

## **The AT Messenger...bringing technology to you**

Delaware Assistive Technology Initiative (DATI), Volume 12, No. 1,  
Winter 2004

### **Governor Creates Commission on Community-Based Alternatives for Individuals with Disabilities**

*Rita Landgraf, Chair, State Council for Persons with Disabilities*

Monday, September 22, 2003 was a significant day for the disability movement: Governor Ruth Ann Minner signed Executive Order 50, creating the Commission on Community-Based Alternatives for Individuals with Disabilities. The Governor made the announcement before attendees at the Annual State Council for Persons with Disabilities luncheon. Her message—that the state needs to do better in its efforts to support individuals with disabilities—has a far-reaching impact. The Governor indicated that the state and disability advocates may not always agree, but a mechanism needs to be in place where all parties can voice their views and promote a positive plan of action. This comprehensive plan's goal will be to enhance community inclusion efforts for all individuals with disabilities. Governor Minner expressed her personal commitment, and that of her administration, to addressing the critical needs regarding community-based services for persons with disabilities.

In addition, Governor Minner announced the pending settlement of the lawsuit filed against the state by The Arc, Homes for Life, Delaware People First, and several individual plaintiffs. The lawsuit, filed on April 8, 2002, asserted violations of the Americans with Disabilities Act (ADA). Believing that individuals with disabilities should be afforded the opportunity to reside "in the least restrictive environment," the plaintiffs sought the elimination of waiting lists for services, provision of community-based services for people who are currently institutionalized at Stockley Center, and improvement of Delaware's current delivery system. As a result of discussions among the Governor, members of her administration, and representatives for the plaintiffs, the parties reached several agreements, including a commitment to work cooperatively to enhance the service delivery system for all individuals with disabilities.

The Governor's new commission will be charged with reporting progress on advancements in the areas of independence and community participation on a quarterly basis. The Commission's membership will be limited to 19 members, including legislators, representatives from the state administration, consumers, advocates, and a community-at-large member. The Commission will utilize existing plans, studies, and reports, including the report created by the HR90 Commission on Community-Based Alternatives for Persons with Disabilities, to inform the creation of a truly diversified, individualized, cost-effective service and support system that will enable individuals with disabilities to be fully included in the community of their choice.

Rita Landgraf, Chair of the State Council for Persons with Disabilities, and Secretary Vincent Meconi, Department of Health and Social Services, have been designated as the Co-Chairs of the Commission. Both Ms. Landgraf and Secretary Meconi believe the process should be very open and inclusive of all interested parties. They intend to establish sub-committees to address aspects of community living such as housing, employment, transportation, health care, and education. All Commission meetings will be open to the public. The first meeting of the Commission was held in early November, and those in attendance were invited to submit issues for consideration as well as nominations for those who might serve on various subcommittees.

It is anticipated that subcommittees will:

- consider processes used to identify supports needed for successful community living
- identify barriers to community inclusion
- establish outcome measures by which progress toward community living goals can be evaluated.

The Commission also is likely to address practices for leveraging funding, policy development relative to person-centered supports, and the development of public/private partnerships to enhance service delivery. The Commission's success depends on the involvement of all who have a stake in its outcome. Please join in the dialogue and contribute to this important activity.

## **Low-Interest AT Loan Programs Seek Start-Up Funds**

*Tom McDonough, DATI Funding and Policy Specialist*

In late September 2003, the U.S. Department of Education, National Institute on Disability and Rehabilitation Research (NIDRR) awarded Delaware \$1.32 million to develop low-interest assistive technology and telework loan programs.

As many of you know, some types of AT, such as home and vehicle modifications and hearing aids, are not covered by private and public health insurers because the devices are not regarded as "medically necessary." The AT Loan Program will enable persons with disabilities and their families to obtain these types of AT devices and others.

The Telework Loan Program will support the purchase of computers and other adaptive equipment that allow individuals with disabilities to work from home. In order to assist consumers who might not qualify for conventional bank loans, these programs are likely to feature guaranteed and non-guaranteed loans, interest rate buy-downs, modified credit scoring, flexible terms, and consumer counseling.

Because of its commitment to AT access for persons with disabilities, the Delaware Division of Vocational Rehabilitation (DVR) has agreed to serve as the fiscal agent for these programs. DATI will coordinate program planning and manage the day-to-day operations of the loan programs.

However, despite the great news about the federal grant, much remains to be done. The federal grant requires that a state match of approximately \$345,000 be raised from public and private sources by September 2004. Our efforts to date have yielded approximately \$70,000 in state match commitments, which leaves us \$275,000 short of the goal. The \$1.3 million in federal funds will not be released until the matching funds have been secured.

In an effort to bridge this gap, DVR recently filed a grant application with the Delaware Health Fund Advisory Committee (DHFAC). This Committee makes annual grant awards with funds received five years ago pursuant to the Master Settlement Agreement between the states and tobacco manufacturers. On November 25,

2003, I testified before the DHFAC in support of this application, and 13 state agencies and organizations also endorsed

DVR's application for "tobacco funds" to support the AT loan programs. We expect to learn by January, 2004 whether the loan program will receive funds from DHFAC.

We are also pursuing other public and private sources of funding in order to reach our goal. We hope to raise the remaining match funds before the September deadline so we can begin offering this new AT financing option. If anyone would like to contribute toward the state match or otherwise assist in our efforts, please contact either Beth Mineo Mollica, Ph.D. at (302) 651-6790 or [mineo@asel.udel.edu](mailto:mineo@asel.udel.edu), or Tom McDonough at (302) 651-6792 or [mcdonoug@asel.udel.edu](mailto:mcdonoug@asel.udel.edu).

## **Web Accessibility Contest Announced**

The Mid-Atlantic Consortium on Accessible Information Technology in Education announces its first annual Website Accessibility Contest. K-12 schools in Delaware, District of Columbia, Maryland, Virginia, West Virginia, and Pennsylvania are invited to submit their Websites for consideration. Entries must be submitted by February 28, 2004, using the form available at <http://adainfo.org/IT/home.htm>. The organizers of the contest hope it will increase interest among school districts in improving the accessibility of their Website.

Entrants can submit their Website in one of the following categories:

- elementary school (student developed)
- middle school (student developed)
- high school (student developed)
- non-student developed (including district wide).

The sites will be judged during the month of March, with the winners to be announced in April, 2004. The top site in each category will be awarded a digital camera; second place will receive Web authoring software, and third place will be given Dreamweaver.

Judging will be based on the World Wide Web Consortium (W3C) Priority 1 Checkpoints and Section 508 Web Standards. All entries must include the following components:

- at least three graphics (photographs or others)
- a table
- at least three hypertext links to pages created by teams (not links to external pages)
- navigational tools.

For more information on the Web Accessibility Contest, please visit <http://adainfo.org/IT/events.htm> or contact the DATI.

## **Coming Soon!**

An updated and revamped DATI Website. Enhancements will include a searchable ATRC AT inventory, funding guide, database of providers, and much more.

## **Freedom Center Named Delaware's ADA Resource Center**

On October 1, 2003, the Freedom Center announced that it has been named Delaware's resource center on the Americans with Disabilities Act (ADA). The Freedom Center, a consumer-driven organization, is committed to promoting independent living options for individuals with disabilities.

New services and support offered by the Freedom Center will include:

- an available ADA specialist
- technical assistance to ensure ADA compliance
- training programs
- a resource library
- a newsletter.

These new services will be funded through a grant from the ADA and IT Information Center for the Mid-Atlantic Region. The Freedom Center will be one of only 10 regional centers funded by the National

Institute on Disability Rehabilitation and Research (NIDRR), the US Department of Education, grant #H133D010212.

#### Contact Information

Freedom Center for Independent Living  
3 East Main Street  
Middletown, DE 19709  
(302) 376-4399 or  
(866) OUR-RIGHTS  
(302) 376-4397 (TTY)  
Freedomcil@yahoo.com

### **Home Modifications: Essential but Difficult to Fund**

*Laura J. Waterland, Senior Staff Attorney Disabilities Law Program*

It has been nearly four years since the Supreme Court affirmed in *Olmstead* that states have an obligation under the Americans with Disabilities Act to provide services for people with disabilities in the least restrictive environment. Many states have at least one of their feet on the community integration bandwagon, although many gaps in the service continuum remain.

States have conducted assessments of their service systems to identify barriers to community living for people with disabilities. One barrier that has been repeatedly identified, but that no one seems to want to "own," is the lack of accessible, affordable housing. Finding an apartment or house in which a person with disabilities can actually get in the door, much less function inside, remains a major hurdle to community integration. This lack of housing makes it difficult for people to move from institutions when they are ready, and makes it hard for people in the community to stay there when they find that they need accessible housing.

Yet, in many cases, relatively minor modifications can make an "inaccessible" house or apartment livable, if not "accessible." Home modifications are alterations that make a living space more livable. They may include minor items, such as shower grab bars, handrails, and lever handles; more expensive alterations may involve widening doorways, installing ramps, or removing high pile carpeting so that someone in a wheelchair can use the unit. Some individuals may

need specially-designed appliances such as stoves and refrigerators, environmental control systems, or accessible shower units.

Many modifications are inexpensive. For example, lowering a peep hole on a door for a person using a wheelchair can cost around \$50. Installing remote control devices on light switches costs as little as \$100. Grab bars cost approximately \$25; add the labor and the cost is still under \$100. A portable ramp costs around \$300.

With these modifications, a fundamental barrier to community living is removed. The problem, as always, is money. Who pays for these modifications? Private funds, of course, are always an option, but what if the person has limited resources?

### **Make the landlord modify the unit (or at least let you do it)**

Unfortunately, in most rental situations, a landlord cannot be made to modify a unit.<sup>1</sup> Generally, if a unit in a multi-family dwelling has been built or substantially renovated since 1991, and if it is a first floor unit or on an upper floor served by an elevator, the unit should contain features of accessible design mandated by the Fair Housing Amendments Act and Section 504 of the Rehabilitation Act. Local building codes now contain similar requirements. If you find yourself in such a unit and it has not been properly designed, you would be within your rights to ask the owner or landlord to make accessibility modifications. If the request is refused, your only real recourse would be to sue, and that can take time that you don't have.

State and federal fair housing laws do require landlords to allow you to make modifications to make a unit accessible at your expense. The landlord can, within reason, express an opinion on the type of modifications to be made, and can require you to return the unit to its original state **at your expense** at the end of the tenancy. Refusal by a landlord to allow a tenant to make modifications is actionable discriminatory conduct.

---

<sup>1</sup> If you own your home, you may still need to get approval from a homeowners' association and permits from local authorities, depending on the work being done. State and federal fair housing laws require homeowners and condominium associations to reasonably accommodate owners with disabilities, and to waive unreasonable restrictions that prevent an owner from making necessary changes to their properties.

If you live in housing funded by the federal government<sup>2</sup>, in some circumstances you can ask the housing authority or project owner to pay for needed modifications as a reasonable accommodation under Section 504 of the Rehabilitation Act. The housing authority or project owner, as a "federally assisted housing provider," is required to bear costs which do not amount to an undue financial and administrative burden.

### **Ask Delaware Medicaid to pay for modifications**

Traditional Medicaid, and many private insurers, won't pay for home modifications because they are perceived as being a "non-medical" service. Most states, including Delaware, have taken advantage of the Medicaid Home and Community Based Services Waiver (HCBW) Program authorized by Congress.<sup>3</sup> Waiver programs allow states to offer traditionally non-medical services (i.e., home or environmental modifications, case management, homemaker services, transportation, habilitation, and respite care) to people in the community who would otherwise qualify for institutional care, in exchange for the federal government suspending some of its requirements for Medicaid programs, such as statewideness and comparability. Many individuals with disabilities who are transitioning out of nursing homes use the home and community based waivers to facilitate community placement. Without the waiver, living in the community would be impossible for many.

"Environmental accessibility adaptations" is actually a "tick off" item on the standard HCBW application form, and is clearly contemplated by Centers for Medicare and Medicaid (CMS) as an appropriate service in waiver programs. According to the "Overview of State Home and Community Based Services Waivers" on the CMS website ([www.cms.gov/medicaid/1915c/agedphysdis.pdf](http://www.cms.gov/medicaid/1915c/agedphysdis.pdf)), the **vast majority** of states that participate in the waiver provide this benefit. Delaware does not, and this is extremely unfortunate. **Delaware is**

---

<sup>2</sup> This would include public housing, federal low income tax credit housing, and project-based assistance, but not landlords participating in the Section 8 Voucher Program.

<sup>3</sup> One advantage of using Medicaid to fund home modifications is that Medicaid is a partially federally-funded program, with the state only paying 50 percent of the cost.

**one of very few states in the country that have chosen not to include home modifications in their waiver programs.<sup>4</sup>**

Looking to neighboring states, New Jersey, Maryland, and Pennsylvania all provide a home modification benefit as part of their HCBW programs. For example, Maryland provides up to \$5,500 per participant annually for environmental accessibility adaptations and assistive technology. Adaptations include lifts, ramps, visual alarms, widening of doors, grab bars, and many others. Pennsylvania, in several of its waivers, provides up to \$10,000 per Medicaid recipient per site for home modifications.

Smaller states, perhaps more comparable in size to Delaware, also provide funding for modifications through their waivers. For example, Rhode Island pays for "minor home modifications," which include environmental controls, lifts, ramps, and grab bars. Idaho (similar population to Delaware) covers ramps, lifts, modifications of bathrooms and kitchens, and widening of doors. Idaho will pay for permanent modifications for owned residences, and temporary modifications to rental units.

### **Obtain a grant from another state agency or non-profit agency**

The Division of Services for Aging and Physical Disabilities (DSAAPD) has very limited state funding for modifications to permanent residences, and will not pay for modifications to rental properties. There is a \$10,000 lifetime cap for modifications. Although DSAAPD maintains a waiting list, funds are sometimes expended within the first few months of the fiscal year. Contact DSAAPD at (800) 223-9074.

The Delaware Division of Vocational Rehabilitation's Independent Living Program (DVR) has funds to pay for home modifications. As is

---

<sup>4</sup> Delaware's Division of Developmental Disability Services actually removed home modifications from its waiver program. Delaware's Division of Services for Aging and Physical Disabilities (DSAAPD) initially chose to include home modifications in its Acquired Brain Injury Waiver but then changed its mind. If a small, one time expenditure on a home modification can accelerate the transfer of a person from an institution, where the state is paying for all of the person's expenses, to the community and where housing and other costs will be paid for by someone else, how can it be cost-effective or good policy to refuse to pay for these services?

the case with DSAAPD's program, DVR maintains a waiting list and demand far exceeds the funds available. DVR will pay for modifications to rental properties under some circumstances. Individuals must meet the eligibility criteria for the program. Contact DVR at (302) 378-5779.

Delaware-Maryland Paralyzed Veterans (PVA) runs a home modification program. The PVA has an application process and frequently runs out of funds. PVA strongly prefers homeowners for its program and prioritizes modifications for children with disabilities. Contact PVA at (800) 786-2039.

Christmas in April's Rebuilding Together Program operates a volunteer home rehabilitation program, which includes home modifications for low-income homeowners, including those with disabilities. Contact Christmas in April at (302) 655-5488.

### **Borrow the money**

Several government agencies and local governments operate low interest loan programs that make funds available for renovations and home modifications. Federally, these include the Veterans Administration's Specially Adapted Housing Program ([www.homeloans.va.gov/sah.htm](http://www.homeloans.va.gov/sah.htm)) and the Home Repair and Loan Program of USDA Rural Development ([www.rurdev.isda.gov/de/housing.htm/](http://www.rurdev.isda.gov/de/housing.htm/)). Contact the USDA Rural Development at (302) 697-4353.

The Delaware State Housing Authority administers federal Community Development Block Grants under its Housing Rehabilitation Loan Program. They provide low interest (3 percent) loans to low income Delawareans who own their homes, or landlords who rent to low income tenants. The loans must be used to rehabilitate homes or make them accessible. This program is not available to tenants. Visit [www2.state.de.us/dsha/hrlp.htm](http://www2.state.de.us/dsha/hrlp.htm) or call (302) 577-5001 for more information.

The City of Wilmington administers the Community Development Neighborhood Rehabilitation Program, which provides home improvement loans for low to moderate income homeowners with disabilities to rehabilitate their properties ([www.ci.wilmington.de.us/departments/housing.htm](http://www.ci.wilmington.de.us/departments/housing.htm)). Contact them at (302) 576-3000. Likewise, New Castle County Department of Community Affairs administers a Housing Rehabilitation Program that

includes grants for emergency repairs and a low interest loan program for homeowners to make major renovations. For more information call (302) 395-5614. As always seems to be the case, money runs out quickly and the County maintains waiting lists. Dover's program is through the Department of Community Development at (302) 736-7175.

This patchwork of limited resources for home modifications is both inefficient and insufficient. Providing an opportunity for livable, affordable shelter for people with disabilities is a fundamental element of successful *Olmstead* compliance and the development of viable community living options. Delaware would be wise to rethink its reliance on this hodgepodge approach to providing resources for home modifications and begin by adding a home modification benefit within its home and community-based waiver programs.

## **DATI Employs Language Line Services**

With the number of non-English speaking residents growing in Delaware, the DATI has employed the use of Language Line Services. These services provide translation assistance to residents who do not speak English and wish to contact the DATI. There is no cost to our customers for these services.

Along with translating telephone conversations, the Language Line also provides document translation. This will allow the DATI to provide assistance to those who wish to contact the DATI via email and fax.



For more information or to employ the services of DATI through the Language Line, contact DATI.

## DATI Sponsors Upcoming IntelliTalk II Workshop



*Imagery provided courtesy of IntelliTools® , Inc.*

### *IntelliTalk II*® Workshops

**When:** March 25-26, 2004, 8:30 a.m.-3:30 p.m.

**Where:** Delaware Technical and Community College, Terry Campus, Room 408

**Cost:** Free for Delaware residents, with lunch on your own. Non-Delaware participants will be charged \$150 per session. The registration cut-off date is March 11, 2004.

The two-day training breaks down as follows:

**Day One** explores the *IntelliTalk II* features through pre-designed activities available on the IntelliShare CD.

**Day Two** teaches the use of the advanced features of *IntelliTalk II* to add text, edit and move palettes, add advanced actions to palette items, build screen breaks using Page View, and more. Participants will also create their own activity, set scanning options, and generate an overlay for alternative access. **This session assumes a working knowledge of *IntelliTalk II* or completion of the Day One session.**

## ***IntelliTalk II Workshop Registration Form***

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Daytime Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

I am a:

\_\_\_\_ consumer    \_\_\_\_ parent/family member    \_\_\_\_ service provider

Please check the sessions you will attend:

\_\_ Day One, March 25, 2004, 8:30 a.m. - 3:30 p.m.

\_\_ Day Two, March 26, 2004, 8:30 a.m. - 3:30 p.m.

Check any accessibility accommodations needed:

Brailled material \_\_\_\_ Large print material \_\_\_\_ Assistive listening \_\_\_\_

Audiotaped material \_\_\_\_

Sign language interpreter (ASL or tactile) \_\_\_\_

Other (specify) \_\_\_\_\_

**Note:** We can only guarantee accessibility accommodation if we receive notice at least 2 weeks prior to the training session.

**To register, detach form and return to DATI, duPont Hospital for Children, P.O. Box 269, Wilmington, DE 19899. DE residents may fax this form to (302) 651-6793. Out-of-state attendees may pay registration fees using a check or money order made payable to the University of Delaware (EIN 51-6000297). Please call (800) 870-DATI, (302) 651-6790 or (302) 651-6794 (TDD) with questions.**

## **Vehicle Modifications Provide Independence**

People love the flexibility of personal motor vehicles to travel where and when they want without having to schedule in advance or wait at bus stops. Persons with disabilities need the flexibility of motor vehicle transportation as much as anyone else; however, they may require vehicle modifications to accommodate their needs. Today, there are a number of adaptive equipment selections designed for vehicle access, steering, secondary controls, brake/accelerator systems, safety, and driver position needs.

For wheelchair and scooter users, lifts can be installed that raise the driver and wheelchair or scooter together, or just the mobility aid alone so that it can be stored during trips. Adjustable power seats that swivel allow occupants comfortable entry and exit and facilitate wheelchair transfers. Strategically located handles and grab bars provide additional positioning assistance. Automatic door openers, power locks and power window controls can compensate for fine-motor difficulties.

For individuals in wheelchairs who prefer to remain in their wheelchairs while driving or riding, tie-down devices are required to keep the chair securely in place while the vehicle is in motion. Some tie-downs are manually operated, using belts to hook the wheelchair frame to a floor-mounted track. There are also power lockdown devices that allow the individual in a wheelchair to drive directly over an automatic latching mechanism which grabs the lower part of the chair frame and secures it in place.

For those with limited upper body or head movement, wide-angle and spotting mirrors can be used to increase range of vision. They can be located both inside and outside the vehicle. As well, customized seat cushioning, while used primarily for support and stability, can also raise the occupant up to provide an improved field of view.

Adaptive devices are also available to assist drivers with hearing loss. For example, enhanced turn signal reminders blink and sound an increasingly louder tone until the signal is turned off. A siren detector will flash red lights whenever its microphone detects an approaching emergency vehicle siren and automatically stops when the siren is out of the microphone's range. The decision to install special equipment and the task of identifying the adaptive equipment

needs may be made by a trained evaluator, a vehicle dealer, or the consumer.

*Reprinted with permission from the August 2003 Assistive Technology Key (Vol. 8, No. 4.), published by the North Dakota Interagency Program for Assistive Technology.*

## **ECUs Put Control At Your Fingertips**

*Dan Fendler, AT Specialist, Sussex County ATRC*

After leaving work tonight, I will have a short drive home. As I approach my house, I will aim a small transmitter and press a button. The door to my garage will open and I will be able to drive right in, avoiding any nasty weather. For me, this is a convenience. If I did not have the garage door opener, I would be able to survive. For some folks, having the ability to automate the control of their living environment is a convenience; for others, it is a necessity. In this article, I will cover some of the technology available to help make a home (or office) more accessible. There are dozens of options available that may truly help—many at a reasonable cost.

### **Door locks may be barriers**

Assuming that an individual is able to get to the front door, one of the first barriers that is encountered is the front door lock. Many people are unable to manipulate keys to unlock a door. I have spoken to a number of individuals who do not lock their doors because it is too difficult for them to use a traditional key. There are many different types of commercial door locks available that eliminate the need for traditional keys.

**SmartHome**, an Internet based retailer, has an **Infrared (IR) Remote-Controlled Deadbolt** (Figure 1) available for under \$80. It locks and unlocks with an infrared remote control and will replace an existing deadbolt without drilling. There is no special wiring required, but it does require batteries.



*Figure 1*

There are also dozens of push button locks available. These locks eliminate the need for keys and may be easier for some individuals to manipulate.

### **Lighting**

Another important thing to consider at the entrance to a home is lighting. One of the simplest and least expensive ways to light a dark entryway is a socket light sensor. This simple device screws into a light-bulb base and includes a photoelectric eye that will detect the amount of light present. The device will turn the lights on at dusk and turn them off at dawn. This device may be purchased at the local hardware store. No special tools are required for installation. **Lowe's** has socket light sensors for under \$8.

Motion lighting is also an option. Motion sensors detect movement and may be used to turn lights on when someone approaches. The lights can be programmed to remain on for a set duration (e.g., one, five, or ten minutes). The type of motion lighting that I have seen most frequently uses dual floodlights with an integrated motion detector. There are a number of other types of lighting products available, including decorative sconce lights. Check the local hardware store; there are several different types of motion lights available for under \$20.

### **Alternatives to wall switches**

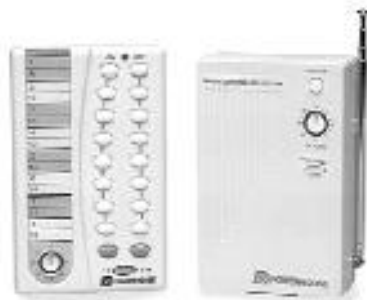
There are a number of relatively low cost alternatives to traditional wall switches, which may present a barrier to some individuals. One is a motion activated light control. When installed, the control is able to turn the lights on in a room whenever it detects movement. **Home Depot** has these controls for under \$20.

Also available are programmable wall switches that allow an individual to control the time of day when a switch controlled light will turn on and off.

## **X10 your way to an automated environment**

**X10** is a communication "language" that works on a home's existing wiring system. An **X10** system can control up to 256 lights or appliances with a single wireless remote. The technology is powerful, flexible, and time tested—it has been around for over 20 years. Many of the system's components are relatively inexpensive. Setting up a basic system can provide an individual with control of lights, appliances, heating system, and more.

Here's an example: to control a lamp in the living room from the bedroom, plug a lamp module into a wall outlet near the living room lamp, then plug the lamp into it. Next, plug a controller (Figure 2) into a wall outlet in the bedroom. The controller in the bedroom will send signals through the power lines to the lamp module and turn on the lamp. A wireless remote control unit is available to allow control from anywhere within the home. From this basic setup, more **X10** products may be added to control more electronic devices in different rooms.



*Figure 2*

For the most part, **X10** products work without a hitch. However, since the products communicate using a home's electrical wires, the devices may have difficulties in two situations. The first may occur when there is an appliance running that generates "noise." Appliances that may cause problems include those with motors (e.g., dryer, treadmill, vacuum cleaner) or advanced electronics (e.g., switching power supplies on some laptops, some big screen TVs). Noise filters are available to eliminate this problem. The second situation in which an **X10** encounters difficulties is when the transmitter is on one "side" (phase) of your home's electrical wiring and the receiver is on the other "side." In some installations, a simple plug-in phase coupler may be needed to solve this problem.

**SmartHome** ([www.smarthome.com](http://www.smarthome.com)) is a great place to get ideas—they have dozens of **X10** products. You can also find a number of **X10** devices at your local Radio Shack.

### **Automatic door openers**

Doors also present a significant barrier to many people. However, there are a number of affordable door openers available.

Take the **Automatic Sliding Patio Door System** sold by **SmartHome**, for example. It is a remote controlled system that will open and close a sliding door at the touch of a button. The retail price (not including installation) is \$289.

Systems are also available to open hinged doors. Prices on the hinged operators start at \$600.

### **Parting thoughts**

As I researched the type of automated controls readily available, I discovered there are literally hundreds of options. What was covered in this article just scratches the surface. The information presented is intended to increase awareness of some available options. If you have a specific question or need, please give your local ATRC a call. We are here to help.

The DATI makes no claims about any of the retailers mentioned above. We do not endorse any vendor over another. Local resources were included whenever possible.

## **The Assistive Technology Bargain Basement**

*Marvin Williams, AT Specialist Kent County ATRC*

Seasons greetings everyone, and welcome to the holiday edition of the AT Bargain Basement. For those of you who are new to this column, this is where I, your humble AT Specialist, give you the info on some great assistive technology that is available for under \$100 and is usually found in local area stores.

During my flight to Minnesota for this year's Closing the Gap, I found a great AT catalog, provided by the airline. It was **Sky Mall**. **Sky Mall** is a catalog that features products from stores such as **The Sharper Image**, **Smart Home**, and **Impressions**. You can purchase products through **Sky Mall** or use the catalog as a starting point to

find the products at the stores that distribute them. For example, I found the second product I am going to discuss in Sky Mall and then went to **The Sharper Image** Website for more details on the product. In doing so, I found another variation on the product that was not listed in **Sky Mall**.

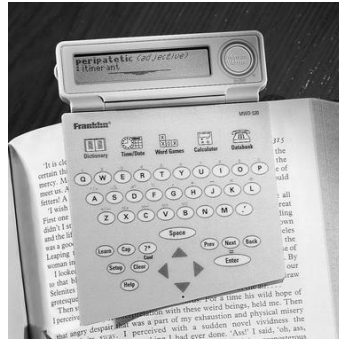


Figure 1

My first product is the **PageMark Electronic Dictionary** (Figure 1). This device is a compact electronic dictionary that clips to a book. It is great for anyone who would benefit from a dictionary, but does not have the space available to use a standard pocket dictionary. The **PageMark** also features a clock, calculator, Rolodex data organizer, and crossword puzzle solver. With a price tag of \$39.95, it is certainly competitive with other pocket electronic dictionaries. The device is available from **The Sharper Image** and **Sky Mall**. While there are no **Sharper Image** stores in Delaware, there are stores in Baltimore; Annapolis; Camden, New Jersey; and Philadelphia. You can also order via their catalog or Website.

My next product is actually three products. They are "**Talking Picture**" **Photo Albums**. There are three sizes of albums: 5-, 24-, and 36-photo carriers. Each album allows you to record a short message for every photo. The length of the messages ranges from 12 seconds per picture for the 36-photo album to 15 seconds per photo for the five-photo album. These albums can be used as simple communication devices or as devices that provide both visual and auditory cues to complete tasks. For example, loading a dishwasher could be broken down into the necessary steps an individual is able to comprehend and successfully perform. Once these steps are defined, pictures of each step can be taken and slipped in order into the photo sleeves. Messages for each photo can then be recorded, making essentially a talking instruction manual. These albums are

available through **Sky Mall** and **The Sharper Image**. The prices range from \$19.95 for the five-photo album to \$39.95 for the 36-photo album.



*Figure 2*

The next two items are from one of my favorite sources for AT, Radio **Shack**. The first is the **LifeWise Pillbox Timer** (Figure 2). It comes complete with a flashing LED and four count-down style alarms that serve as great reminders. The unit is compact enough to fit in a purse and retails for \$14.99. However, I have seen it on sale for \$9.99.



*Figure 3*

The second **Radio Shack** find is the **Gossip Gismo Sound Amplifier** (Figure 3). It features headphones for the user, and a compact base unit which acts as the microphone/receiver. The extremely compact unit is only \$9.99. However, as the base unit acts as the microphone, it will amplify everything around it. While this is nice for watching TV or conversation in small groups, it is not a replacement for a hearing aid or other assistive listening device. The **Gossip Gismo** is a bargain for anyone who may need a little amplification. As with any device for the hearing impaired, make sure

you have your hearing checked by a licensed professional before pursuing this or any assistive listening device.

My next product can be purchased or made, depending on how handy you are. It is the **Seat Saver** (Figure 4) from **Sky Mall and Improvements**. This is a seat cushion rigidizer for a chair, sofa, or love seat. The rigidizer prevents a cushion from swallowing up the individual sitting on it. It provides a firm base of support, making it easier to get up, and it may also reduce back pain in individuals who cannot tolerate sitting on something that is "too soft." The sofa-sized **Seat Saver** is priced at \$14.99. However, if you are handy and can get some ABS plastic, you can make your own seat rigidizer. I recommend ABS plastic, as it is fairly harmless and easy to clean. If you are interested in making your own rigidizer and have the tools and skill to do so, please contact me for any additional tips or recommendations.



*Figure 4*

Those using a communication device with X10 transmission capability can use the device as the master remote control unit for the convenient **Plug 'n Power Environmental Control System**. The three piece system is available from **Radio Shack** for \$29.99. However, I have seen it on sale for \$19.99. The system includes a master remote, lamp dimmer and control module, and an appliance module. Additional lamp and appliance modules may be purchased for \$11.59 each. Make sure to check the power rating of all appliances to that of the module. Contact the manufacturer of the device and the control system before connecting them if there are safety concerns. It is better to be safe than sorry.

Well, that does it for this installment of the Bargain Basement. If you find any bargains you think others might benefit from, please pass them along to me and I will spread the word. If you want to

check out any of the bargains listed here, you can find them on the Internet at **Radio Shack's** Website, [www.radioshack.com](http://www.radioshack.com), **Sky Mall's** Website, [www.skymall.com](http://www.skymall.com), **The Sharper Image's** Website, [www.sharperimage.com](http://www.sharperimage.com), and **Improvement's** Website, [www.improvementscatalog.com](http://www.improvementscatalog.com). Join me next time and I will have more bargains for you.

## Visual Assistant Keeps Users on Task

*Eden Melmed, AT Specialist New Castle County ATRC*

**Visual Assistant** by AbleLink Technologies is a customizable, multimedia software application that runs on Windows CE palmtop computers (Figure 1). It was designed to help individuals with mental retardation and other cognitive impairments learn and maintain skills in a self-directed format. The software may be used in a variety of settings including home, school, and workplace.



*Figure 1*

**Visual Assistant** allows caregivers to set up instructional tasks by recording instructions and incorporating pictures of each step. Once created, the multi-modal task reminders provide both visual and auditory reminders of the job the user must complete. There are three modes to play back messages and view the pictures for each step.

The **Play Only** mode requires the user to press a single on-screen button to cycle through the steps in a task (Figure 2). The **Play/Done** mode provides the option to press a Done button to indicate completion of a step. These modes are useful when a sequence of steps needs to be repeated frequently, such as in an assembly position.



Figure 2

The **To Do List** mode is similar to a written “to do” list and is useful in settings where steps in a task do not need to be performed sequentially. In this mode, after a message plays the user presses the Done button to indicate that the step has been completed; if the step is not completed, the user presses the To Do button again to hear the next instruction. All steps marked as "Done" are removed from the set, while those not completed are replayed until the user indicates they have been finished. When the final step is completed, a feedback message is played to confirm that the user has completed all steps.

The **Visual Assistant** is a powerful support for independence by providing a portable training and reminder system. It is available as a complete system that includes a Pocket PC, an integrated digital camera, and a 64 MB memory card (\$1,499). For more information about **Visual Assistant**, please visit the website at [www.ablelinktech.com](http://www.ablelinktech.com) or contact your local ATRC.

### **To Contact DATI’s Central Site office or the ATRC closest to you, call 1-800-870-DATI**

Press:

#1 for English or

#2 for Spanish,

Then press:

#3 for the Central Site office

#4 for the New Castle County ATRC

#5 for the Kent County ATRC

#6 for the Sussex County ATRC

TDD callers: Do not press #1 or #2 and your call will be answered on a TDD line at the Central Site office.

## **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:

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 four weeks.

A maximum of four devices may be borrowed 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. Equipment must also remain in Delaware throughout the loan period.

## **Please Keep Us Posted**

Has your address changed? Are you receiving duplicates? Would you prefer to receive the newsletter via email?

If the address we have for you is incorrect, please type or print your correct address and forward it to DATI along with the current mailing label. If you no longer wish to receive this newsletter, please contact our office or send us your mailing label with “discontinue” written next to the label. If you would like the



newsletter sent directly to your inbox every quarter, please contact us to provide your mailing and email addresses. Thanks for your cooperation.

## **DATI Resource Centers Throughout the State...**

### **Delaware Assistive Technology Initiative**

Center for Applied Science & Engineering

University of Delaware/Alfred I. duPont Hospital for Children

PO Box 269

Wilmington, DE 19899-0269

1-800-870-DATI

### **New Castle County ATRC**

Easter Seals of Delaware and Maryland's Eastern Shore

61 Corporate Circle, Corporate Commons

New Castle, DE 19720-2405

(302) 328-ATRC; (302) 328-2905 (TDD)

### **Kent County ATRC**

Easter Seals of Delaware and Maryland's Eastern Shore

100 Enterprise Place, Suite One

Dover, DE 19904-8200

(302) 739-6885; (302) 739-6886 (TDD)

### **Sussex County ATRC**

Easter Seals of Delaware and Maryland's Eastern Shore

This center is in the process of relocating. Staff and AT equipment can still be accessed by appointment.

(302) 856-7946; (302) 856-6714 (voice or TDD)

The AT Messenger is published quarterly by the Delaware Assistive Technology Initiative (DATI).

Delaware Assistive Technology Initiative

Center for Applied Science & Engineering

University of Delaware/Alfred I. duPont Hospital for Children

P.O. Box 269, 1600 Rockland Road

Wilmington, DE 19899-0269

Phone: (800)870-DATI or (302)651-6790

TDD: (302)651-6794; FAX: (302)651-6793

E-mail: [dati@asel.udel.edu](mailto:dati@asel.udel.edu); URL: <http://www.asel.udel.edu/dati/>

Beth Mineo Mollica, Director

Thomas McDonough, Funding & Policy Specialist

Sonja Rathel, Project Coordinator

Kia Bergman, Information and Outreach Coordinator

Carmen Taylor-Acevedo, Staff Assistant

Dan Fendler, ATRC Coordinator

DATI is a joint project of the Center for Applied Science & Engineering at the University of Delaware and the Alfred I. duPont Hospital for Children.

DATI is funded by the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education, Grant #H224A10005. This publication does not necessarily reflect the position or policy of NIDRR/ED, and no official endorsement of the materials should be inferred.

The University of Delaware is an equal opportunity employer and prohibits discrimination on the basis of race, color, creed, age, national origin, marital status or disability in conformity with applicable laws.