

The AT Messenger

...bringing technology to you

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DATI Adds New Dimension to Technology-Related Assistance in Delaware

A recent addition to the Tech Act was the mandate for state AT projects and the state Protection and Advocacy (P&A) organizations to work together to improve consumers' access to assistive technology devices and services. Thus, DATI has awarded a contract to Community Legal Aid Society, Inc. (CLASI) to provide a wide range of supports to individuals who have encountered barriers as they attempt to secure the devices and services that they need.

This collaboration has a dual focus. First, CLASI will examine whether various statewide systems—such as special education, vocational rehabilitation, and Medicaid—are complying with federal and state mandates relative to AT access. If individuals are having difficulty accessing needed devices and services as a result of failure of these systems to meet their obligations, CLASI may be able to provide assistance to rectify the problem. The other aspect of the collaboration will enhance the existing case management capabilities available through the DATI. CLASI paralegal staff will provide follow-up support to individuals who have contacted the DATI for assistance. If individuals are encountering difficulties in getting the devices or services that they need, CLASI staff will assist by providing additional information or referrals, arranging for equipment demonstration and loan, and by helping consumers identify potential funders and develop appropriate approaches to these funders.

We have taken this two-pronged approach to

advocacy and systems change because our experience has taught us that by meeting individual needs through vigorous case management, we can accomplish system-wide change as well. The National Institute on Disability and Rehabilitation Research/U.S. Department of Education liked this approach so much that it awarded the DATI a supplemental grant to support the model. The supplemental grant is only for one year, and supports paralegals and attorneys who will work at the Assistive Technology Resource Centers to manage cases and identify issues requiring more concentrated legal advocacy.

For more information, contact Beth Mineo at the DATI Central Site at:

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Talk to Your Computer

A look at affordable voice access to Macintosh and IBM computers.

Ed Salisbury, DATI Kent County Assistive Technology Resource Center

What is voice access?

There are two basic types of voice access systems available: navigation and dictation. A navigation system allows one to perform basic operations of the computer using his or her voice. Any command that is to be recognized must first be trained into the computer. Dictation systems, on the other hand, provide the user with navigation capabilities as well as the ability to speak new words. The computer builds voice files and learns the person's patterns. Whenever a new word is spoken, it is compared to the person's voice file and a dictionary file. The user is then presented with a list of words that are the closest match to the word spoken. The user then chooses from that list. After minimal training, the person should be dictating at around twenty words per minute. Most are able to dictate up to 60 words per minute after some practice.

What systems are available for IBM-compatible computers?

IBM and compatible computer users have somewhat more choices available in voice recognition products. Dragon Systems, the originator of voice recognition technology for IBM and compatibles, produces three full dictation systems:

- DragonDictate Starter Edition with 5,000 word vocabulary and 110,000 word backup dictionary,
- DragonDictate Classic Edition with 30,000 word vocabulary and 110,000 word backup dictionary, and
- DragonDictate Power Edition with 60,000 word vocabulary and 110,000 word backup dictionary.

The prices for these are \$695, \$995, and \$1995 and require a 486 computer with 8, 12, and 16 megabytes of RAM, respectively. Windows ver-

sions are also available at the same cost. IBM also markets the three DragonDictate editions under the IBM VoiceType name. Price and specifications are the same for the DragonDictate and VoiceType products. Kurzweil AI, a division of Xerox, also produces a dictation system called Kurzweil Voice. This product operates in Windows and costs around \$995. Kurzweil Voice has a 60,000 word vocabulary and includes a fax/modem on its sound card. A 486DX with 16 megabytes of *dedicated* RAM is required.

What systems are available for the Macintosh?

Surprisingly, voice access has become very affordable. Apple Computer actually includes Plain Talk, a voice navigation program, with their AV line of Macintoshes. For those Macintosh users who do not have an AV Model, Articulate Systems produces the Voice Navigator which sells for around \$350 and works with virtually all Macs. If full dictation is necessary, Articulate Systems produces the Power Secretary which sells for around \$2500. This system requires an AV Macintosh or an 040 series Macintosh with a 16 bit sound card. The Power Secretary has a 30,000 word vocabulary with 120,000 word backup dictionary.

Voice recognition technology is not only commonplace; it is affordable. It can allow even those with the most severe physical impairments access to computers with a speed and efficiency rivaled only by experienced touch typists and Morse Code input. For more information about this exciting technology, contact your local ATRC.

Managing Problem Behaviors in Dementia by Enhancing Memory and Communication Skills

Memory loss is one of the most pervasive and debilitating symptoms of dementia, including Alzheimer's disease. It can be exhibited in a variety of ways, such as losing things around the house; failing to recognize places visited or getting lost on a walk; rambling, irrelevant conversations, forgetting or confusing recent past events, a story, or detailed instructions; and repeating the same questions. Michelle Bourgeois, Ph.D., at the University of Pittsburgh, has developed and evaluated a variety of strategies designed to help individuals with dementia to function better in their daily lives. She has found that by providing memory aids and a prosthetic environment in which stimuli and consequent events are carefully planned to evoke and reinforce appropriate functional behavior, patients with dementia have increased desired and decreased undesirable behaviors.

Dr. Bourgeois has investigated a variety of memory aids, including memory wallets, memory books, memo boards, and cue cards. Because these aids are usually portable and personalized, they help the person remember better, just as other prosthetic devices such as glasses, hearing aids, canes, and dentures help people to see, hear, walk, and eat better. She has received funding from the Alzheimer's Association in Chicago and the National Institute on Aging to evaluate the effects of these types of memory aids on conversational and other memory-related behaviors of patients with dementia and their caregivers.

Dr. Bourgeois at a DATI-sponsored workshop on February 2, 1995. This session, to be held from 9:00-noon at Westminster Presbyterian Church on Pennsylvania Ave. in Wilmington, is being offered free of charge to caregivers and service providers concerned about the impact of memory loss in the daily lives of people with Alzheimer's disease and other dementias. Based on results of studies conducted in patients' homes, adult day care centers, and nursing homes, Dr. Bourgeois will present memory aid strategies that have proven to improve stimulation, orientation, and conversational content and to decrease sundowning behaviors, anxiety, and repetitive questions. Other general behavior management principles and strategies that focus on the verbal and non-verbal communication skills of family and staff will be discussed. The audience is encouraged to suggest for discussion problem behaviors that have been particularly resistant to their remediation efforts.

If you plan to attend the workshop on February 2, please complete the registration form below and return it to the **DATI, A.I. duPont Institute, P.O. Box 269, Wilmington, DE 19899** by January 25, 1995.

Delawareans will have a chance to learn from

Registration Form—Memory Aids for Dementia

Name _____ Affiliation _____

Address _____

Daytime Phone (_____) _____ FAX: (_____) _____

Please circle any of the following **accessibility accommodations** that you may need:

- | | | |
|--|--|---|
| <input type="checkbox"/> brailled materials | <input type="checkbox"/> assistive listening devices | <input type="checkbox"/> sign language interpreter (ASL or tactile) |
| <input type="checkbox"/> large print materials | <input type="checkbox"/> audiotaped material | <input type="checkbox"/> accessible transportation |
| <input type="checkbox"/> other (specify) _____ | | |



Wanted: Your "Consumer Reports" on AT Devices

The Nebraska Center for Language, Cognition and Instruction and the Nebraska Assistive Technology Project are working together to establish a database of consumer evaluations of assistive technology. The database will be available through Internet, on disk, or in print media to help consumers and others make informed decisions when selecting AT devices.

The AT Consumer Evaluation Database will be a user-friendly, easily accessible resource providing information about consumer satisfaction with individual pieces of software and hardware. The database will provide ratings about effectiveness, versatility, support and training needs, and ease of operation, and will be updated on a quarterly basis.

The DATI has agreed to coordinate the information collection process in Delaware. Enclosed in this newsletter you will find a copy of the questionnaire being used to complete the database in Nebraska. Please complete the survey or pass it on to someone who can and mail or fax it back to the DATI Central Site Office at:

DATI
Applied Science & Engineering Labs

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P.O. Box 269
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FAX: (302)651-6793

As an extra incentive, anyone returning an evaluation form to us before January 20, 1995 will receive a coupon redeemable for a free copy of one publication from the DATI Publications List, including the *Guide to Funding Resources in Delaware* and the *Assistive Technology Resource Directory*.

Send your responses today and take advantage of this free gift offer!

ASEL Has World Wide Web Server

The Applied Science & Engineering Laboratories, the administrative home of the DATI, now has capabilities as a server on the World Wide Web, a rapidly-developing national resource on the Information Superhighway. If you have Internet access and Mosaic or another similar software program, you can find out about the latest in assistive technology and disability-related news and events at the following URL address:

<http://www.asel.udel.edu/>

Watch for more WWW info in later issues!

Devices Available	wheelchair lift. Side door access Budco lift, tiedown for 3-wheeled power scooter. 80,310 miles. Asking \$1700. (Item 3-1-003)	or best offer. (Item 3-1-005)
Free! Portable commode with side rails. Used for toileting when traditional access is not feasible. 1 year old. (Item 3-1-001)	Free! Leg braces (2), both for left leg. Suitable for someone recovering from stroke. Need minor repair. (Item 3-1-004)	Devices Wanted
For sale: IBM-compatible 386 DX 25 computer system with dot matrix printer. 5-7 years old. Instruction materials included. Asking \$900. (Item 3-1-002)	For sale: Power 900 Invacare electric wheelchair. Adult-size, heavy duty, with battery charger. Less than 2 years old. Works fine. \$1500	Needed: Child's potty chair for toilet training.
For sale: 1981 Chevy Van with		Needed: Low-cost or free power wheelchair to assist elderly person.

Call DATI Central Site at (302)651-6790 for further information or to place your free ad!

FINANCING ASSISTIVE TECHNOLOGY

The ADA: The Road Less Traveled to AT Funding

Ron Sibert, Funding Specialist, DATI

Very often, identifying funding sources for assistive technology involves staying on top of public policy developments and understanding one's rights or entitlements under various laws. Certain laws, while they do not necessarily provide funds or pay for devices directly, still represent very effective means of obtaining or accessing AT. One such law, the Americans with Disabilities Act (ADA) of 1990 is crucial in terms of access to assistive technology. Here's the story.

The ADA is a nondiscrimination statute, or "An Act: to establish a clear and comprehensive prohibition of discrimination on the basis of disability."¹ This is landmark legislation for people with disabilities because it calls for them to have equal access to employment, education, and other important life activities. The law requires businesses, agencies, and service providers with 15 or more employees (except private tax-exempt clubs and religious organizations) to make their services and employment opportunities accessible to people with disabilities. They are supposed to do this by providing what the law terms "reasonable accommodations." Such accommodations might include job restructuring, training material or policies, provision of qualified readers or interpreters, or -- my own personal favorite -- acquisition or modification of equipment or devices. However, the organization must provide such accommodations only to the extent that it will not cause an undue hardship. The term "undue hardship" means "an action requiring significant difficulty or expense" when considered in light of the nature and cost of the accommodation, the overall financial resources of the facility or entity, and the type of operation.

Now recall that many disability accommodations are achieved through the use of assistive technology devices and services. So the right to equal access and reasonable accommodation sometimes translates into the right to assistive technology.

Section 1 of the ADA contains five titles, four of which describe areas in which reasonable accommodations should be considered. They are:

- Title I: Employment
- Title II: State and Local Government Services
- Title III: Public Accommodations and Services Operated by Private Entities (applies to commercial facilities such as hotels, bars, restaurants, movie theaters, supermarkets, laundromats, museums, libraries, parks, etc.)
- Title IV: Telecommunications (includes relay services for people who are hearing or speech-impaired, and closed captioning for public service announcements).

Think of it! Assistive technology may be a component of accommodations in any one or all of the above situations. For example, a public school student with disabilities who does not qualify for special education services is still entitled to reasonable accommodations under the ADA (as well as section 504 of the Rehab Act). Examples might include modified input devices for computers, or closed captioning, print enlargers, etc. Employers are required to provide similar accommodations to their employees with disabilities and, to some extent, to candidates for employment. The list of possibilities is quite extensive.

Another important outcome of the ADA has been its impact now and in the future on other

1. P.L. 101-336, 104STAT. 327

areas of policy development. The nondiscriminatory requirements of the ADA have helped shape other disability-related legislation. For example, the 1992 amendments to the Rehabilitation Act include various provisions designed to promote access to employment, vocational rehabilitation services, and assistive technology. The recent activity in Congress related to telecommunications and accessibility of the information superhighway is yet another case in point. Goals 2000 legislation, which focuses on educational improvement through the use of various state-of-the-art approaches which include technology, has spawned a flurry of activity right here in Delaware. A Goals 2000 Technology Committee was established in November under the leadership of Governor Carper and Dr. Pascal “Pat” Forgione, the State Superintendent of Public Instruction. The Committee is chaired by Nancy Doorey, a member of the Delaware State Board of Education, and is composed of several representatives from each school district, the Department of Public Instruction (DPI), and the University of Delaware. I am a committee member representing DPI’s Exceptional Children’s Team as well as the DATI. The Committee is charged with developing plans for effectively incorporating telecommunications and educational technology into Delaware’s public education system. My function is to assure that accommodations for students with disabilities are considered in the planning process.

These are all very encouraging developments, but the disability community must remain ever watchful if the spirit of the law is to be realized fully. If we have learned anything from history, it is that change—no matter how positive—rarely happens without resistance. Along with the recent election-related changes in Washington, we are beginning to experience what some are calling “the ADA backlash.” According to the November 25, 1994 issue of the *Disability Compliance Bulletin*, the new House Speaker-designate, Newt Gingrich, favors only local (i.e., state) enforcement of the ADA. He calls federal enforcement

“another example of the ‘Washington bureaucracy’ intruding into the lives and livelihoods of American citizens.” On the other hand, Rick Douglas, executive director of the President’s Committee on Employment of People with Disabilities, notes that Section 504 of the Rehabilitation Act of 1973 was never fully realized because states failed to enforce it adequately, heightening the need for a law such as the ADA. He added, “one of the primary reasons the ADA was passed was because of the failure of [Section 504].”¹

Remember, though, that the ADA came to be because a number of people with disabilities contacted their legislators and spoke up. Their efforts brought fundamental changes to federal law. True—the outcomes have not been perfect, but the presidential signing of the ADA was a significant accomplishment. Yes, there is much yet to be done, but despite the latest swing to a less accommodating congress, these are still exciting times for people with disabilities; a time to explore and master the wonderful possibilities that using technology brings. However, keeping abreast of public policy developments will probably be more crucial now than ever before.

1. *Disability Compliance Bulletin*, Vol. 5, Issue 14, November 25, 1994, p.1,8.

Be sure that you don't miss a single issue of the *AT Messenger*. If you're not on the project's mailing list already, clip this form and send it in today!

DATI Mailing List Application

Name _____ Title _____

Affiliation _____

Address _____

Phone: Business _____ FAX _____ Home _____

<p>I am a:</p> <p><input type="checkbox"/> Person with a disability (please specify): _____</p> <p>_____</p> <p><input type="checkbox"/> Family member of a person with a disability</p> <p><input type="checkbox"/> Friend/advocate/colleague of someone with a disability</p> <p><input type="checkbox"/> Professional working with people who have disabilities (please specify) _____</p> <p><input type="checkbox"/> Interested citizen</p> <p><input type="checkbox"/> Other (please specify) _____</p> <p>_____</p>	<p>Accessibility Needs:</p> <p><input type="checkbox"/> Braille</p> <p><input type="checkbox"/> Large print</p> <p><input type="checkbox"/> 15/16 Audiotape</p> <p><input type="checkbox"/> 1-7/8 Audiotape</p> <p><input type="checkbox"/> ASL Interpreter</p> <p><input type="checkbox"/> Tactile Interpreter</p> <p><input type="checkbox"/> Transportation</p> <p><input type="checkbox"/> Spanish</p>	<p>I would like to be involved in:</p> <p><input type="checkbox"/> Technology users peer network</p> <p><input type="checkbox"/> Service provider network</p> <p><input type="checkbox"/> Funding initiatives</p> <p><input type="checkbox"/> Presenters network</p> <p><input type="checkbox"/> Project governance (boards & committees)</p> <p><input type="checkbox"/> Advocacy activities</p> <p><input type="checkbox"/> Volunteer work as: _____</p> <p>_____</p>
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Send completed application to: **Delaware Assistive Technology Initiative**
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Final Conference Wrap-Up

Now that final attendance numbers are computed and the evaluation forms are summarized, it looks like the annual statewide conference—this year held in collaboration with the Delaware Developmental Disabilities Planning Council—is another success! Registrations totalled 388 (about a third of whom were consumers), the evaluations were generally very positive and encouraging, and 18 exhibitors and 4 corporate sponsors helped to defray the significant expense of a conference of this magnitude.

But it's already time to start looking ahead at plans for 1995. Decisions have to be made very

soon about next year's conference location, date(s), length, and session topics. If you were unable to attend in the past because of any of these reasons, we'd really like to hear your preferences. If you *have* attended any of our previous conferences and would like to offer some suggestions or ideas, please feel free. DATI's goal is to provide training activities that are as informative, accessible, and conducive to networking as possible—and we can only judge our success from your input and feedback.

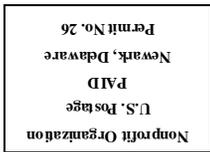
Please let us hear from you!

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