



# The AT Messenger

bringing technology to you

Delaware Assistive Technology Initiative (DATI) • Volume 12, No. 2 • Spring 2004

## DATI Launches New Website, [www.dati.org](http://www.dati.org)

Newsletter to follow in the Website's electronic footsteps with email availability

Over two years in development, Delaware's most comprehensive AT Website "went live" on March 2. Found at [www.dati.org](http://www.dati.org), the site has something for everyone, from AT novices to those searching for a specific device, provider, or funding tip.

The most exciting part of [www.dati.org](http://www.dati.org) is that functionality of the site is put into the hands of its visitors. Individuals will have the luxury of personalizing the Website to their own needs. For example, a woman in Sussex County, looking to purchase an adult-sized power wheelchair with right hand controls, will be able to find out immediately if there is a used chair for sale anywhere in Delaware. At the same time, a special education teacher from the Red Clay School District will be able to locate information on a Universal Design for Learning conference scheduled for next month in Dover.

A section of the site that will excite many *AT Messenger* readers is the online version of the

Delaware Recycles AT program. The online AT Exchange provides an AT classified section for people looking to acquire, sell, or trade gently used AT equipment. Via the Website, users may post an item for sale and view items that are available.

**Focus on  
Recreation  
and Leisure**

Another facet of this AT classified section allows individuals, in search of a specific device, to post their needs.

The AT Funding segment of the Website provides visitors with details about AT funding through federal and state agencies. Information on non-profit groups and community organizations that offer AT funding assistance is also outlined in this segment of the site.

Making the site even more user friendly, the AT Provider section helps users find an AT professional to assist them with evaluation of their AT needs and selection and purchase of appropriate products. Search categories for AT providers include county served as well as services provided. Practitioners are able to add their information to the DATI database, as well as update their current listing.

New to the DATI Website is an events calendar. Visitors to the site are now able to search listed events by date or keyword. Information such as online registration, available CEUs, and event location will be included (when available) with listed events. Users are invited to submit upcoming workshops, conferences, exhibits, and public awareness events for inclusion on the DATI calendar at [www.dati.org/events/submit\\_event.php](http://www.dati.org/events/submit_event.php).

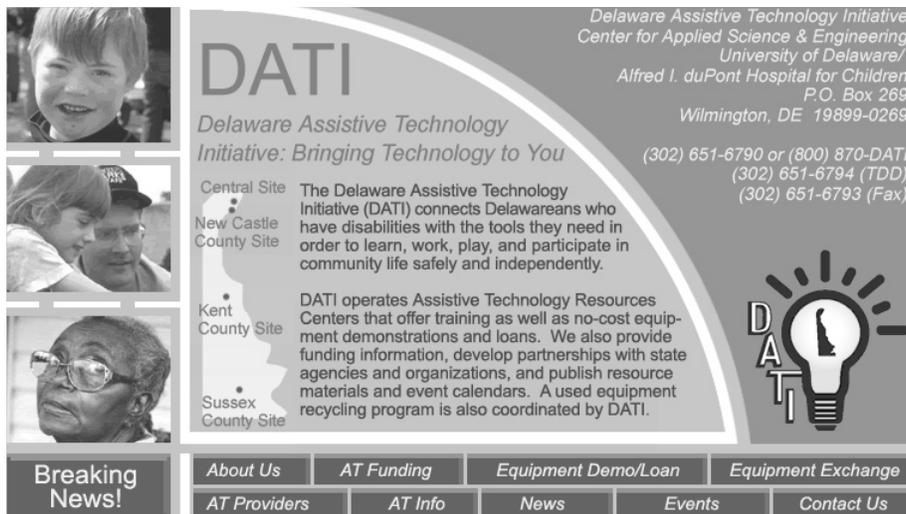
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# DATI Launches New Website (continued)

"Funding from the Real Choice Systems Change grant enabled us to build the Website we had always dreamed of," said Beth Mineo Mollica, Director of the DATI. "But, we are not finished. We intend to add several more features over the next year."



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## DATI

Delaware Assistive Technology Initiative: Bringing Technology to You

Central Site The Delaware Assistive Technology Initiative (DATI) connects Delawareans who have disabilities with the tools they need in order to learn, work, play, and participate in community life safely and independently.

New Castle County Site

Kent County Site

Sussex County Site

DATI operates Assistive Technology Resources Centers that offer training as well as no-cost equipment demonstrations and loans. We also provide funding information, develop partnerships with state agencies and organizations, and publish resource materials and event calendars. A used equipment recycling program is also coordinated by DATI.

Breaking News!

About Us AT Funding Equipment Demo/Loan Equipment Exchange  
AT Providers AT Info News Events Contact Us

The next module to come online will be a statewide inventory of AT items available for loan and demonstration at the local ATRCs. Scheduled for a spring release, this feature will provide visitors with a photo and a description of all devices available for demo or loan. Visitors can then email their local ATRC to get more information or reserve the item for trial use.

Also in the works for [www.dati.org](http://www.dati.org) are email alerts sent directly to an interested visitor's inbox. The DATI's Breaking News Alert, which is now available, provides up-to-date information on all aspects

of assistive technology, while the Exchange Alert will send an email when a specific piece of equipment is posted to the AT Exchange.

Also going high-tech is the DATI's quarterly newsletter, *The AT Messenger*. To make the newsletter more

accessible and to help contain costs, it will now be available on the Web in pdf, large print, plain text, and HTML formats. Delaware residents will continue to have the option of receiving a print or alternate format version of the newsletter. To continue to receive the newsletter, return the completed postage-paid card sent with this newsletter or visit [www.dati.org/subscriptions/index.html](http://www.dati.org/subscriptions/index.html). If we do not hear from you, this will be your final issue of *The AT Messenger*.

As always, there is no subscription fee for Delaware residents. ■

## Congress Considers Future of State AT Projects

There are indications from Capitol Hill that a bill providing continued federal support for the national AT infrastructure may be introduced in the Senate as early as next month. The proposed legislation reflects considerable efforts by Republican and Democratic Senators and their staff, the disability community, and others who are committed to improved AT access.

In late 2003 and early 2004, the Senate Subcommittee on Health, Education, Labor, and Pensions (HELP) held a series of meetings with AT stakeholders to discuss current barriers to AT access/use and the need for continuation of state AT funding. Among those providing testimony were Cynthia Tehan, Vice President of Business Development for Easter Seals of Delaware and Maryland's Eastern Shore, and Beth Mineo Mollica, Director of the DATI.

Congress now needs to hear from you. A two-prong advocacy effort is directed at 1) extending funding for the state AT projects for another year and 2) passing new legislation that will make state funding more stable and sufficient. Visit the new Website, [www.dati.org](http://www.dati.org), and click on Breaking News to find out what you can do to help, or call the DATI Central Site for an update. ■

# Housing Workshop Informs and Energizes

*Beth Mineo Mollica*  
DATI Director

Despite the bitter cold, an enthusiastic crowd turned out on January 23 for the Universal Design in Housing workshop sponsored by DATI. Dick Duncan, Training Coordinator at the Center for Universal Design at North Carolina State University, provided an overview of universal home design features, products, and home building plans in the morning, and then shared his expertise with the group in a lively question-and-answer session in the afternoon. Attendees included consumers, builders, contractors, architects, therapists, AT specialists, state social service and housing agency representatives, and many advocates concerned with the limited stock of accessible housing in Delaware.

It appears that Mr. Duncan's message reached the right people at the right time, because during lunch,

groups of attendees hatched some mighty big plans for bringing the universal design message to all corners of Delaware. Discussion topics ranged from awareness campaigns to the actual construction of homes embodying universal design principles. At press time, we are pleased to report that a coalition of agencies, organizations, and individuals has formed to support the construction of a universally-designed home in Sussex County. Steve Tull, a Seaford builder, will be instrumental in making this vision a reality. Another universally-designed home built by Mr. Tull is the subject of a new video, *Accessible Housing*, produced by Mark Snow, and available from the Delaware Developmental Disabilities Council. For more information, contact Al Rose at (302) 739-3623 or [al.rose@state.de.us](mailto:al.rose@state.de.us). To add your name to the growing roster of those with interest or expertise in universal/accessible home design, please contact the DATI Central Site. ■

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## Help! I've Got Pac-Man Fever

*Marvin Williams, AT Specialist*  
Kent County ATRC

Okay, I admit it. I enjoy video games, and I am not alone. In 2003, according to NPD Group, the leading marketing information provider, the console, portable, and PC game industry made a reported \$11.2 billion in sales. I know I was not responsible for all of those sales! Millions of people around the world enjoy playing video games. The games provide a means of interactive entertainment that can rival some movies. Yet, physical or sensory limitations may prevent some individuals from playing. The controllers that most console and PC games use can be difficult for those with limited dexterity to manipulate. Video games may also limit those with visual impairments, as the games usually rely heavily on the player being able to see and interact with actions or events on the screen. However, there are modifications and adaptations that may make video games more accessible.

I first learned of Ken Yankelevitz and **KY Enter-**

**prises (KYE)**, [www.quadcontrol.com](http://www.quadcontrol.com), when I contacted **Sony** regarding an adapted controller for their **PlayStation®** video game system. **Sony** told me they did not have any immediate plans to pursue adapted video game controllers, but I might want to contact **KYE** for assistance. Ken Yankelevitz is the owner of **KYE**, a company that makes adapted video game controllers. He was an aerospace engineer for ten years prior to starting the company in 1981 when **Atari®** referred him to a teenager with quadriplegia who wanted to play video games again.

"He was depressed and his family and church were searching for something to spark his interest in living after his accident," Ken said.

After the **Atari** project, Ken was asked to help one of the foremost rehabilitation hospitals in the country, Rancho Los Amigos National Rehabilitation Center in Downey, CA.

"[That's] where I met several rehab specialists," Ken stated. It was also there that he met Kirk Kil-

*continued on page 4*

## Help! I've Got Pac-Man Fever (continued)

gour, a former collegiate athlete and quadriplegic.

"[Kirk] had been trying to get someone to build him a joystick so he could still compete using video games," Ken said. "We got together and designed something that worked for him and the children in the wards in the hospital, and the joy it brought them convinced me to continue this work."

So what do these adapted controllers look like? First, let's start with the standard **PlayStation 2** controller (Figure 1). It includes analog and digital controls for motion as well as four action buttons (a triangle, square, x, and circle) that perform various actions depending on what is called for by the game. There are also four "shoulder buttons" which can perform other actions. The controller also has a second analog joystick control that, in some games, can perform the duties of some action buttons. The controller also has a "start" and a "select" button to pause a game and/or change some of its parameters. That brings the function count to 14 buttons for digital control. Managing that many buttons



Figure 1

requires a lot of manual dexterity.

The flagship for **KYE** is the **PlayStation 2 mouth controller**. The mouth controller has one mouthpiece that operates as a digital joystick only. The

adapted controller does not have an analog joystick that some of the **PlayStation 2** games require. However, **KYE** is currently working on a unit that will allow the player to select either the digital or analog configuration for the mouth controller.

The **KYE** controller's mouthpiece uses a combination of two lip switches and three "sip and puff" switches for a total of six functions. A second "sip and puff" gives the user access to the "start" and "select" functions. That brings the total function control to 14 with the mouth controller—the same as the **PlayStation 2** controller (not counting the analog controls which replace or perform the same functions as the digital controls). The mouth controller comes with a stand that can be mounted to a

table or wheelchair tray. The unit sells for \$175 and can be ordered from **KYE** by visiting their web site, [www.quadcontrol.com](http://www.quadcontrol.com), or by calling them at (562) 433-5244. **KYE** does have adapter cables available for the **Xbox**® and for the **Nintendo**® **GameCube**™ game systems.

**Enabling Devices**, [www.enablingdevices.com](http://www.enablingdevices.com), recently unveiled a new product for the portable gamer.

**The Game Boy**® **Adapter** (Figure 2) allows you to play your **Game Boy Advance SP** using switches.



Figure 2

The nice thing about this device is it is available "off the shelf." It does not require the user to make modifications to the **Game Boy** and, hence, does not affect the **Game Boy** manufacturer's warranty.

The adapter is usable with a variety of switches and retails for \$129.95. Switches and the **Game Boy** are not included. The adapter will **ONLY** work with the **Game Boy Advance SP**. The adapter is not compatible with **Game Boy**, **Game Boy Pocket**, **Game Boy Color**, or **Game Boy Advance**.

Recommended games for use with the adapter include:

- Crash Bandicoot-The Huge Adventure
- Island Xtreme Stunts
- Mario Kart Super Circuit
- Sonic 2 Advance
- Quad Desert Fury

If that all seems like Greek, don't worry, just ask a gamer for translation.

Currently, there are a number of alternative mice and input devices that already exist for the PC. Joysticks (Figure 3 shows a version by **Penny & Giles**), trackballs, touch pads, and styli (pens that act like mice) are readily available for the comput-

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er. There are also switch interface boxes available from **Don Johnston**, [www.donjohnston.com](http://www.donjohnston.com); **Penny & Giles**, [www.penny-gilescp.co.uk](http://www.penny-gilescp.co.uk); and **Tash**, [www.tashinc.com](http://www.tashinc.com).



Figure 3

Each county's ATRC has some joysticks, switch interface boxes, and switches available for short-term loan. Please take advantage of the DATI's free loan program and take home an alternative controller and try it with a favorite PC game. It is important to try the con-

troller with each game because not every game works with every adapted device. Please note that the ATRCs do not have video games available for loan.

Another resource for information on adapting video game controllers is available online at [www.markbb.co.uk](http://www.markbb.co.uk). Mark Bosanquet-Bryant, who is paralyzed from the neck down, has posted information to his site on the adapted controllers he uses. He discusses some of the modifications that have been made to his **PlayStation**, **Xbox**, and **Nintendo 64** controllers that allow him to play hands-free. This site offers a wealth of information to individuals who are handy with a soldering iron and willing to risk ruining a spare controller or two (controllers retail for around \$10-\$30).

**Pin Interactive**, a Swedish company, has developed the first 3D video game for both sighted and visually impaired video gamers. The game, **Terraformers**, uses an audio interface as the basis for the game. Everything in the game's virtual environment is represented by a sound. For example, one mission is to find keys to several doors and open each door with its corresponding key. In the game, each key makes a special sound; this special sound is also made by the corresponding door. There are also a sound compass and sonar that help players navigate movements in the virtual world. **Pin Interactive** released this statement regarding their reasoning for developing this game:

*We have seen that sight disabled children and youth have an interest in the computer games that their seeing friends play. But until now, they haven't been able to partici-*

*pate. With Terraformers, blind and seeing children can play the same game with about the same conditions. No longer do the blind have to sit beside and just listen while their friends play.*

A free, downloadable demonstration version is available at [www.pininteractive.com/terraformers/eng/download.php](http://www.pininteractive.com/terraformers/eng/download.php). The full CD-Rom and license key are available for \$60.

The need for, and benefits of, meaningful recreation go without saying. For some, recreation is reading a book, while others enjoy riding a bike 20 miles, or playing video games. The important thing is that everyone has some means of relaxing and engaging in recreational pursuits.

With the evolution of the Internet and online technologies, a whole new world has been opened to us. Everyone can win a Super Bowl ring, compete in the NBA Finals, hit one out of the park at the World Series, score a hat trick in the Stanley Cup finals, capture the flag at the NASCAR championship, and sink one at the Masters. We can also storm a medieval castle, take part in a Navy SEAL mission, play a game of chess, or rescue Middle Earth from Sauron's orc army with friends from all over the world. The beauty of this virtual world is that a player's limitations can be invisible. All that matters is having fun. Game on! ■

### Alfred I. duPont Hospital for Children Announces Annual AT Conference

The Department of Therapeutic and Rehabilitative Services at the Alfred I. duPont Hospital for Children is sponsoring its Annual Assistive Technology Conference. This year's conference, titled "The Language of Augmentative & Alternative Communication," will take place on Friday, April 23, 2004. Presenters will emphasize the relationship between AAC and Language. The 8 a.m. to 4 p.m. conference will be held at the Alfred I. duPont Hospital for Children. CEUs are available. For additional information on registration and fees, contact Lauren Winnington via phone at (302) 651-5595, via fax at (302) 651-5612, or via email at [lwinning@neumours.org](mailto:lwinning@neumours.org). ■

# Go Fish—With Adaptive Fishing Equipment

Dan Fendler, AT Specialist  
Sussex County ATRC

If you have ever wanted to kick back, relax, and enjoy a day of fishing, but did not think you could because you could not find adapted fishing equipment or tournaments, read on.

While researching this article, I found there are dozens of good resources for adapted fishing equipment. There is one resource, however, that is referred to (repeatedly) on many Websites. That resource is **Access to Recreation**, a catalog vendor based in Newbury Park, California. All of the equipment mentioned in this article may be purchased through **Access to Recreation**. For more information regarding **Access to Recreation**, to order equipment, or to request a catalog, visit them at [www.AccessTR.com](http://www.AccessTR.com) or contact the company at (800) 634-4351.

When searching for adapted fishing equipment, there are a number of modifications to consider in light of physical strengths and limitations. Modifications to consider are the adaptation of the fishing reel or rod to make grasping easier, changes to the way the rod is held to create greater stability, and also adjustments to the rod to make casting easier.

## A limited grip will not limit the fishing experience

People with upper extremity weakness might consider using an electric reel. Electric reels are similar to standard reels except that they are battery powered. A few examples include the **Elec-Tra-Mate**<sup>®</sup> and the **John's Reel**.



Figure 1

The **Elec-Tra-Mate** (Figure 1), by **Electric Fishing Reel Systems, Inc.** is available with a remote waterproof switch and a clip that allows the user to attach it to his/her own power source (an option

for those with power chairs). For more information regarding the **Elec-Tra-Mate** and other adapted fishing devices from **Electric Fishing Reel Systems**, visit the company's Website, [\[mate.com\]\(http://www.elec-tra-mate.com\). The \*\*Elec-Tra-Mate\*\* retails for around \\$360.](http://www.elec-tra-</a></p></div><div data-bbox=)

The **John's Reel** is another power-driven electric fishing reel. This reel works well for single-handed users. It allows the individual to enjoy the full fishing experience, from setting the drag to playing the fish on the line. Because the **John's Reel** is available with several options, persons with higher quadriplegia can also use this device to fish. A remote push button and a remote joystick can be mounted on an armrest or headrest. The joystick can also be mounted on the reel itself. **John's Reel** prices depend upon what options are required. Prices range from \$369-\$389.

The **Strong Arm** rod holder is a device for the fishing enthusiast with limited or no grip. The holder attaches securely to the user's wrist to provide additional support for the rod. With the support provided by the **Strong Arm**, an angler with lower level quadriplegia can cast with no assistance. The **Strong Arm** is available through **Access to Recreation** for \$35.95.

## Stability will keep "the big one" from getting away

There are several options for those seeking greater stability while fishing. One option is a splint. Splints come in various sizes and may be used on either hand. A harness rod holder may be another device to consider. The **Angler's Aid Rod Holder**, a suspender-style harness, holds all four styles of rods and is made for single-handed use. This device may be purchased from **Access to Recreation** for \$69. Attachable pole holders are another device available to provide additional stability. The holder clamps directly onto any type of wheelchair or lawn chair, keeping the pole in place while making the reel easily accessible to the user.

## Casting problems solved

Another problem that anglers may experience is difficulty when casting. Individuals with severe upper extremity disabilities may find **Van's E-Z Cast** the answer to their problems. The device is a mechanical casting tool designed by an individual

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with quadriplegia. It activates with little upper-body movement, and the cast and reel work independently even with no wrist or finger movement. For fully automated fishing, consider coupling the **E-Z Cast** with an electric reel.

## Fishing tournaments

The Paralyzed Veterans Association (PVA) sponsors an annual, nationwide PVA Bass Fishing Tour. A fun and competitive event, the PVA Tour has four tournaments in which a participant can learn new fishing skills or improve old ones. The Team/Open Competition is for those who wish to fish from a boat. It pairs anglers with disabilities with able-bodied boat partners. Those who prefer to stay on dry land may participate in the Bank Competition. Both novice and experienced anglers compete for significant cash and other prizes.

This year's tournament schedule is:

### **Land of Lincoln**

May 21-23, 2004

Rend Lake, Mt. Vernon, IL

### **Potomac River**

June 25-27, 2004

Potomac River, Waldorf, MD

## **Texas Roundup**

September 17-19, 2004

Lake Sam Rayburn, Sam Rayburn, TX

## **Southeastern**

October 8-10, 2004

Clarks Hill Lake, Augusta, GA

For more information regarding the PVA's tournament, contact Phyllis Dale from the Delaware-Maryland PVA at (800) 786-2039.

In North Carolina, the annual Cape Fear Disabled Sportsman's Fishing Tournament is held at the Kure Beach Fishing Pier in Kure Beach, North Carolina. This year's tournament is scheduled for May 21, 2004. The tournament, which is hosted by the Got Em On Live Bait Club, is free for anglers with disabilities. Participants are provided with rods, tackle, bait, refreshments, food, t-shirts, and prizes. For more information, visit <http://got-em-on.com> or call the Kure Beach Pier at (910) 458-5524 for more information.

If you have any questions regarding adaptive fishing equipment or need help finding specific devices, please contact your local ATRC. ■

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# Let's Play! Playground Accessibility and the ADA

*Diana S. Erickson, Esq., Staff Attorney  
Disabilities Law Program<sup>1</sup>*

**T**he Americans with Disabilities Act<sup>2</sup> (ADA) is a broad, remedial statute designed to eliminate discrimination against persons with a disability in all facets of society, including recreational areas such as playgrounds. The ADA mandates that playgrounds be accessible to children with disabilities, who numbered roughly 5.1 million in 1994.<sup>3</sup>

The Architectural and Transportation Barriers Compliance Board (the Access Board) has the responsibility<sup>4</sup> of creating accessibility guidelines under the ADA for new construction and alterations of certain facilities. These rules are created to guide construction and alteration in facilities ranging from government buildings to private facilities to public accommodations, and are known as the ADA Accessibility Guidelines (ADAAG)<sup>5</sup>. The specifics in this article have been culled from the ADAAG. To view these guidelines, please visit

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<sup>1</sup> Many thanks to MaryBeth Musumeci, Esq., for her assistance with this article. Any and all errors are mine.

<sup>2</sup> Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101 et seq.

<sup>3</sup> Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities; Play Areas Final Rule, <http://www.access-board.gov/play/finalrule.htm>, citing federal census data on children with disabilities ages 3-14.

<sup>4</sup> 36 C.F.R. Section 1191.1.

<sup>5</sup> 36 C.F.R. Part 1191, Appendix

# Let's Play! (continued)

<http://www.access-board.gov/adaag/html/adaag.htm>. For the ADAAG Guidelines concerning recreational facilities, please visit [http://www.access-board.gov/adaag/html/adaag.htm#15\\*%20RECREATION%20FACILITIES](http://www.access-board.gov/adaag/html/adaag.htm#15*%20RECREATION%20FACILITIES).

In November 2000, the Access Board published in the Federal Register a final rule (its final guidelines) pertaining to play areas. This final rule contains many subsections detailing specifics of playgrounds ranging from play components to accessible routes to ramps to ground surfaces. The rule is designed to set a bare minimum for what playgrounds need in order to provide appropriate access for children with disabilities to the socialization and education, and just plain fun, of swings and slides and other playground equipment.

## The specifics of the final rule

The Access Board's final rule on play areas contains many technical specifications; this article will provide only a general overview. A copy of the complete rule may be found on the Web at <http://www.access-board.gov/play/finalrule.htm> or may be obtained by calling the Access Board's publication order telephone line at (202) 272-5434. The Access Board's guidelines, although very technical and specific, also leave room for innovation, and accordingly ADAAG 2.2 provides that "[d]epartures from particular technical and scoping requirements of this guideline by the use of other designs and technologies are permitted where the alternative designs and technologies used will provide substantially equivalent or greater access to and usability of the facility."

The final play area rule applies to newly designed or constructed play areas (in a variety of settings such as parks, schools, shopping centers, but not playgrounds in religious settings or in family child care facilities at which the proprietor also resides) and also to certain renovations or alterations of existing play areas that affect, or could affect, the usability of the play area. If, for example, a play

component is replaced by a new spring rocker, the play area rules apply, but the rules would not apply to routine maintenance changes, like replacing worn ropes.<sup>6</sup>

## Definitions

Some of the important terms defined in the rule include:

- A **play component** is defined as an element intended to generate specific opportunities for play, socialization, or learning. Play components may be manufactured or natural, and may be stand alone or part of a composite play structure.
- A **ground level play component** is a play component that is approached and exited at the ground level. Examples include swings, spring rockers, sand boxes, and panels with educational toys.
- An **elevated play component** is a play component that is approached above or below grade and that is part of a composite play structure consisting of two or more play components attached or functionally linked to create and integrated unit providing more than one play activity. Examples include climbers, overhead play equipment, double slides, or tubes approached from a platform or deck. These play components may be made accessible through ramps or through transfer systems.
- An **accessible route** is defined as a continuous unobstructed path connecting all accessible elements and spaces of a building or facility.

## Components of accessible routes

A first, general requirement for the accessibility of ground level play components is that one type (e.g., swinging, sliding, or rocking) of each ground level play component in the playground must be on an accessible route. Additionally, in any play area where elevated play components are provided, a second, more complicated rule applies to ground level play components. Specifically, the minimum

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<sup>6</sup> See U.S. Architectural and Transportation Barriers Compliance Board, A Guide to the ADA Accessibility Guidelines for Play Areas, May 2001, [www.access-board.gov/play/guide/intro.htm](http://www.access-board.gov/play/guide/intro.htm) and nested links (A Guide to the ADAAG for Play Areas).

number of ground level play components that must, according to the rule, be on an accessible route also depends on how many elevated play components are in the play area and how those elevated play components are reached. A chart with specifics is provided in the rule.

For elevated play components, 50 percent of the components must be located on an accessible route. Generally, ramps are preferred as an access route because some children cannot or will not want to move out of their wheelchair or mobility device. Transfer systems, whereby a child transfers out of a mobility device to a platform or steps with the use of handrails to get to a play component, are also allowed under an exception. For example, transfer systems (that comply with specifications in the ADAAG) are permitted to connect elevated play components, except where 20 or more elevated play components are provided in a play area, no more than 25 percent of those elevated play components may be connected by transfer systems.

The specifications for determining what components are needed on accessible routes under the final rule can seem complex, so the Access Board has created a step-by-step guide to provide assistance.<sup>7</sup>

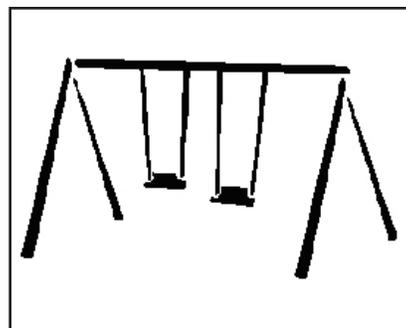
## Accessible routes and other specifications

Technical requirements for accessible routes under the final rule include specifications for width, slope, surface, clear space for maneuvering in front of a play component, and for protrusions into the routes. Accessible routes must connect entry and exit points, and must connect play areas to parking lots and elsewhere. Ground surface coverings of routes also have specific requirements, which are designed to provide safety for impact (soften falls) and yet also be firm enough to promote maneuverability of mobility devices on the routes. The Access Board has determined that certain materials, particularly rubber or certain types of wood-based products, are appropriate as a surface covering.

Other guidelines within the final rule also include specifications relating to play tables and soft contained play structures (a fully enclosed play environment that utilizes pliable materials).

## Conclusion

The goals of the final ADAAG rule on play areas are to provide playground integration for children with disabilities with their non-disabled peers and to provide for a variety of social, educational, and play experiences for children with disabilities. The ADAAG's technical specifications all essentially seek, ultimately, to provide room for wheelchairs and other mobility devices at, over, around, and exiting play equipment; and to ensure that accessible play areas are various, integrated, and wide enough to allow wheelchairs to pass and turn around. The effect of the implementation of this rule, however, is not just to make playgrounds more accessible and usable for children with disabilities, but to make playgrounds more easily accessible and usable for everyone else as well, such as parents with strollers or care-givers (such as grandparents) who have mobility impairments, who want to play with their children on the playground regardless of anyone's disability.



More information on the play area guidelines may be found on the Access Board's Website, [www.access-board.gov](http://www.access-board.gov); the U.S. Department of Justice, [www.usdoj.gov/crt/ada](http://www.usdoj.gov/crt/ada); or the National Center on Accessibility, [www.ncaonline.org](http://www.ncaonline.org). The Disabilities Law Program may be contacted at (800) 292-7980. ■

<sup>7</sup> A Guide to the ADAAG for Play Areas, [www.access-board.gov/play/guide/part3.htm](http://www.access-board.gov/play/guide/part3.htm).

# For Many, AT Brings Enjoyment Back to the Theatres

Eden Melmed, AT Specialist  
New Castle County ATRC

If you or someone you know no longer goes to the theatre because of sensory difficulties, there are products you should know about.

## Need help hearing?

Assistive Listening Devices (ALDs) are amplification systems designed to help people hear better in a variety of difficult listening situations, such as in a theatre or a large classroom. ALDs do this by increasing the volume of the desired sound without increasing the loudness of background noises. ALD devices are available, free of charge, at many theatres.

## The difference between an ALD and a hearing aid

A hearing aid and an ALD differ from each other based on the location of each device's microphone. In a hearing aid, the microphone is incorporated with both the amplifier and the loudspeaker in one component, which is placed in the user's ear. With an ALD, the microphone is a separate component, which is placed at the source of the sound, rather than in the user's ear, thus helping to reduce the background noise.

## At the movies

Many theatres use an infrared amplification system to help those with hearing difficulties enjoy the movies. Infrared systems work by transmitting sounds via invisible light beams to the receiver, worn by the user. Since the receiver must be within the direct line of sight of the light beam from the transmitter, the sound will not "spill over" to the next room. This makes it ideal for simultaneous use in adjacent theatres.

The following is a list of some local theatres that provide ALDs for patrons who are hard of hearing:

### Movie Theatres

- Cinemark Movies 10  
First State Plaza, Newport, (302) 994-7075

- Regal Brandywine 16  
US 202/Naamans Road, Brandywine,  
(302) 479-0750
- Regal Peoples Plaza 17  
Route 896, Glasgow, (302) 834-8510
- Movies at Midway  
Route 1, Rehoboth, (302) 645-0200

### Performing Arts Theatres

- Chapel Street Players  
Newark, (302) 368-2248
- Delaware Theatre Company  
200 Water St, Wilmington, (302) 594-1100  
The Delaware Theatre Company offers American Sign Language interpreted performances for selected productions, on certain dates. Large print programs are available upon request.
- DuPont Theatre  
Hotel du Pont, Rodney Square, Wilmington,  
(302) 656-4401  
The DuPont Theatre offers large print programs upon request.
- The Grand Opera House  
818 North Market St, Wilmington  
(302) 652-5577  
The Grand Opera House offers large print programs upon request.
- Second Street Players  
Riverfront Theater, 2 South Walnut St., Milford  
(302) 422-0220

## Would closed captioning or audio description help you?

WGBH, Boston's public broadcaster, has developed a **Motion Picture Access (MoPix) System** which uses closed captioning and descriptive narrative formats to improve movie accessibility for persons who are deaf, hard of hearing, blind, or visually impaired. More and more first run movies are now being produced with these assistive features.

**MoPix** has two components:

- **Rear Window® Captioning (RWC)** provides

*continued on page 11*

closed captioning for only those audience members who wish to use the service. The captions are not on the film, but are on a separate CD which is run in synchronization with the film. The system displays reversed captions on a light-emitting diode (LED) text display which is mounted in the rear of a theatre. A patron wishing to see the captions attaches a transparent acrylic panel to his/her seat to reflect the captions so that they appear superimposed on or beneath the movie screen. The reflective panels are portable and adjustable, enabling the caption user to sit anywhere in the theatre.

• **Descriptive Video Service Theatrical® (DVS)** provides descriptive narration to anyone wearing a special receiver and headset. Descriptive narration is a way of making visual media more meaningful to persons with vision loss. The narrated descriptions provide information about key visual elements such as actions, settings, facial expressions, costumes, and scene changes. The descriptions are

inserted into pauses in the soundtrack and do not interfere with the movie's dialogue.

While there are a few theatres in New Jersey, Maryland, and the Philadelphia-area that have the **MoPix System**, **MoPix** has not been installed in any Delaware theatres...yet. To see a complete listing of available movies and theatres that employ the **MoPix System**, visit [www.mopix.org](http://www.mopix.org). If you would like to see **MoPix** in Delaware, contact your local cinema or one of the trade organizations listed below.

National Association of Theatre Owners (NATO)  
[www.natoonline.org](http://www.natoonline.org)  
[nato@mindspring.com](mailto:nato@mindspring.com)  
(202) 962-0054

Motion Picture Association of America  
[www.mpa.org](http://www.mpa.org)  
(818) 995-6600 ■

## The AT Bargain Basement

*Marvin Williams, AT Specialist*  
*Kent County ATRC*

Hello again and welcome to the leisure activities installment of the AT Bargain Basement. For those of you who are new to this column, I try to find assistive technology for \$100 or less. I also try to find devices that are available locally at places such as **Wal-Mart®** and **Radio Shack**. Well, I broke that last rule again this issue by doing some Internet and catalog shopping. I did find some good devices, so let's get this party started!

My first items may seem like I'm cheating, but I'm not. (Okay, maybe a little.) My first recommendations are books on audio cassette and compact disc (CD). They are widely available at bookstores and range in price from \$10 to more than \$50. While the books on audio cassette are not set up with chapter stops, books on tape for specialized players are. The fact that the audio cassette does not have chapter stops may not matter much to a person who is listening to a novel on tape. Personally, when I pick up a book I'm reading, I usually start reading where I left off, not at the beginning of the chapter. I may need to go back a page or two to jog the

memory, but this can be done with a cassette by rewinding to let listeners hear what they may have forgotten. Now, with the advances in digital recording, we are seeing more books on CD. This is nice in that it allows the listener to skip chapters. However, the downfall of books on CD is that if the listener stops the CD, it usually will not restart in the exact spot where the user originally stopped it. Thus, listeners are forced to start at the beginning and fast-forward until they find the point where they left off reading. If this is not a problem, then a book on CD may be an option.

Very similar to audio books are electronic books or e-books. These are not limited to technical manuals, and are downloadable from many of the same Websites that sell print books (e.g., [www.bn.com](http://www.bn.com), [www.amazon.com](http://www.amazon.com), and [www.borders.com](http://www.borders.com)). E-book prices depend on the popularity of the title. The average price seems to be about \$10. An e-book purchase includes a free document reader (usually **Adobe** or **Microsoft**), so no additionally purchased software is required. Do pay attention to the document reader that the book uses. If you do not have the specific reader on your computer, you may need to download it from the Website where you're

*continued on page 12*

# Bargain Basement (continued)

purchasing the book or from [www.download.com](http://www.download.com). If you need assistance in downloading a document reader, please contact your nearest ATRC.

Recently, Dan Fendler, the AT Specialist in Sussex County, learned that the latest version of **Adobe Reader** has text-to-speech capabilities. This feature

may be of assistance to e-book readers with reading and/or comprehension difficulties.



Figure 1

My next pick, for the bowling enthusiast who uses a wheelchair, is the **Bowling Ball Holder Ring** (Figure 1) which sells for \$39.95. The ring is designed to safely hold the ball while the bowler wheels up to the foul line. The device is a

one-piece unit that easily attaches to most wheelchair armrests.

To purchase the bowling ball holder ring, visit **Access to Recreation** at [www.AccessTR.com](http://www.AccessTR.com) or contact the company at (800) 634-4351. The company also sells other adaptive bowling items that cost over \$100, but because of my self-imposed rule, I will not speak of those items here. Still, if you have questions regarding them, please feel free to contact me for more information.

My next picks are two craft items. The **Colonial 3-Way Hoop** is a stand-supported embroidery hoop. The stand allows the device to be placed on a table or clamped to the arm of a chair, making it easier for persons to do embroidery with one hand. While there are many different brands of adapted embroidery hoops with different capabilities, the one I



Figure 2

found on [www.AccessTR.com](http://www.AccessTR.com) (**Access to Recreation**) sells for \$84.95.

Also available through **Access to Recreation** is **Kroh's Crochet Aid** (Figure 2) which retails for \$11.95. This device

helps individuals with limited hand function to enjoy crocheting. The crochet aid is a fairly straight-forward device. An adjustable Velcro band wraps around the user's wrist or hand to provide the right amount of tension on the yarn. A ring, with a small slit for yarn to pass through, is attached to the band and keeps the yarn from slipping to the side. A second ring wraps around the finger. This ring has a slit in the top to keep the yarn close to the fingertip, making it easy to hook and crochet.

I've mentioned a few AT leisure devices for the young at heart.



Figure 3

Now, let's discuss devices for the young. For water play, there is the **Under the Sea Water Table** (Figure 3) from **Enabling Devices** ([www.enablingdevices.com](http://www.enablingdevices.com) or (800) 832-8697). Press one switch and a stream of water starts. Press another switch and music plays while lights glow. This toy retails for \$95.95 and does not include switches.

Also available from **Enabling Devices** are switch-adaptable toy kitchen appliances (Figure 4). The toy blender, coffee machine, and mixer enable pretend kitchen play. The mixer, which actually works, retails for \$31.95. The blender and coffee machine retail for \$31.95 and \$34.95, respectively.



Figure 4

That does it for this installment of the AT Bargain Basement. As usual, if you find a bargain and want to share it with everyone else, please feel free to contact me, and I'll tell everyone about your find. Now go have fun! ■

# Parents Must Plan Summer Activities Early

Beth Casper  
PACER Center, Inc.

It may be hard to plan summer activities while snow flurries grace the view from the living room window, but finding the camp or program that is a good fit for a child with disabilities takes time. Parents who start the process early are more likely to find the appropriate accommodations and a better fit for their child.

“Last May, PACER received phone calls from panicked parents looking for opportunities for their children with disabilities for the summer when most programs are already full,” said PACER advocate Beth-Ann Bloom.

“PACER staff caution, however, that parents should think seriously about the kinds of camps and programs that would interest their child. There are specialized services and programs for children with disabilities, but most community programs can also accommodate a person with a disability as long as planning occurs. Here are initial questions to ask:

- What leisure and recreation activities does my son or daughter enjoy?
- What talents or activities can my daughter or son develop now that can continue into adulthood?
- What activities does my child’s friends and siblings participate in?
- What level of support does my child need and what information and training does summer staff need to make the experience positive?
- Is this an activity that requires extra support from an individual aide or a program that is designed and structured for my son’s or daughter’s specific disabilities?
- What ages are served in the program?

In addition to participation in recreation and leisure activities, an interest in spectator sports such as tennis, golf, baseball, or football may provide enjoyment for a child with disabilities. He or she may learn the language and rules of the sport and continue to find enjoyment of the sport as an adult.

When trying out new programs, call a supervisor, coach, or manager and discuss the child’s disability

and possible accommodations.

## Where to look

- Summer camps
- Schools
- Community recreation programs
- Disability organizations
- YMCA/YWCA or other fitness centers
- Religious groups
- Community education
- Museums and zoos
- Horseback riding specifically for children with disabilities at area farms or programs
- Special Olympics
- Centers for Independent Living with wheelchair leagues or other specialized programs.

## How to help

Parents can develop a list of recreation and leisure activities in which the child would probably have a positive experience. The child may be eager to pursue a particular interest or try many different activities. The important thing is that the child is building confidence, developing social skills, and having fun. Parents can help their child reach this goal by:

- Making contact with different recreational organizations
- Helping the child explore different options that are available
- Encouraging the child to participate
- Supporting the child as he or she pursues different activities
- Pursuing an activity with the child.

*Reprinted with permission from the Winter 2004 PACESETTER (Vol. 27, Issue 1), published by PACER Center, Inc. For more information, contact PACER at (952) 838-900 or visit [www.pacer.org](http://www.pacer.org). ■*

DATI is currently updating its list of recreational opportunities in the Delaware area. Once completed, the information will be available on [www.dati.org](http://www.dati.org). Please check the Website for this information.

# DATI Sponsors Money Management Skills Workshop

**Who:** The workshops will be conducted by the Delaware Community Reinvestment Action Council (DCRAC) and the Delaware Assistive Technology Initiative (DATI). Each session is limited to ten participants, and registration will be handled on a first-come, first-serve basis.

**What:** This free, half-day workshop helps individuals with disabilities to understand the world of personal finance and assists them with becoming more economically self-sufficient. Each session focuses on financial fundamentals such as building a credit score, saving and budgeting money, and recognizing unfair and/or dishonest business practices.

**When and Where:** April 12, 2004  
5 p.m. - 8 p.m.  
Del Tech, Owens Campus

June 8, 2004  
5 p.m. - 8 p.m.  
Del Tech, Terry Campus

May 12, 2004  
1 p.m. - 4 p.m.  
Del Tech, Owens Campus

June 21, 2004  
1 p.m. - 4 p.m.  
Del Tech, Stanton Campus

**Registration:** To register for one of the workshops, contact Tom McDonough at (302) 651-6792, (302) 651-6794 (TDD), or [mcdonough@asel.udel.edu](mailto:mcdonough@asel.udel.edu). You will need to provide your name, contact information, accessibility accommodation needs, and the session you prefer to attend. ■

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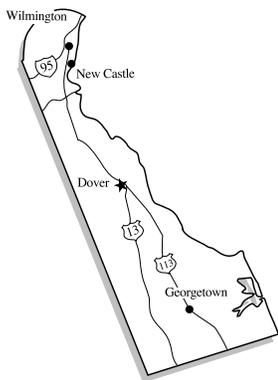


Delaware Assistive Technology Initiative  
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Hospital for Children  
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Maryland's Eastern Shore  
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Commons  
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(302) 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)

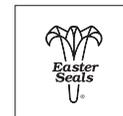
Sussex County ATRC  
Easter Seals of Delaware and Maryland's Eastern Shore  
This center is in the process of relocating. Staff and AT  
equipment can still be accessed by appointment.  
(302) 856-7946; (302) 856-6714 (voice or TDD)

*The AT Messenger* is published quarterly by the Delaware Assistive Technology Initiative (DATI). It is available online at [www.dati.org](http://www.dati.org).

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*Creating solutions. changing lives.*