ITEST
Learning Resource Center
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In This Issue

In order to provide information that supports and inspires ITEST projects' efforts with regard to accessibility, the ITEST LRC interviewed **Mary Lester, Executive Director of the Alliance for Technology Access (ATA)** and an LRC partner.

The ATA is a network of community technology centers (CTCs) focused on people with disabilities; they work with assistive technology and accessible technology. In addition, a growing number of CTCs have become members of ATA in order to increase their accessibility and capacity to serve people with disabilities. Vendors who develop assistive technology and accessible mainstream technology also belong. The ATA has been in existence since 1987. Its mission is to increase the use of technology by children and adults with disabilities and functional limitations.

About ITEST

The Information Technology Experiences for Students and Teachers (ITEST) program was established by the National Science Foundation in direct response to the concern about shortages of IT workers in the United States. The ITEST program funds projects that provide opportunities for both school-age children and teachers to build the skills and knowledge needed to advance their study and to enable them to function and contribute in a technologically rich society. The ITEST National Learning Resource Center at EDC supports, synthesizes, and disseminates the program's learnings to a wide audience.

Accessibility

Creating Inclusive Learning Environments

The following documents a conversation with Mary Lester, highlighting tips and additional resources for ITEST program staff and participants.

Q: What do people need to be thinking about when they're creating an inclusive program? What does it mean?

Mary Lester, Executive Director of the Alliance for Technology Access (ATA)

An inclusive program is one that welcomes and accommodates everybody. People needing accommodations might have an identified disability or a diagnosed learning challenge—or just a very different way of doing things… Access is a continuum. There is no such thing as an accessibility seal of approval that you get if you make a specified list of improvements to your facility and program. It's a way of thinking, an attitude—an approach to decision making that uses accessibility and inclusion as a filter. For example, in deciding whether to buy a new piece of software, ask the question: Can everybody use this tool? Can someone who needs large print use this tool? Can someone who's only a one-handed typist use this tool? It's really about looking at all of your decisions with accessibility and usability as key filters.

Q: Who is included in the disability community?

59 million or 1 in 5 Americans has a disability. The range is broad, and takes in everything from cognitive disabilities to physical and sensory disabilities (i.e., hearing, vision).

We've spent a lot of time working to put a face on disability that people can recognize every day in their own communities. Diabetes (associated with vision impairment, mobility problems) is something that people can easily relate to, as is arthritis. Learning disabilities are also very common. An estimated 15 percent

of the U.S. population has a learning disability (often undiagnosed). Moreover, the rate soars to 60 to 80 percent of adults who read below the 7th grade level (again, primarily undiagnosed).

Don't assume that because you can't see a disability that a person doesn't have one or that you're not already serving people with disabilities. With regard to the question about whether to ask people if they have a disability—typically we never ask for a diagnosis, instead asking for what people are hoping to accomplish in their lives and how the tools might help them do that. The important thing is to work with an individual to figure out together how the tools and the program can best accommodate their learning styles and access needs.

Q: How does disability relate to people's perceptions of diversity?

For starters, people don't include disability typically when they're talking or thinking about diversity. Over and over again, you'll see documents and training programs that list all of the groups they're addressing, and disability won't be there.

There's an assumption that the disability movement, or community, is largely white and middle class. It's a really bizarre notion, but understandable. People in under-served communities with disabilities are the least connected to services and disability support organizations. They don't get their information from these organizations; they get their information from the mass media. And for the most part the mass media and the advertising world shy away—they don't see us as a viable market… The reality is people with disabilities typically have greater need for goods and services, and so it's extraordinary that the market hasn't picked up on this and the disability community remains to a great degree "hidden."

> *"In an inclusive environment, everyone ends up winning because we're all challenged to be better."*
>
> *— Mary Lester*

There are a lot of cultural issues that come into play that can create barriers to service and also to the adoption of technology. In fact, in every case, people with disabilities will tell you that attitudes are the biggest barriers… and lack of knowledge of the laws that prohibit discrimination against people with disabilities.

Q: What are the benefits to establishing an inclusive program, an inclusive environment?

An inclusive environment offers an incredible learning experience. Everyone benefits—in expected and unexpected ways. A whole lot of people can benefit from the tools and strategies we're promoting. Kids are far more open to diversity than they're given credit for. If an environment is created where everyone is welcome and feels comfortable, and everyone can see that there are tools, strategies, and different ways to do things, then they are all more supported. Inclusive classrooms are great incubators for all kinds of innovative ideas and approaches, and the introduction of new strategies and tools. I think having to figure something out, just the problem-solving of it—kids really get into that; they get very creative and imaginative. They start figuring out how a fellow student can participate or do things more easily… The more you introduce people to new ideas and differences, the more you empower them to think beyond the standard configurations and the standard ways of thinking.

Q: The whole idea behind ITEST is to reinvent learning, creating more opportunities for young people who aren't entering STEM careers. What should ITEST projects be doing to think about how to change learning environments?

I think outreach is the key. One of the things that has to happen is expectations have to be raised—on everybody's part. Expectations for students with disabilities across the board are extremely low. A lot of it is about being open and experimental, doing the outreach and saying, we don't know exactly how this will work, but we'd like to try to make it work. One thing that's so interesting about the whole progression of technology and its use in classrooms, is that in the beginning a lot of the computers taken into classrooms were brought in by students with disabilities—because they had IEPs (individual education programs) and they had to have the technology in order to participate at all. And the whole classroom benefited from having the computer there. Other kids were able to work with the student with disabilities, and a lot of cooperative learning strategies were used. One of the benefits of having stu-

dents with disabilities bring new technology into class is it gets everybody excited about the possibilities and the tools, and thinking beyond what they're used to thinking about.

TIPS... Where do I start?

Program Design:

- Consider the intended use and who you want to serve when deciding on technology tools and other program resources.
- Configure space with ample room around the computers and in the aisles (i.e., for users with guide dogs, for more than one user per computer, for someone using a wheelchair, etc.).
- Invite a guest speaker who has a disability, visible or not, to visit the program.

Technology:

- Check your website for access—incorporate accessibility as part of the design process. The Web Accessibility Initiative of the W3C has guidelines and resources on their web site that can help evaluate sites and fix problems. Using these online tools, evaluate the accessibility of other websites, both good and bad.
- Learn about and explore with participants the operating systems and access features built into Windows, Mac OS, and other software.
- Look for software programs that allow greatest customization. An example is being able to adjust or disable the timing feature in programs that limit the time a student has to complete a task.
- Overall, know the range of options that exist to help someone who has trouble reading, writing, decoding what's on the screen, or using a standard mouse or keyboard. Find resources in your community where you can try out different options and learn how to use them.

Recruitment:

- Build relationships with school teachers and administrators, including resource room staff.
- Link up with parent centers, which serve families of children and youth with disabilities (www.taalliance.org/Centers).
- Network with independent living centers, some of which work with youth and also could serve as contact points for other disability organizations in the community (www.ilusa.com/links/ilcenters.htm).
- Connect with local ATA centers or member organizations to reach people with disabilities.

Resources

- *Alliance for Technology Access*
  "Guide to Low Cost / No Cost online tools for People with Disabilities"
  "Computer Resources for People with Disabilities"
  "Access Aware: Extending Your Reach to People with Disabilities"
  www.ataccess.org
- *CAST* – Universal Design for Learning
  www.cast.org
- *Forrester Research, Inc.* Accessible Technology reports commissioned by Microsoft
  www.microsoft.com/enable/research/default.aspx
- *Freedom Machines* (film)
  www.freedommachines.com
- *Microsoft Accessibility Resource Centers (MARC)*, and *free Microsoft Accessibility Resource CD Sets*
  www.microsoft.com/enable/centers/default.aspx
- *ScienceQuest* "An inclusive informal science education program"
  www2.edc.org/sciencequest/announcements/TOC.htm
- *Web Accessibility Initiative*
  www.w3.org/WAI
- *WestEd Regional Technology Education Consortium*
  Technology Tips for Differentiated Instruction
  www.westedrtec.org/techtips

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