Breaking Down Barriers

K – 12 and Beyond

A Parents' Guide to Accessible Technology in Schools

AccessIT

ADA&IT TECHNICAL ASSISTANCE CENTERS

Hannah, who is blind, has a computer equipped with text-to-speech technology at school. She goes to the computer lab to do a Web assignment with her class. Her text-to-speech system reads aloud all of the text presented at the Web site. The Web site's designer, however, neglected to include text descriptions of the content presented within graphic images; therefore, this content is not accessible to her. Even with her impressive computer system, Hannah is stuck. Hannah sits on the sidelines, surrounded by the enthusiastic chatter of her classmates working together.

Too often, Hannah and other students with disabilities cannot access Web content or operate educational software because of its inaccessible design. They do not have full access to the standard curriculum and are in danger of failing to meet state learning standards and the goals of No Child Left Behind. Excluded from computer-based activities, these students do not receive the benefits technology delivers to their peers who do not have disabilities.

How can you assure that your son or daughter has access to technology-based learning opportunities at school? This publication presents strategies that can help you advocate for technology that is accessible to all students, including your child. It presents key terms and then puts them all together in a way that makes a simple, compelling case for the purchase, development, and use of accessible technology. If you would like to join the effort to promote the use of accessible technology in our schools, keep reading.

What do I need to know?

It is helpful to have a basic understanding of a few technical terms in order to effectively promote the use of accessible technology.

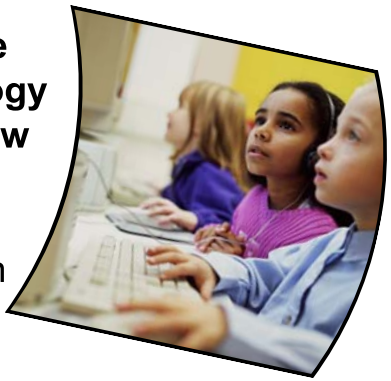
Assistive technology (AT), such as the text-to-speech system Hannah uses, can help a person with a disability to operate a computer. Grammar checkers, alternative keyboards, hands-free interfaces, and other assistive technology may be prescribed on your child's Individualized Education Plan or Section 504 Plan.

Information technology (IT) includes computers, software, Web sites, telephones, CDs, videotapes, calculators, and other electronic devices. Many IT products, like the Web site Hannah tried to access, are designed in such a way that they are inaccessible to people with disabilities, even to those who have AT.

Universal design refers to the design of products and environments so that they are usable by everyone, to the greatest extent possible. A teacher is applying universal design when he purchases an instructional videotape that includes captions for children who are deaf, even though he does not currently have a student who is deaf in his class. The manager

of a computer lab is applying universal design when he purchases adjustable tables in anticipation of students who are small or large in stature or who use wheelchairs.

Accessible information technology is created when producers consider the needs of people with disabilities in the process of designing information technology. More accessible products minimize the need for AT; they are also compatible with existing AT products. If Hannah's teacher assigned the use of an accessible Web site to her students, it would have, among other features, included alternative text for graphics images so that Hannah's text-to-speech system could read the content to her.



AT and accessible information technology work together to allow everyone to access all product features. Accessible information technology and AT allow students with disabilities to participate side-by-side with their classmates as they complete assignments, access information, and engage in collaborations, simulations, and tutorials.

Why is it important that information technology be accessible?

The use of information technology is widespread in schools and employment settings. It has the potential to maximize the independence, participation, and productivity of students with disabilities–including your child. However, this potential can only be reached if all students can use the IT independently and effectively. This requires that students be provided with the **assistive technology** they need AND that teachers and lab managers procure, develop, and use **accessible information technology**.

What should we ask for?

So how do we put all of this together into words that we can use for advocacy in our schools? Here's one way to say it:

> ***We want our schools to purchase and use accessible information technology and apply universal design principles in the creation of its facilities and programs. There should also be an efficient system in place to address the assistive technology needs of specific students with disabilities as they are needed.***

Promoting universal design is a powerful way to get your message across. Just like ramps installed for people who use wheelchairs also benefit those who are pushing delivery carts or baby strollers, accessible information technology benefits individuals with and without disabilities. For example, captioning on videotapes can benefit students whose first language is not English and individuals who are learning to read.

What can I do?

Considering universal design of computing tools and environments requires that educators consider the wide range of abilities and disabilities of all present and future students, including those of your child. Encourage school personnel to think proactively by designing and purchasing accessible products and creating facilities in anticipation of students with a wide variety of characteristics. Teachers should anticipate that students will come with a wide range of abilities and disabilities.

Often school decision-makers consider access issues only once a specific student with a disability, such as your child, enrolls. The student may be treated as an exception and teachers and other school personnel may try to make him/her fit into an environment equipped with inaccessible information technology. Advocating for universal design of educational environments, technology, and instruction, builds in the flexibility to make curriculum and activities more accessible to everyone, including your child.

Consider taking the following steps, perhaps in collaboration with other parents.

- Educate yourself on how technology is used in your child's classroom and school. What software is used? What Web sites are used? What types of assignments are given?
- Determine what barriers your child is facing or is expected to face in technology-enhanced instructional activities. Are computers, software, Web sites and other technology accessible to him/her?
- Alert your child's teacher or computer lab manager of accessibility barriers you

identify. If your child has an IEP, bring up these issues in IEP meetings.

- Advocate for improved accessibility to technology and computing environments in your school and district by suggesting a proactive approach to teachers, technology support staff, and administrators. For example, suggest that the school's computer lab have a few adjustable tables, offer trackballs as well as mice, place handouts where they can be reached from a seated position, and assure that Web sites used are accessible to those using assistive technology.

In the case involving Hannah, her parents could communicate with her teacher and the computer lab manager about the importance of using accessible products. They could request that vendors of current products include accessibility features in next versions and that webmasters redesign their Web sites to be accessible to individuals using text-to-speech systems.

Building accessible information systems in our schools requires the concerted effort of policy makers, information technology

specialists, assistive technology specialists, teachers, and other decision-makers. A good place to start is with district-wide policy that clearly states a commitment to the purchase and use of accessible products, including information technology. From this, clear guidelines regarding accessible information technology can be established. Procedures should ensure that accessibility is considered in all stages of technology planning and support. Creating accessible information systems requires a close collaboration between those who serve students with disabilities and those who make information technology decisions, approve purchases, and provide technical support. As with all systemic change initiatives, persistence of advocates and cooperation among stakeholders are key.

But, doesn't this mean more work for me?

Yes, but, not a lot more. You might just need to change your approach a bit. The work put into this effort initially may lead to less work in the long run, yet a more accessible education for your child. The ultimate reward is a more accessible school and a more accessible world for everyone. These benefits outweigh the effort.

What resources are there?

Parents, school administrators, teachers and computer lab support staff can seek more information about the design, procurement, and use of accessible technology from the following resources:

- ADA and IT Technical Assistance Centers in your region:
  www.adata.org/dbtac.html
  (800) 949-4231 (V/TTY)
- AccessIT, the National Center on Access to Information Technology in Education:
  www.washington.edu/accessit
  (866) 968-2223 (V) (866) 866-0162 (TTY)
- DO-IT (Disabilities, Opportunities, Internetworking and Technology):
  www.washington.edu/doit/
  (888) 972-3648 (V/TTY)
- Family Center on Technology and Disability:
  www.fctd.info/
  (202) 884-8068 (V/TTY)
- PACER (Parent Advocacy Coalition for Educational Rights):
  www.pacer.org
  (952) 838-9000 (V) (952) 838-0190 (TTY)

For additional information contact k12@mtc-inc.com