Special-Needs Gaps

BY LISA FINE

When the topic of the digital divide arises, R. Craig Wood often asks school administrators and teachers to picture what it would be like to surf the Internet with their monitors turned off or without using a computer mouse.

Wood, a Charlottesville, Va., lawyer who has advised national groups about the role of technology in teaching children with disabilities, says many schools that have Web sites have failed to make them accessible to such students. Students with visual impairments and conditions that restrict physical movement face some of the biggest challenges. Schools whose Web sites don't accommodate children with disabilities are opening themselves up to potential lawsuits for violating the Americans with Disabilities Act, warns Wood.

The lawyer echoes what special education administrators and advocates say: Many people think of the digital divide as being between those who have access to technology and those who don't. But for the 5 million U.S. students receiving special education services, simply having access to technology doesn't guarantee they will be able to use it.

Bill East, the executive director of the National Association of State Directors of Special Education, says school administrators have to be more rigorous in evaluating how technology is used for students with disabilities.

"The problems of the haves and the have-nots are just magnified when we talk about disability," East says. "Technology can be a great equalizer, but when the playing field is not leveled, students with disabilities will have even greater problems."

East says states must work hard to close that gap. When education officials deal with technology grants and programs, he says, they must always consider the needs of such students.

"They should not be an afterthought," he says.

Barriers to Access

People with disabilities have encountered a number of barriers in technology, such as inaccessible Web sites and software that is incompatible with adaptive devices employed by the disabled to use computers and other technologies, according to a 1999 report by the U.S. Department of Commerce, "Understanding the Digital Economy."

As a consequence, schools should be especially sensitive to what levels of accessibility exist inside individual classrooms and whether that access is being used wisely, advocates for students with disabilities say.

At the least, East says, teacher training should offer guidance in how technologies can be used by students with disabilities to enhance their learning.

Some school districts are already making use of technology to help equalize the educational opportunities for students with disabilities.

For instance, in some places, word processors with "word prediction" software—in which programs complete unfinished words or check the spelling of words as they're being typed—are helping children who have disabilities that affect language and writing in doing such tasks as taking notes.

For students who have problems with upper-body coordination or cannot use their arms, computers can be outfitted with a foot pedal that acts like a computer mouse.

And, for visually impaired children, screen magnifiers used in some places help youngsters see images and text more easily.

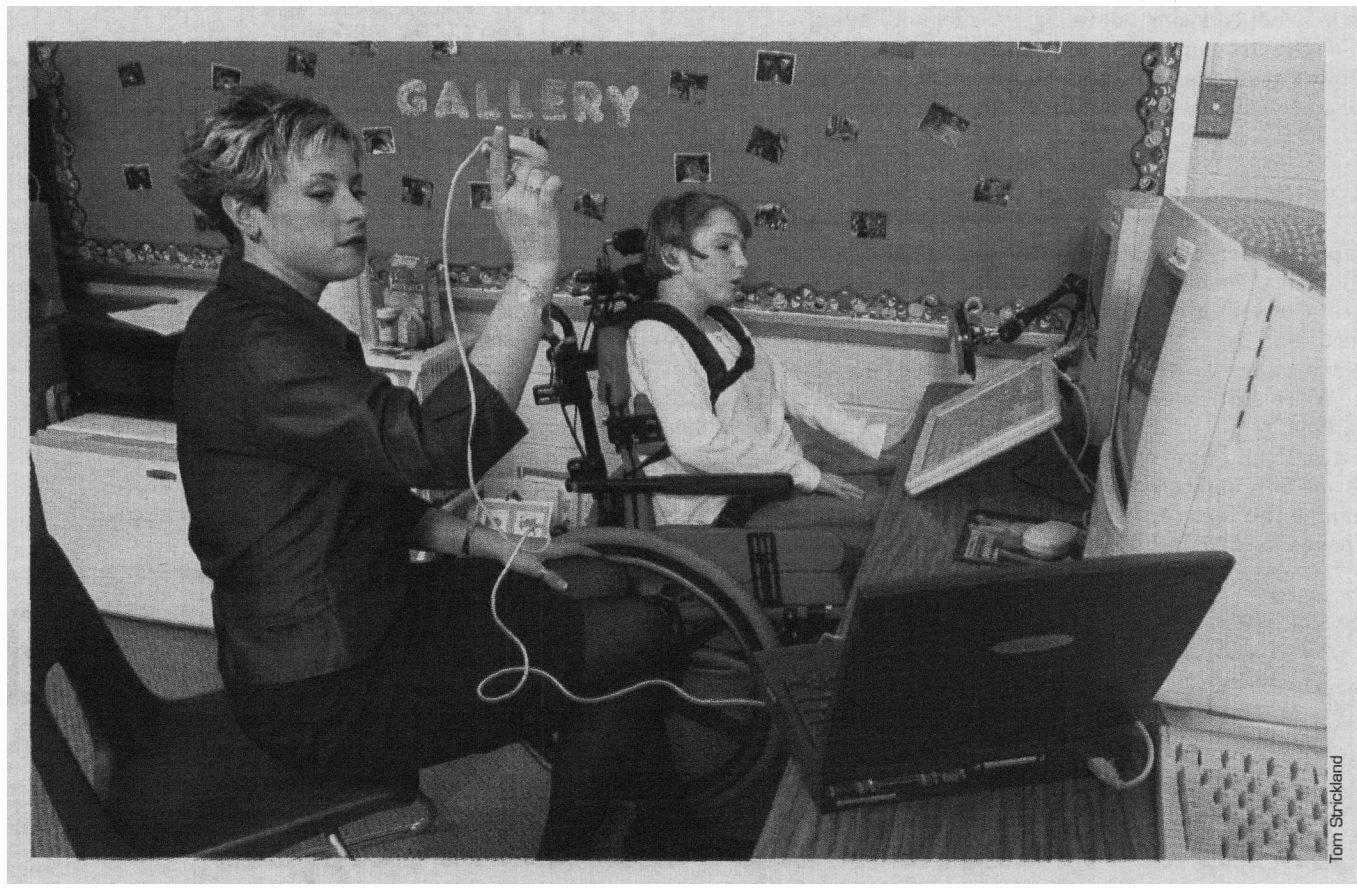
In addition to those devices, speech synthesizers that translate complicated chemical and mathematical equations are available for blind students; and computers that translate Braille into English make it easier for general education teachers to grade the work of a blind student.

Electronic Portfolios

Indiana has used technology to design an alternative assessment for students with disabilities that allows them to better express their abilities.

In partnership with Purdue University, the state department of education devised electronic "portfolios" for such students. As part of the program, laptop computers are loaded with special assessment software to collect and document a student's work and performance. A video camera records the student's activities and answers; in turn, those recordings are downloaded into his or her portfolio.

The equipment allows teachers to record student performance whenever they need to over the course of the school year.



Tom Strickland

At Westlane Middle School in Indianapolis, teacher Annemarie Cramer videotapes Holly Mantsch for the youngster's digital portfolio, a computerized record of what she has learned. Indiana recently started using electronic portfolios to assess the academic skills of special-needs students. Bill East, the executive director of the National Association of State Directors of Special Education, says "the problems of the haves and the have-nots are just magnified when we talk about disability."

"We view the electronic portfolio as one more tool to better assess what students with disabilities have learned and are able to do," says Suellen Reed, Indiana's superintendent of public instruction. "What we have seen is that the potential achievement of special education students has been underestimated."

The software is programmed to assess more than 1,000 skills, including those in mathematics, science, and language. The state developed the assessment software, but each district is responsible for buying the appropriate hardware.

In addition, on its standardized tests, Indiana allows the use of word processors and electronic calculators for some students with disabilities who ask for those accommodations.

Brenda Welburn, the director of the National Association of State Boards of Education, says states should try more creative approaches, such as Indiana's, to assess the achievement of students with disabilities.

"Given the national effort to make our schools more accountable, and the critical importance of leaving no child behind as we move forward, it is imperative that we seek innovative and alternative means of assessing students with disabilities," Welburn says. "We want to shine a light on the creative approach being used by Indiana with the hope that other states will consider equally innovative approaches and partnerships."

Michael Huffman, the special assistant for technology for the Indiana Department of Education, says the state's K-12 schools have universal Internet access, but the state wants to gather better information to evaluate what level of access schools are offering students with disabilities. Next year, an annual survey that tracks technology use in schools will include for the first time a specific category on access for those students.

"We will be able to have a better idea of the situation for our students with disabilities when the survey is done," Huffman says. "We have made great strides. But we still have a long way to go."

Technology and Testing

As more states require students to pass state tests to graduate or be promoted to the next grade, technology could help level the playing field in measuring the performance of students with disabilities.

For example, a recent settlement of a lawsuit in Oregon requires that students with learning disabilities be allowed to use spell-check software, dictation machines, and other forms of help deemed appropriate on a case-by-case basis to take statewide tests.

The settlement, reached Feb. 1, stems from a 1999 lawsuit filed against the state board of education by a group of parents who claimed that the standardized tests violated the Americans with Disabilities Act. When designing the assessment system, first used in the 1998-99 school year, the board did not take into account the needs of Oregon students with dyslexia, attention deficit disorder, and other learning disabilities, according to the suit.

In the complaint, the parents of five children argued that it was unfair that their children had been accommodated in classroom work, but were not allowed the same assistance on state exams, which are given in grades 3, 5, 8, and 10. Students who fail the tests can be held back a grade and be forced to go to summer school.

"Our hope is that [the case] will have a huge impact on high-stakes testing," says Alison Aubry, a lawyer with Disability Rights Advocates, a public-interest law center in Oakland, Calif., that represented the parents in the Oregon case. "Because of this settlement, Oregon will be setting up a model system that other states will pay attention to.

"A lot of states are trying to figure out how students with disabilities fit into high-stakes testing." ■