needs; and (6) create a network of collegial support that will continue to increase knowledge and effectiveness in the future. (CR)
Six Steps to Improved Assistive Technology Services in Schools

Penny R. Reed, Ph.D.
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Many school districts are finding it challenging to fully comply with the assistive technology requirements of IDEA, especially the broadened requirement in IDEA '97 to "consider" the need for assistive technology in developing each IEP. One of the reasons that school districts are still challenged by a law that is basically ten years old, is that assistive technology has typically been treated as an isolated, specialized factor understood and implemented by only a few specifically trained individuals. The only way that school districts can effectively and efficiently comply with the assistive technology requirements of IDEA is to change their system so that the provision of assistive technology devices and services is fully integrated into the special education process of referral, evaluation, plan development, implementation, and review that already occurs for all children with disabilities (Bowser & Reed, 1995, 1998). But how do we get there from here?

We know from past experience, that an effort to improve services in schools must have a dual focus on both increasing the individual service provider's capabilities and expanding the school district's capacity to provide the service (Garmston and Wellman, 1995). Applying this premise to assistive technology services in schools means we must focus on both increasing the capabilities of the teachers and therapists to provide the services involved with assistive technology use and expanding the school district's capacity to provide those assistive technology services. We do this by looking at the "system" and how it functions in relation to assistive technology. Changes in district capacity will include such things as: developing policies that include assistive technology, providing directions about dealing with requests for assistive technology in the district handbook, developing forms to be used to request or provide assistive technology devices and services, and planning for the acquisition of needed assistive technology for both trials and ongoing use.

There are six steps to effectively improving assistive technology services in schools: (1) Develop a shared vision of what those services should be, (2) Create a leadership team to direct the implementation of that vision, (3) Develop necessary policies, procedures, and forms to guide district staff in the provision of assistive technology devices and services, (4) Assure access to assistive technology for both trial and ongoing use, (5) Provide training to all staff tailored to their needs, and (6) Create a network of collegial support that will continue to increase knowledge and effectiveness in the future.

Developing a Shared Vision
It is impossible to move toward a goal, unless we know what that goal is. A first step in any effective change effort is to describe what it should look like when we are done. There are two tools available that can help do this. One tool is the set of Quality Indicators of Assistive Technology Services being developed by a collaborative group of practitioners from across the country (Bowser, Korsten, Reed, & Zabala, 1999). The Quality Indicators are available at the web site, http://www.qiat.org.
Another tool to use in developing a vision is the School District Profile of Assistive Technology Services (Reed, 1997). The School Profile is a tool for self evaluation to determine how the district is performing when compared to an outside standard. The School District Profile is an innovation configuration matrix (Hall & Hord, 1987) that was designed to be used by administrators and service providers as a tool for reflection, discussion, and planning. It describes a number of specific activities that every district must do in the provision of assistive technology services and then offers five descriptive variations of that service ranging from "needs improvement" to "highly satisfactory." The service providers that complete the School District Profile should include teachers from all buildings, levels and disability services, speech/language pathologists, occupational therapists, physical therapists, and where appropriate, paraprofessionals. It is important to involve as many as possible, not just a select few. The percentage of staff who complete the self assessment will determine its effectiveness in representing the true picture of how assistive technology services are provided throughout the district. The discussion about the School District Profile should end with the staff deciding which areas are their highest priority for change.

Use of tools such as the Quality Indicators and the School Profile are also effective tools to "raise the level of concern" of some of the key people in the district. It is a fact of life that people do not change when they are feeling complacent. Unfortunately it is often an outside force such as a due process hearing that raises the level of concern about assistive technology services. But that is a painful and expensive way to draw attention to assistive technology needs. Not all school districts need to wait for such a stressful and expensive event to occur before beginning to make changes. Using a self assessment tool to identify strengths and weaknesses in the school district's current system of providing assistive technology services is a more effective way to raise the level of concern and open the door to effective change.

**Assistive Technology Leadership Team**

When it comes to change, there is nothing more powerful than a small group of committed people. The next step is to create that group of committed people. The Assistive Technology Planning Committee or Leadership Team or whatever you choose to call it, should involve individuals with power and opportunity to make changes, as well as concern about the quality and availability of the assistive technology services throughout the district. Individuals to consider inviting to serve on this committee include the Special Education Director, the Technology Coordinator, a teacher, a therapist, Supervisors of Special Services such as Vision or Hearing Services or Occupational and Physical Therapy. If your district has a department that does staff development, by all means include someone from that department. Other key people include at least one building principal. In larger districts, several principals, one from each section or area of the district, or one elementary and one secondary.

In deciding who to invite to serve on this committee, think about their interest in the overall goal, but also think about their connectedness to various groups within the school
Making change in complex organizations requires you to think globally, but act locally (Wheatley, 1994). Therefore you need to select people who represent and interact with different constituencies within the district.

The most effective size for this type of group is five to seven people. In a larger district you may need to go to nine or ten, but try not to let the group get too large or it will get too difficult to get things done.

The Assistive Technology Leadership Team will utilize the information from the School District Profile to target the things in the district that are most in need of improvement. They will work together to outline specific steps that will need to be undertaken, addressing both training needs of individuals and things that build district capacity.

**Policies, Procedures, and Forms**

One of the areas that frequently is identified as the most problematic is the area of policies and procedures for obtaining or providing assistive technology services. The first step is to review the existing policies and procedures in the district to determine where and how assistive technology is addressed. If there is a procedures manual of staff handbook, does it address assistive technology? Does it tell the staff member how to handle a request for assistive technology from a parent? Is there information about who is knowledgeable and how to contact them? Is there a referral process? Are there forms to be completed?

The whole issue of forms is another concern. The district should utilize forms to guide individual staff members through a process that has been agreed upon as the process which will be followed. So that someone new to the district could follow appropriate procedures by completing available forms. These forms need to address how to make a referral, how to conduct an evaluation, how to “consider” AT during the IEP, etc. Districts that do not have forms will find that most staff have no idea how to proceed when approached by a parent who feels that their child would benefit from assistive technology.

**Access to Assistive Technology**

Service providers need access to a variety of assistive technology for both trial use and ongoing use. They also need access to resources and information about assistive technology. Successful efforts to improve assistive technology services have demonstrated that access to print, disk and on-line resources as well as devices to try out is absolutely necessary for system change in assistive technology.

Service providers need access to both hardware and software to try out, learn to operate, and utilize for trials with students prior to purchase (McInerney, Osher, & Kane, 1997). Large school districts may be able to provide this for themselves, but smaller school districts will need to collaborate or seek assistance from an education service agency or
their state education agency. The Wisconsin Assistive Technology Initiative, the Oregon Technology Access Program, the Florida Assistive Technology Educational Network, and other successful state assistive technology projects operate assistive technology lending libraries that are open to all school districts in their states.

Because school districts are struggling with stricter budget limitations than ever before, efforts to make technology resources more available in other ways too are important. A Used Equipment Marketplace, which is a free classified ad, where anyone can advertise to sell, donate, give away or seek any assistive technology valued at more than $25 is an inexpensive, but effective tool. The items listed are then published each month in a newsletter or web site.

To make software more available, some projects like the Wisconsin Assistive Technology Initiative have put together bulk purchases of various software programs that are especially beneficial for students with disabilities. In Wisconsin these have included Co:Writer, a word prediction program, Write:OutLoud, a talking word processing program, Access to Math, a math software program, Picture It, a program that adds symbols above printed words, Inspiration, a concept mapping/outlining program, and WYNN (What You Need Now) a program to scan and read text. By working with the vendors and other school districts, it is possible to put together orders for 100 or more copies each software program, qualifying them for significantly lower prices. Again neighboring districts, education service agencies or state education agencies can work together to make these possible. This is especially helpful to small districts that only need small amounts of any one software title and never qualify individually for the lower prices accorded big purchases.

Another way to increase access to assistive technology is to survey all buildings (or districts if several districts are collaborating) to create a data base of assistive technology that is there. Both items that are in use and those that are not currently being used can be listed so that buildings or districts can borrow items from each other, visit a site to see a device being used, or call a service provider for information about how they like a particular device, how easy it is to use, how often it needs repair, etc.

Another aspect of increasing access to resources may be to make used computers available to schools and families for use with students with disabilities. Many districts, groups of districts, and states have formed partnerships with the National Cristina Foundation and other computer reutilization projects to obtain and deploy used computers with appropriate software to be used by students.

Provide Training
The training component of an effort to improve assistive technology services must offer a variety of training opportunities including overview and introductory workshops, specific workshops on assessing students' need for assistive technology, open labs and demos, workshops on specific devices, and workshops on implementation strategies. For the open labs and demos and the training on how to operate specific devices it is often possible to utilize local and national vendors as well as local school district staff. The
workshops on implementation strategies must be provided by staff who work regularly with assistive technology and can share from their actual experiences. Of particular value are ideas and materials that can help to organize and order information. In other words, tables, charts, and specific examples are extremely helpful. In general a variety of schedules utilizing in-service days, after school sessions, sequences of workshops, and continuing education credits or, when possible, graduate credit through a university are all part of an effective training plan.

Most important in making the training effective is to involve the building principal or other immediate supervisor in planning the training, selecting the trainees, and following up afterwards to encourage their implementation of new information. These and other "transfer of training" strategies (Broad & Newstrom, 1992) can be critical to increasing the implementation of new skills.

On-going technical assistance is another aspect of training that is important. It is the one-on-one help that can make a difference between a person giving up in frustration and moving forward. It needs to be available in person, over the telephone, and in writing via newsletter or already prepared materials sent out in response to a question. The first step in providing technical assistance is to create a highly visible source of information and help. People need to know where to seek assistance when they need it. While early adopters of assistive technology typically called vendors for technical assistance, later adopters of an innovation are not as likely to do so. In addition, many of their questions are about implementation and not all vendors can, or should, provide that type of help. Service providers within the school district need to know who to call for help and when and where they can connect with them. In addition to being available and accessible the person(s) providing technical assistance within the district or building can be proactive by providing problem solving forums both in person and on-line, open labs, and other designated times and places for people to come with their questions. The provision of technical assistance is an art as well as a skill. It requires the provider to be sensitive to what information and how much information the person seeking assistance can handle and moderating their information accordingly.

Collegial Support

The final aspect of improving assistive technology services is collegial support. Service providers and administrators need access to other professionals who are facing and meeting the same challenges. Collegial support comes from the opportunity to discuss with other professionals what he/she is attempting, what seems to be working, what doesn't seem to be working, and to reflect on why. It includes a resource to call when something isn't working, or when everything works perfectly and that success needs to be shared! In that way, it goes beyond technical assistance. In addition, it comes not from the "experts" in the district, but from the peers that have struggles to learn new information. Collegial support is what keeps us going when the going gets tough.
The interdependence that leads to collegial support has been promoted in Wisconsin, Oregon, and other states by setting up intra- and inter-agency working/planning groups, labs, and equipment fairs. It has also been facilitated by looking for existing networks such as reading teachers associations, branches of USAAC (United States Society for Augmentative and Alternative Communication), TAM (Technology and Media Division of the Council for Exceptional Children), etc. Any structure that connects service providers with common interests or similar situations can be utilized to promote collegial support and encourage people to "help" others.

In Wisconsin, the Wisconsin Assistive Technology Initiative's Leadership Institute was especially important in creating collegial support as it brought individuals together from across the state and encouraged them to plan how they could help others in their school district. 150 service providers from across the state were nominated for participation by someone else in their district or area who named them as being a "leader" in assistive technology. Letters were written to their district superintendents and special education directors, explaining the program and to the nominee inviting them to participate. The Leadership Institute participants meet twice a year. A nationally recognized speaker is often brought in to provide training. They regularly receive specific materials selected to assist them in helping others. At one training every two years, participants work in regional groups to develop regional plans for providing information and training to each other and their colleagues.

The cumulative effect when these components are put into action is truly amazing. They do, in fact, create systems change. They provide a foundation for an effective, efficient system of assistive technology services as well as a network of people who can support each other to be confident, resilient and effective service providers.

References


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