



The AT Messenger

...bringing technology to you

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Recent Study Points to Unmet Technology Needs Among Those with Mental Retardation

The impact of technology on people with disabilities is probably even more profound than that felt by the general population because it opens up avenues for communication, mobility, learning, and self-care that simply could not exist in its absence. As with any technology, however, it takes time for new advances to reach those who might benefit from them. Assistive technology (AT) has proven to be a valuable tool in helping hundreds of thousands of individuals achieve personal goals related to education, employment, recreation, and personal care. Such technologies often decrease dependence on others and allow individuals to become or remain integrated into their chosen communities. Unfortunately, people with mental retardation are often overlooked as potential users of AT. As a result, many individuals with retardation do not have access to the AT devices and services that could assist them in being more independent and productive at home, at school, at work, and in the community.

Since May 1996, a workgroup convened by the Division of Mental Retardation (DMR) has been exploring the assistive technology-related needs of DMR clients. The group has identified several potential approaches to increasing the availability of assistive technology for these individuals. The multifaceted effort includes staff training, increased availability of AT for trial use, thorough assessment of individual needs, and provision of the technology and support services in each case. All involved agreed that a logical first step in this process would be to get some sense of the cost and magnitude of this undertaking. To that end, the Delaware Assistive Technology Initiative (DATI), with funding from the Delaware Developmental Disabilities Planning Council and the Delaware Division of Mental Retardation, conducted an evaluation of the AT-related needs of a sample of DMR's client population.

This project was undertaken to determine the extent to which assistive technologies were being used effectively by DMR clients in their pursuit of their life goals. Screening and evaluation activities considered the individual's program goals, the input of family members and service providers when available, and the individual's wishes and preferences. The process identified dimensions of daily activity that could be enhanced by the application of assistive technology

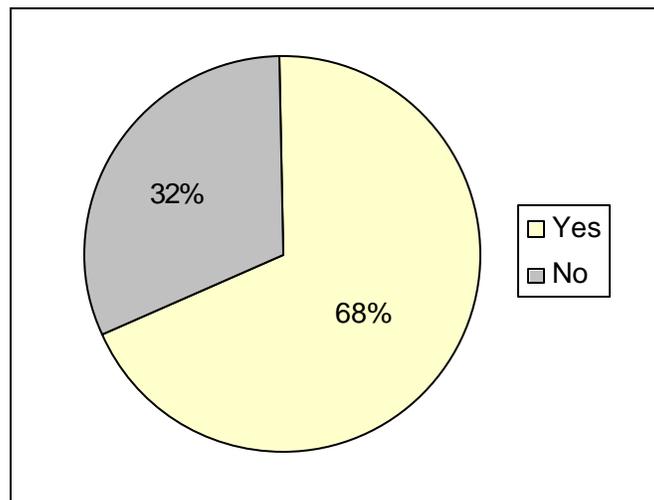
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and culminated in device and/or service provision recommendations that would facilitate achievement of positive outcomes.

This short-term, intensive project focused on 50 individuals, randomly selected from each of DMR's program areas. Information was gathered on each individual relative to history, current status, and goals, and then clients and significant others participated in a screening to determine if there were aspects of the individual's education, work, or home and community life that could be supported with AT. Forty of the 50 clients were referred for additional evaluation or consultation following the screening process. Of these 40, 85% were identified as having an immediate need for AT devices and/or services not currently available to them. Proportion of sample population with an immediate need for AT devices and services. Another 12.5% were identified as having no unmet needs at the time of evaluation, yet it was anticipated that follow-up would be needed within the year as client circumstances were expected to change

Immediate Need for AT?



Project staff identified device and service needs for each client evaluated. Of the 34 individuals needing some form of AT, over 70% of them (N=24) were in need of augmentative communication supports. Twenty-six percent (N=9) needed technology for mobility. Technologies were also recommended to address sensory, literacy, self-care, and vocational needs. Nine individuals had needs across two functional domains. The table below represents the breakdown of needs by

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technology type.

Need	# of clients
Communication	24
Literacy	4
Mobility	9
Self-care	4
Sensory	1
Vocational	2

The costs of needed devices and services varied considerably. One individual required modified shoelaces costing \$3, and others had communication needs that warranted acquisition of a device and the appropriate services to support its implementation costing several thousands of dollars. A conservative estimate of the costs of meeting the AT device/service needs of the sample population was projected at an average of \$1,543 per person.

This per-person cost was then used to estimate the cost of meeting the unmet AT device and service needs of the entire DMR population of 2100 individuals. Applying the per person average cost of \$1,543 across the entire caseload, we estimated that it would cost \$3,240,300 to meet the unmet device and service needs system-wide. These estimates do not include the cost of screenings and evaluations to assess unmet needs, which we estimated to require an additional \$586,300.

Based on the findings of this study, we estimate that there are over 1700 individuals in the DMR system who could benefit from assistive technology devices and services currently unavailable to them. Our cost projections, which include the cost of evaluation as well as the costs for technology acquisition and concomitant service provision, indicate that \$3.8 million would be required to meet these needs. These findings were presented at the June 4 meeting of DMR's AT Work Group, and DMR has begun exploring mechanisms to address unmet needs in an efficient and cost-effective manner. n

Reading with the Kurzweil 3000

Michael Meyreles, ATP, New Castle County ATRC

As advancing computer technology supports a multimedia approach to teaching, a new product has come upon the scene to aid those with reading difficulties. This product is the **Kurzweil 3000** Version 2, a PC-based reading system. This article will highlight some of its new features as well as a brief description of how it works.

The **Kurzweil 3000** is a PC-based reading system that simultaneously presents visual and auditory renditions of printed material. Once printed material is placed on a scanner, it is scanned into the computer and the **Kurzweil 3000** software converts the text to a format that can be read by the “**Flex-Talk**” speech synthesizer, all the while leaving the page layout intact to be viewed on the monitor as it appears in the document. This means that if any pictures appear in the document being scanned, they will appear on the computer monitor as well. This feature is especially useful for those who can integrate auditory and visual information.

Some of the other features of the **Kurzweil 3000** include: dual highlighting; a talking dictionary that provides spoken definitions, synonyms, syllabification; and letter by letter spelling. **Kurzweil 3000** also has a feature that allows it to be coupled to Microsoft’s Internet Explorer. Text on the Internet can be read aloud while dual highlighting is done within the Explorer window. Other **Kurzweil 3000** features, such as the dictionary, can be accessed through a tool bar that is placed in the Explorer window.

This reading system can be experienced before purchasing by ordering the demo CD. This demo is the full version with all the features but will only remain on the computer for 14 days, after which it will automatically erase itself from your computer. To order the CD, call Kurzweil at 800-894-5374, x30. To locate the nearest sales rep visit their web site at <www.kurzweiledu.com> and order the demo disk directly. The ATRCs also have a demo disk that can be tried before purchasing the system.

Kurzweil 3000’s technical requirements are:

- Pentium PC processor with at least 133 MHz (preferably higher) running Windows 95
- 24 MB RAM (32 MB recommended)
- 70 MB hard disk space
- 6x CD ROM or faster
- Sound Blaster or compatible sound card
- SVGA Monitor
- Twain compatible scanner

For any more information on this product or other AT, please call your local ATRC. n

Symbolic Language: Recycling for Quick Communication

Tracy A. Bombara, M.S., CCC-SLP

Language, regardless of whether it be spoken, written or signed, is comprised of a series of symbols combined together to convey an idea. The degree to which language has been developed in human beings is one of the fundamental skills that sets us apart from other species. And when language is suddenly lost, or does not develop according to the expected patterns, the result can create extreme frustration on the part of the individual, as well as for communication partners.

For many individuals with developmental or acquired disabilities, communication via picture symbols provides a potential solution. Clinical experience has demonstrated that many people with significant communication limitations spontaneously look for symbols or pictures to help express wants and needs. An example would be the experience of a 65 year old man who was trying to express his preference for a group lunch, but was unable to be understood by those around him due to decreased intelligibility resulting from a stroke. He spontaneously rolled his wheelchair over to a basket of magazines and began leafing through them until he found, in the third magazine he encountered, a picture of a pizza. His actions immediately demonstrated his need and ability to use a picture based communication system.

For those involved in the daily lives of such individuals, using picture symbols may be as easy as cutting out pictures from a magazine and arranging them in a photo album, or as complex as programming symbol combinations into an electronic, voice output communication system. Whatever the means available, the important part is that the individual who uses the pictures has the appropriate ones available when he/she needs them. And this may involve using the materials available at the time.

During cooking activities with individuals having mental retardation, the actual pictures on the packaging can be used to provide choice making opportunities, or to answer questions about which ingredient should be used next. Many cake mixes and microwavable foods already provide pictorial directions, as well as printed ones, which may be enlarged on a copier for quick and easy use. Drawing basic representations on a write on/wipe off board is often sufficient for individuals with developmental disabilities to follow a task with a few steps. Using this method of sequential cuing led to the discovery that adults with mental retardation understand and like to play a modified version of Pictionary using the same types of tools!

With younger children, the play scenes on the boxes that adorn many of today's toy sets can be cut out and used as instant language boards. These scenes quickly and easily provide pictorial access to objects as well as actions, which may be easier for the child to comprehend than an action symbol from an unrelated picture dictionary. These action pictures encourage the vocabulary development of verbs and even adjectives, instead of only nouns, which is so common in

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very young, communicatively handicapped children. We've always known that in a child's eyes, the best part of any toy is often the box!

For anyone with an acquired communication impairment, picture symbols can serve many functions. They can be enlarged and attached within eye gaze of a person who is only able to use eye gaze indication to convey basic information. Picture based language boards can be small and portable, made out of small pieces of cardboard and a little contact paper. They may be taken just about anywhere, giving an individual personal control in situations outside the home or extended care facility. Picture symbol sequences can be used as an independent aid to provide individuals with memory deficits a means of recalling a daily schedule. Sale flyers from the Sunday paper can be used to choose personal care needs or to make up a Christmas shopping list.

So the next time you are searching for a way to support an individual with a developmental or acquired communication impairment in expression of a thought or idea, take a walk into your kitchen...the answer may be found in the stack of recyclables you have been meaning to take to the recycling center! n

Handheld Help for Frustrated Spellers

By Ed Salisbury, Kent County AT Specialist

Can you imagine having a 300,000 word Merriam Webster dictionary, thesaurus, and spelling correction program all rolled into one? How about a dictionary in which one does not need to know a word's spelling to find the definition? What about a tool that did all this and spoke words and definitions aloud in a clear and natural voice? It would probably seem an unreasonable request for all of this to fit in a backpack, purse, or even a jacket pocket. Not only is a system such as this available, it is affordable. The device that has just been described is called the Language Master Special Edition from Franklin. This valuable tool was developed for people with learning disabilities, as well as those with visual and speech impairments. For those who would argue that a device such as this is only a novelty, and not a serious tool for people with disabilities, consider the long list of familiar agencies and organizations that contributed to the development of the Language Master SE: The American Foundation for the Blind (AFB), Center for Applied Special Technology (CAST), Closing The Gap (CTG), and the Maryland Rehabilitation Center.

The features of the Language Master SE solve several problems for people with learning disabilities. First, the user can find a word quickly and easily without knowing the exact spelling. The person spells the word to the best of his or her ability and, if it is spelled correctly, the definition is instantly displayed. If the Language Master does not recognize the word, it presents the user with a list of choices that are possible matches for the desired word. The user is then able to hear each of the words read aloud. Once the word is found, its definition may then be displayed. The definition, of course, may also be read aloud. Second, if any word in the definition is not understood, it can easily be selected from the text and defined in the same manner as the original word. Third, if the word is very difficult to spell, the user need only type in those letters he or she is sure of, separated by "wildcard" characters. The Language Master will then generate a list of words that match the criteria.

The Language Master SE is also a valuable tool for people with visual impairments. Many keys on the keyboard have distinctly different sizes and shapes. This makes it easy for someone who is blind to memorize the keyboard. In order to assist with finger placement and orientation of the hands on the keyboard, Franklin includes press-on locator dots. Because everything can be spoken, including menus, the user who is blind is never left guessing as to what is being presented on the LCD screen. If, by some chance, a word is misunderstood, it can be spelled using the military alphabet (alpha, bravo, charlie, etc.). For those with low vision, letters are printed on the keys in bold capitals. A large type mode can also be used to increase the readability of the screen.

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Other features of the Language Master SE include a thesaurus, nine talking word games, a grammar guide, classification of words by subject, identification of commonly confused words, a list of words commonly found on the SATs and other achievement tests, and the ability to store messages for spoken output. The device comes with an AC adapter or can be used with AA batteries. A headphone is also included for private listening.

In a small handheld package, Franklin has combined a talking dictionary, thesaurus, spelling corrector, and more. This tool can be used effectively by people with learning disabilities, visual impairments, and speech impairments. The Language Master SE can be purchased from Franklin for \$450.00. If you would like to borrow a Language Master, one is available at your local ATRC. n



= science + topos (place, Gk.)

Join Our Science Place OnLine

Students, mentors, and advocates...come join our science place online. Scientopia fosters a community network for high school students with disabilities interested in the sciences. It expands on an existing forum that paired mentors and students with disabilities via email. Students have access to a pool of mentors with diverse backgrounds. They share and explore a wealth of information exchanged through list servers and available on the web. They are given the opportunity to facilitate discussions with peers, mentors, and advocates. Community members also receive invitations to a variety of our sponsored activities (lectures, workshops, and events).

Applications for all members are now being accepted for Summer and Fall '98 admittance. Anyone interested in joining us in our quests in cyberspace should apply. Computers may be available for loan to support participation. To obtain a copy of our application, learn more about *Scientopia*, or register online visit our website. Additional information can be obtained by calling (302) 651-6840 or sending email to <sem-info@asel.udel.edu>.

Scientopia is sponsored by the Information Access program, formerly known as the Science Engineering and Math (SEM) program. We are pleased to announce that the SEM was recently awarded a new grant by the National Science Foundation to continue the program's progress. The name of this new grant is Information Access. The Information Access program focuses on increasing the number of students with disabilities in scientific academic programs through educational and outreach programs and the research and development of information access tools. The program is affiliated with the University of Delaware and the duPont Hospital for Children.

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For more information about our program contact:

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The Spotlight on Employment

All three members of Delaware's Congressional delegation—Senator Roth, Senator Biden, and Representative Castle joined University of Delaware President David Roselle in hosting *Assistive Technology: Innovative Concepts at Work* on April 27 on the University of Delaware campus. The event emphasized the benefits of AT and universal design in the workplace with a keynote address by Steve Jacobs, senior technology consultant for the NCR Corporation in Dayton, with exhibits, and with the premiere of a new video produced specifically for this event. The video, titled *Assistive Technology: The Right Tools for the Right Job*, showcases Delawareans working in their chosen professions with support from assistive technology. Among those depicted in the video are Lily Bandak, Ken Barner, John Jefferson, Tony Maczynski, Michele Reeves, Jamie Wolfe, and Kevin Weik. The video was developed by University of Delaware Media Services in conjunction with DATI, with funding from the U.S. Department of Education, National Institute on Disability and Rehabilitation Research. Additional copies of the video are available; see page 13 for more information.

The DATI is extremely grateful to the University and the many University staff who made this event possible. We were also honored by the support and participation of our Congressional delegation, all of whom offered compelling remarks about the benefits of assistive technology for persons with disabilities. Our deepest appreciation is extended to those who shared their stories for inclusion in the video. n



Delaware Legislation Enhances Infant & Toddler Access to AT

Brian J. Hartman, Esq., Project Director

Disabilities Law Program

Delaware is poised to implement legislation formally establishing a comprehensive early intervention program for infants and toddlers with disabilities. This legislation holds great promise for youngsters who would benefit from assistive technology.

Federal Background

In the mid-1980s Congress extended the reach of special education programs to infants and toddlers. The legislative package was commonly known as the “Part H Program” since its provisions were codified as Part H of the Individuals with Disabilities Education Act. Part H authorized Federal funding of services to states with qualifying programs. In exchange for Federal subsidies, states offered a wide variety of services to youngsters with disabilities from birth through their third birthday. In 1997, the legislation was reauthorized through FY (Fiscal Year) 2002 and recodified as “Part C” of the Act effective July 1, 1998.

Delaware Background

Delaware has operated a statewide “Part H” program since 1993. In FY 97, the program served 1,879 children. However, until now, Delaware lacked State legislation formally establishing the program and defining its components. Over thirty five (35) states previously enacted authorizing legislation, including all of Delaware’s neighboring states (Pennsylvania, New Jersey, and Maryland). On March 26, 1998, Representative Maroney, a member of the state’s Part H advisory council, introduced Delaware’s enabling legislation, H.B. No. 531. The bill was drafted by the Disabilities Law Program at the council’s request. With broad bipartisan support, the bill passed the House on April 28 by a 41-0 vote. On June 3, it passed the Senate by a 21-0 vote. Signed by the Governor on June 11, the bill will be fully effective within ninety (90) days.

Key Features

Eligibility

To be eligible for services, children must be less than 36 months old and need early intervention services because they are either: 1) experiencing developmental delay; 2) diagnosed as having a physical or mental condition which has a high probability of resulting in developmental delay; or 3) if authorized by regulation, at risk of developing substantial developmental delay in the absence of early intervention services. To date, Delaware has never adopted the third eligibility category, i.e., covering “at risk” children. However, the bill “leaves the door open” for the State to cover such children without separate legislation. Finally, the bill adopts a flexible approach to defining “developmental delay” by deferring the standard to regulations which can be modified

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based on experience and clinical developments.

Outreach

The legislation requires affirmative efforts to identify eligible children. Key provisions include assurances of both:

1) “prompt identification and evaluation of eligible children” and 2) availability of appropriate early intervention services “to all eligible children.” Outreach efforts are often described as “Child Find” or “Child Development Watch” activities. In practice, the Department of Education (DOE) assumes primary responsibility for identifying children with autism, visual impairments, or hearing impairments. The Department of Health & Social Services assumes that role for children with other disabilities.¹

Assistive Technology

A broad array of services must be available through the program. “Assistive technology devices and services” are explicitly included in the bill. Based on Federal law, screening, assessment, selection, procurement and training on assistive technology are authorized (20 U.S.C. §§1401 and 1432; 34 C.F.R. §303.12). “Transportation,” which could be specialized to meet a child’s needs, is covered. “Audiology services,” which could include amplification and hearing aid support, is included. Since speech, occupational, and physical therapy are covered, support for augmentative communication and mobility-related technology is contemplated.

While coverage of assistive technology is clearly within the scope of the program, experts agree that it is often overlooked in early intervention systems. Last year, a national project studied the underutilization of assistive technology assessments within the Part H (now Part C) program. The experts issued a report with the following recommendations:

- ***What developmental areas should be assessed?***

All suspected areas of delay should be assessed. An assistive technology assessment or evaluation should address possible technology devices and services that are appropriate for each area of delay. The assistive technology evaluation should also address the impact of a particular device on other aspects of the child’s life. For instance, if the child needs a communication device, the assessment should also address positioning, access to the device, and mobility.

- ***When can evaluation of assistive technology needs be requested?***

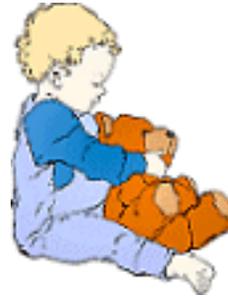
An assistive technology assessment can be requested at any time, but should be routinely

1. DHSS, DOE, and DSCY&F Interagency Agreement for the Delaware Early Intervention System Under Part H of the Individuals with Disabilities Education Act (July 9, 1996).

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requested when the child is first assessed for eligibility for Part C services if there is reason to believe that the child could benefit from the use of assistive technology. States should develop a list of indicators or questions to assist team members in determining if an assistive technology assessment is warranted. Such indicators could include, but not be limited to the following:

- * Is the child able to play with toys independently?
- * Is the child able to communicate effectively?
- * Is the child able to sit independently? Stand independently? Walk independently?
- * Is the child able to feed himself/herself independently?



If the answer to any of these questions is “no”, then an assistive technology evaluation should be conducted.²

Interagency Collaboration

Since many agencies serve young children with disabilities, coordination is of critical importance. The State legislation confirms that the Department of Health & Social Services will continue as the “lead agency” in implementing the Federal early intervention program. However, it also requires that State agencies and contractors cooperate with the Department to “ensure effective system implementation, coordination, and non-duplication of activities.” This legislative mandate reinforces the Department’s ability to prompt development of interagency agreements and discourages “ostracism” by agencies reluctant to share resources.

Individualized Family Services Plan

Eligible children are provided with an individualized family service plan (“IFSP”). This plan, which is designed in active collaboration with parents, identifies the nature and extent of services to be provided to the eligible child and family. Consumers must be vigilant to ensure that appropriate assistive technology is included in any plan when necessary to meet a child’s identified needs. To minimize interagency disputes, the State legislation identifies the IFSP as the paramount service delivery model for the child. Specifically, the bill recites that “the individualized

2. Assistive Technology Funding & Systems Change Project, Part C Policy Group, “Part C: Infants & Toddlers With Disabilities Assistive Technology Policy”, No. 97-21 (Summer, 1997). The Project, which is funded by the U.S. Department of Education, has a mailing address of 1660 L Street, N.W., Suite 700, Washington, D.C. 20036. It can be reached by phone at (202)776-0406, by e-mail at atproject@ucpa.org, or through its website at http://www.ucpa.org/html/innovative/atfsc_index.html.

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family service plan shall serve as the primary comprehensive service plan” among agencies and contractors providing early intervention services and “be accorded deference in determining the developmental, educational, and medical necessity of included early intervention services.” For example, if the IFSP of a Medicaid-eligible child includes specific assistive technology, Delaware’s Medicaid agency should not “second guess” its propriety when processing a funding request.³

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3. This provision codifies and expands current practice. The DHSS, DOE, and DSCY&F Interagency Agreement for the Delaware Early Intervention System Under Part H of the Individuals with Disabilities Education Act (July 9, 1996) recites as follows:
The existence of Part H funds notwithstanding, Medicaid is obligated to pay for allowable services covered through the EPSDT Program....Federal regulations permit Medicaid to pay for services provided to Medicaid beneficiaries under Title V and for those Medicaid allowable services covered in an IEP or an IFSP. Medicaid services prescribed in an IFSP are deemed to be medically necessary when authorized by the Primary Care Physician of a child eligible for the Child Development Watch program.

This is consistent with commentary from the Secretary of the Department of Health and Social Services:

Regarding “medically necessity,” the Managed Care Organizations participating in Delaware’s Medicaid program have been instructed to honor the plan of care on the IFSP as the validation of “medical necessity” for the items included in that plan for children receiving services under Part H, in that this plan is the result of the consensus among the Primary Care physician, the Child Development Watch Team and the family.

Commentary on Delaware Medicaid Utilization Report Submitted by DHSS to the Developmental Disabilities Planning Council (April 18, 1996)

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Dispute Resolution

Several options for resolving disputes are available. Interagency disputes are subject to resolution through grievance systems identified in interagency agreements.⁴ Consumers may opt for mediation, an administrative hearing, or complaint to the Department of Health & Social Services. 20 U.S.C. §1439; Proposed 34 C.F.R. §§ 303.511-303.512, 62 Fed. Reg. 55026, 55123 (October 22, 1997).

Conclusion

All in all, passage of Delaware early intervention legislation holds great promise for improving access to assistive technology. The statutory mandate to conduct outreach activities, coupled with the program's enhanced visibility by inclusion in the Delaware Code, should result in an increase of covered youngsters. Finally, since the legislation specifically identifies assistive technology as a core service, and other agencies are encouraged to defer to services included in IFSPs, disputes over coverage and funding should be minimized. n

4. For example, the DHSS, DOE, DSCY&F Interagency Agreement for the Delaware Early Intervention System Under Part H of the Individuals with Disabilities Education Act (July 9, 1996) establishes a 6-part appeal process which eventually culminates in resort to the Governor's Office.

Statewide Trainings...

The CAMA Van is Coming

to Clayton Hall in Newark, Delaware!

Want to learn about the latest in augmentative communication technology directly from the product manufacturers themselves? If so, plan to attend the CAMA (Communication Aid Manufacturers Association) Workshop to be held in Newark on **Thursday, October 8, 1998**. For a pre-registration fee of \$30, you will have the opportunity to learn about all the latest innovations in augmentative and alternative communication (AAC) technology from the leading manufacturers. The full-day program offers a continental breakfast, a packet of materials, lunch, and up to six 45-minute sessions offered by manufacturers.

The sessions have been developed specifically for consumers, parents or caregivers, speech/language pathologists, occupational therapists, physical therapists, teachers, administrators, health care providers, rehab engineers, inclusion specialists, students, and others interested in AAC.

CAMA offers Continuing Education Units through the American Speech-Language-Hearing Association (ASHA). For more information or to receive a registration form, contact CAMA at 1-800-441-CAMA (2262) or email them at <cama@northshore.net>.

Scheduled participants are:

AbleNet, Inc.

Adaptivation

Communication Devices, Inc

Innocomp

IntelliTools

Mayer-Johnson

Prentke Romich Co. (PRC)

Sentient Systems Technology (SST)

TASH International

Toby Churchill

Words +

Zygo

Inclusion Conference

This year, DATI is joining forces with the Developmental Disabilities Planning Council and the Department of Education in hosting this event. Along with other well-known presenters, this year's conference will feature **Richard Wanderman** of **LD Resources**. During his day-long workshop, Mr. Wanderman will demonstrate ways children with LD can be included in regular education classrooms by considering the student's needs and abilities, the environment of the classroom, and the technology that can make it happen.

The event will be held at the Sheraton Dover Hotel, in Dover, Delaware on **Wednesday, November 4, 1998**. Registration information will be mailed in September. n

LIFE Conference Debuts in January

Instead of its stand-alone conference in the fall, DATI has opted to join forces with a number of other consumer-focused organizations to sponsor the **LIFE (Liberty and Independence for Everyone) Conference**. This day-long event is scheduled for **January 28, 1999** at the Sheraton Dover Hotel. It will feature a keynote, concurrent sessions, and a full-array of exhibits. Please direct suggestions for session topics to Sonja Simowitz at the DATI Central Site. n

Financing Assistive Technology

AT Funding for Persons with Cognitive Disabilities

Ron Sibert, DATI Funding Specialist

With the exception of certain dedicated benefit programs and institutional financing procedures, assistive technology (AT) funding options for persons with cognitive disabilities are similar to those that are available to people with other types of disabilities. Unfortunately, however, there is typically less awareness about the appropriate types of AT interventions for cognitive disabilities than there is about other disability types.

Generally speaking, several factors must be considered when determining the appropriate AT funding source(s) for a given device. Typical considerations are: the person's age, type and severity of disability, eligibility for state or federal government benefit programs, insurance coverage, the type of equipment needed, and the intended use of the equipment. A person's age is probably the most basic consideration. Eligibility for programs or services that pay for or include assistive devices varies with age. Some services, like public special education services and certain types of public insurance programs, are reserved for children and youth with disabilities. In contrast, the State Division of Vocational Rehabilitation (DVR) provides services to qualified working age adults with disabilities.

AT interventions that are appropriate for use by people with cognitive difficulties usually incorporate alternative ways of managing language and/or information. Examples include a wide range of devices—from simple low-tech picture boards and memory aids to computer applications to assist with learning, reading, writing or speaking. The type of equipment a person needs and the nature of its application can determine which funding option is most likely to apply. Suppose, for example, a person is unable to communicate verbally and a qualified team (which includes a speech/language pathologist) determines that a computerized augmentative/alternative communication (AAC) device is needed. Such a device may be covered by Medicaid (or private insurance—if the policy covers durable medical equipment) as long as the device's selection was based on a proper evaluation by a qualified professional and the recipient's physician prescribes it. Note that public and private insurers only cover equipment that they determine to be *medically necessary*. The medical necessity requirement is usually met when the selected treatment (in this case the AAC device) can restore a physical function that has been absent or significantly diminished due to a diagnosed medical condition. Many state Medicaid programs, including Delaware's, cover AAC devices. However, Medicare and some private insurance carriers have been much less responsive.

Equipment that is used exclusively to enhance learning can be difficult to obtain through insurance, which brings us to the next issue: how the device will be used. The nature of the device's

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application can be viewed in terms of the task (the thing the person requires assistance to do) and/or the environment in which the task is to be carried out. Currently, equipment that is used for educational purposes (e.g., to enhance reading, writing, or computational skills) may be purchased by public agencies that provide educational or independent living services. Public school special education and State Division of Mental Retardation (DMR) programs are good examples.

A similar concept applies to work-related AT applications. Say, for instance, a person needs a specially designed filing system, document organizer, or software in order to perform certain functions on the job. A wise employer may purchase the needed device(s) to retain a dedicated and productive employee who has cognitive difficulties. In fact, if the person is otherwise capable of performing the essential functions of the job (putting the need for technology aside), the employer's provision of necessary devices and other types of reasonable accommodations would be legally required under the Americans with Disabilities Act (ADA). Also note that there are significant tax advantages for employers that provide such accommodations.

Now suppose that same person, prior to locating a prospective employer, is determined to be qualified for state vocational rehabilitation (VR) services. The person and a VR counselor could identify a vocational need for one or more devices in the process of developing that person's individualized written rehabilitation plan (IWRP). To the extent that the device(s) would be required in order for the person to attain or maintain employment, the equipment should be written into the IWRP, and the VR agency would be the provider or primary payer. VR money is not, however, the only financing option in this scenario. If this person, for example, requires medically necessary equipment in order to work, the person's insurance coverage could be brought to bear. If the person receives Social Security benefits and has other earned (or unearned) income, the person may opt to finance equipment through Social Security work incentive programs. In that case, the VR counselor could assist with developing the strategy or applying for a program as needed. These alternative ways of paying for equipment are examples of "comparable benefits." It is important to note that while the VR is permitted to consider other ways of paying for equipment to implement the IWRP, the search for alternatives cannot delay the person's receipt of the equipment. Also note that for individuals who cannot work or for those whose circumstances will not permit them access to VR services, *nonwork-related* funds for AT are available through DVR's Independent Living program.

Next, the equipment's intended use, the person's living circumstances, insurance coverage, and eligibility for various public programs can combine in interesting ways to determine how a device may be funded. The Medicaid and Social Security-related AT funding options that exist within the DMR administrative structure itself are an excellent case in point. Funding approaches can vary based on where beneficiaries live (community- or noncommunity-based living arrangements) and how residential facilities treat residents' Social Security benefits.

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Depending on the intended use of equipment, Medicaid's AT funding for DMR's Medicaid beneficiaries who reside in ICFs/MR,¹ nursing homes, or similar types of residential facilities can be administered in one of two ways. The first way involves the facility's use of its "per diem," the lump-sum financial allotment it receives from the State Medicaid program based on the number of Medicaid beneficiaries residing in the facility. The second approach is the individual claim or "fee for service" method. At times, the appropriate application of per diems has been a point of confusion. Much of the equipment utilized in residential facilities is supposed to be paid for by the facility through its Medicaid per diem allotment. However, that is not always the case. The intended purpose of the per diem is to pay for nonexclusive services and equipment; that is, devices that are not earmarked exclusively for individual client use. For example, a manual wheelchair and an electric hospital bed may be utilized over a period of time by any number of residents throughout the facility. It is appropriate to use per diem funds for such purchases. On the other hand, some equipment may be customized for and/or intended for use by a single resident; per diem funds should not be used here. In such instances, filing an individual claim to the insurer on the beneficiary's behalf, or "protecting" (setting aside) a portion of the beneficiary's SSI benefit are the procedures of choice.

For DMR's clients who reside in the community, the Medicaid Home and Community-Based Waiver enables DMR to provide several types of AT. The Services and Standards section of the Waiver [Appendix B, section (h)] calls for the provision of "environmental modifications," which are defined as "...those physical adaptations to the home, required by the recipient's plan of care, which are necessary to ensure the health, welfare and safety of the individual, or which enable the individual to function with greater independence in the home and without which, the recipient would require institutionalization."

Finally, there are times when an individual qualifies for AT funding from more than one agency. When policies permit several possible funding sources to be applied, the involved agencies may be willing to negotiate terms for cost sharing. Given the cost-effectiveness of this approach, it is certainly worth pursuing. However, the involved parties should understand that the negotiation process should not cause delays in delivery of devices or services. n

DATI Equipment Loan Policy

DATI has a wide variety of equipment at the Assistive Technology Resource Centers for the primary purpose of demonstration and short-term loan. The policy for the loan of the equipment is as follows:

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1. Intermediate Care Facilities for Persons with Mental Retardation

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- The standard loan period is two weeks, defined as the day borrowed (e.g., Monday the 10th) to the same day two weeks later (e.g., Monday the 24th). Loans may be extended providing there are no names on the waiting list and/or that an extension will not interfere with an existing reservation. The maximum loan period is 4 weeks.
- A maximum of four (4) devices may be borrowed at a time, i.e., during any single loan period. However, combinations of devices may be treated as a single device if the components are interdependent—either operationally, or because one component is required for the user to access another.
- Equipment loans across State lines are not permitted. Borrowed equipment must also remain in Delaware throughout the loan period. n



DATI would like to feature a regular column in *The AT Messenger* to address our readers' questions. Many articles appearing in previous issues of *The AT Messenger* were in response to questions that have been asked frequently during various workshops and outreach activities. If you have a question that we haven't yet addressed, simply call, write, or email your question to the ATRC in your county, and it will be answered by a staff member specializing in that topic.

Of course, we can respond to your question immediately, but we may also publish the answer in the newsletter to get the word out. n



Delaware Recycles AT

If you are interested in an item, please call the number listed next to the item. If you would like to add or remove an item from the list, call 800-870-3284, press 1 for English, and then press 3 for the DATI Central Site office. All prices are negotiable and all area codes are 302 unless otherwise noted.

Devices Available:

Ambulation/Mobility

Cane, wooden, Free, Donna, 731-1775

Crutches, wooden, Free, Donna, 731-1775

Walker, \$40, Connie, 653-7341

Communication

Canon 7P Communicator, w/tape print out, single switch scanning or keyboard access, new, \$650, Dick or Gloria, 910-686-9744

CheapTalk 8, brand new, \$125, Amy, 349-5996

Hearing

Telecaption II Decoder, \$25, Donald, 892-9038

Personal Care/Home Management

Bath Chair, w/commode, arm rests, back support, \$100, Catherine, 652-6641 after 5 p.m.

Geriatric Chair, BioCare 5000, 3 position, neg., Carol, 610-358-2137

Flexiflow Companion Nutrition Pump, Ross, Free, Donna, 731-1775

Hospital Bed, new, w/mattress in plastic, \$300, Joseph, 733-0628

Hospital Bed, Electric, \$150, Richard, 610-565-3636

Hospital Bed, Electric, 3-position, \$600, Stephen, 947-1637

Hospital Bed, Electric, \$1,200, Billie, 322-7863 after 6 p.m.

Hospital Bed, Electric, adj., traction bar, \$1,500 or B/O, ask for Michele only, 368-8864

Hospital Bed, Invacare, \$375, Ruby, 764-8585

Hospital Bed, Manual, Free, Harry, 855-1692

IV Pole, \$10, Sheila, 697-8404

Lift Chair, holds up to 300 lbs., \$300, Mary, 856-9791

Oxygen Concentrator, w/Alarm and D tank, B/O, Robert, 325-4063

Oxygen Machine, \$1K, Millie, 800-982-2248

Peristaltic Gradient Sequential Compression Pump, Negotiable, Joanne, 658-5878

Pulmo-Aide Compressor, \$40, Millie, 800-982-2248

Reacher, 24", Free, Donna, 731-1775

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Restraint Belt, neg., Maryanne, 737-6215

Shower Chair, extended seat, no wheels, back, \$25, Sheila, 697-8404

Shower Chair, nylon mesh seat, adj., reclines, \$50, Sheila, 697-8404

Stair Glide, (2) Cheney, perfect condition, neg., Sandra, 239-7440

Stair Glide, Silver Glide II, neg., Jay, 734-8400

Stair Lift, \$2,500, Brad, 517-773-2158

Stair Lift, National Wheelovator Falcon, for 4 steps, neg., Cheryl, 368-7230

Traction Belt, Foam Padded, neg., Maryanne, 737-6215

Three/Four-Wheeled Powered Scooters

Amigo, 3-wheel, electric, adult-size, battery recharger, \$950, Mike, 764-4499

Lark, w/lift, can attach to car, \$1,500, Nancy, 834-7554

Lark, XT Model 4371, dismantles into 4 parts to fit into a car, \$125 Firm, Francis, 832-7506

Omega, \$2K, Brad, 517-773-2158

3-wheel, w/basket, teal, make offer, Nora, 610-583-9435 between 4-7 p.m.

Vehicles/Accessories

Braun Swing Lift for full-sized van, neg., Ginny, 234-1512

Hand Brake/Throttle, new, GM, \$375, Barbara, 678-0515

Hand Controls for brakes, emergency brake, and accelerator, \$30 for all, Robert, 322-5264

Ramp, permanently attaches to a van, \$60, Elizabeth, 422-2896

Van, '88 Ford E150, Ricon, sidedoor w/c lift, driver hand controls, remote control, 91K, \$6.5K or B/O, Jean, 325-2528

Van, '89 Ford E150, blue, Braun w/c lift, automatic, \$4.5K, Richard, 610-274-0242

Van, '93 Mercury Villager Mini, hand controls, scooter lift, 43K, \$9.8K, Dick, 764-1714

W/C Lift for van, Braun, semi-automatic stepwell, \$600, Freda, 629-9603

Wheelchairs/Accessories

Adult, Electric, w/recharger, E&J, \$1,500, Mary, 984-1225 after 6 p.m.

Adult, Electric, Joystick Hoveround, reclines, hi-back, video and manual inc., neg., Josephine, 764-5324

Adult, Electric, new w/battery & charger, reasonable offer, Albert, 738-0422

Adult, Electric, w/charger, manual inc., std, \$900, Dolores, 856-3261

Adult, Electric, charger w/new batteries, lift for vehicle, \$900, Pat, 610-518-5871

Adult, Electric, Action 9000, inc. joystick & battery charger, 1 1/2 yrs old, \$2,450, Ruby, 764-8585

Adult, Electric, \$1,500, Barbara, 654-6723

Adult, Manual, collapsible, \$100, Nancy, 834-7554

Adult, Manual, 24" wheels, \$175, Ruby, 764-8585

Adult, Manual, La-Bac Tilt 'n Space, \$1,500 or B/O, Sandi, 992-0225

Adult, Manual, w/tilt & space w/headrests, \$300, Sheila, 697-8404

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Child, Manual, for age 1 1/2 - 3 yrs of age, w/stroller handles, w/many accessories, \$500 or B/O, Lori, 717-596-3510

Child, Quickie, Manual, w/tray, \$275, Vernessa, 655-9840

Child, Zippie by Quickie, Manual, Pink & Black, tilts, \$500, Jamie, 945-8668

Children's, variety, Free, Kristen, 672-1960

Devices Needed:

Barrier Free Lift, Herb, 610-667-5051

Bike, Adult, 3-wheeled, Sandra, 875-8095

Bike, Adult, 3-wheeled, pedal with your hands or feet, willing to pay reasonable price, Pat, day - 292-9913, eve. - 653-6892

Lift Chair, willing to pay reasonable price, Chris, 834-8734

Mattress, Roho, willing to pay reasonable price, Lynda, 652-4483

Ready Racer/Star Car, Tumble Forms, willing to pay reasonable price, Katherine, 219-277-5849

Stair Glide, willing to pay reasonable price, Carrie, 674-1661

Stroller base for Tumble Forms chair, willing to pay reasonable price, Patty, 998-6302

Tub Benches or shower chairs, need donations, Michelle, 235-1135

Wagon and Rifton tricycle for clients, willing to pay reasonable price, Karen, 610-494-4080

W/C Parts, Meyra brand, Lisa, 410-893-8614

W/Cs, manual, need donations for senior center, Sharon, 422-1510

Note: *If you are looking for items not on the list, please contact the Central Site office at 1-800-870-DATI. New items are added to the list regularly.*

If there has been no activity or interaction with the contributor to the list within six months, items are automatically removed from the list.

Note on Liability: *The DATI assumes no responsibility for the condition of any products exchanged through this information service. It is the responsibility of the owner to provide accurate information about product specifications and condition. Additionally, terms or arrangements made for any product exchanges are the sole responsibility of the exchanging parties. n*

New Resources

Resource List From VISION Foundation, Inc.

VISION Foundation, Inc., a self-help organization for people adjusting to sight loss, announced the publication of the 16th edition of the *VISION Resource List*, with information about eye diseases and visual conditions, consumer organizations, electronic reading aids and computers, financial resources, resources for large print materials and general information brochures. To learn about the free *Resource List* contact VISION Foundation, Inc. 818 Mt. Auburn Street, Watertown, MA 02172; (617) 926-4232. n

Bell Atlantic Announces Accessible Products and Services

Bell Atlantic's Center for Customers with Disabilities announced the availability of accessibility services and low-cost or free telecommunications equipment, such as large- button phones, speak-back dialer systems, and talking Caller ID equipment. Bell Atlantic will also begin providing braille and large print billing statements to customers in late spring 1998. For additional information, call Marilyn Benoit, (800) 974-6006, at the Bell Atlantic Center for Customers with Disabilities. n

Congressional Internship Program for College Students Who are Blind or Visually Impaired

The American Council of the Blind (ACB) announced the establishment of a congressional internship program to enable qualified blind or visually impaired college students to intern in the offices of a limited number of United States senators for a period of approximately five weeks. For additional information and requirements, contact Oral Miller, Executive Director, ACB, 1155 15th St. NW, Suite 720, Washington, DC 20005. n

**To contact DATI's Central Site office or
the ATRC closest to you...
Call 1-800-870-DATI**

Press #1 for English or
Press #2 for Spanish
then press...



#3 for the Central Site office or
#4 for the New Castle County ATRC or
#5 for the Kent County ATRC or
#6 for the Sussex County ATRC

TDD callers—If you do not press #1 or 2 your call will be answered on a TDD line by someone at the Central Site office.