



The AT Messenger

....bringing technology to you

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DATI Kicks Off New Project

With financial assistance from the Delaware Developmental Disabilities Planning Council (DDPC) and the Delaware Division of Mental Retardation (DMR), the DATI has launched a relatively short-term activity that is intended to have long-term impact. The project will help to determine the nature and extent of assistive technology (AT) needs among clients of the Division of Mental Retardation by examining the needs of a sample of this larger group. Working with clients ranging from young children to adults in community residences to residents of nursing homes, project staff will first screen 50 selected clients to determine whether AT could potentially increase their independence in various aspects of daily life such as communicating, getting around in one's environment, and taking care of one's personal needs. If the screening indicates that AT use could be of some benefit, the individual will then undergo a full evaluation to identify specific areas of need and the technologies that might appropriately meet those needs.

In addition to identifying individual needs and potential intervention approaches, the project will also permit some projections to be made relative to the entire DMR client population. The state will then have a much better idea about how many people within the larger group are likely to have AT needs. The final report will also address systemic issues such as staff development, access to equipment, and options for funding AT devices and services. Staff from the Easter Seal Society will join with DATI and DMR staff in the completion of project activities.

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SIBSHOPS

*A Free Workshop for Parents and Professionals
About Siblings of People with Special Needs*

Friday, July 11, 1997

and

Saturday, July 12, 1997

8:30 - 4:00 p.m.

*Delaware Technical & Community College
Conference Center, Dover, Delaware*

This statewide training is designed to:

- Increase family members and service providers awareness of issues faced by brothers and sisters of people with special needs.
- Teach family members and service providers how to create peer support and education programs for school age siblings.
- Teach qualified family members and service providers how to conduct awareness working shops on sibling issues.

Who should attend? Parents, advocates, siblings (five to adult), and service providers from education, health and social service fields.

The presenter, Donald J. Meyer, M.Ed., is the Director of the Sibling Support Project at Children's Hospital and Medical Center in Seattle, Washington.

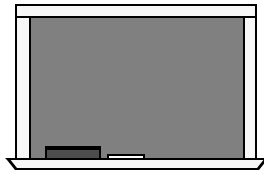
For more information, contact Parent Information Center of Delaware at (302) 366-0152.

Lessons Learned: A Parent's Perspective

Cheryl Baxter

A learning disability is “the inability to acquire, retain, or generalize specific skills or sets of information.” At the time of our first child’s kindergarten testing, the above sentence was almost foreign to me. But by the end of his junior year in college, I knew exactly what this definition had encompassed.

Our first child thrilled his parents. Entering kindergarten with a “late” birthday, his test scores were in the 95th percentile. The educated educators said, “Don’t hold him back; he’ll be bored; he’s ready.” However, kindergarten became a test of wills—his, ours, and theirs. The academic world held no interest for this five-year old. Given the outdoors, mechanical, and self-chosen tasks, he was happiest.



First grade was the beginning of an eight-year battle. The battlefield setting varied, as did the people in charge. The philosophy of learning was much the same, as was the response to this child’s seeming unwillingness to learn. We heard, “He’s spoiled/ immature/stubborn,” and “He will not accept the responsibility” necessary to achieve in an academic setting. These statements were in stark contrast to the little boy that we saw outside of school. That little boy was funny, intuitive, and sometimes slow to grasp some concepts, but so was his dad.

By high school, it was evident that the eight-year battle had taken its toll. Low self esteem, a lack of interest in learning, and feelings of failure were traits displayed upon entering the ninth grade. We experienced frustration at the system and at the lack of help provided. This child was not who they said he was...but where was the answer?

An error in placement landed our son in a highly academic history class. This error provided our son with a teacher who cultivated an environment of positive learning and the development of individual strengths and, most importantly, a “verbal learning” program. This error in placement was discovered in the last two weeks of the marking period. Steps were taken to correct the mistake. A meeting between the teacher, staff and myself revealed that a B+ average, class participation, and enthusiasm were where he stood; not with the failure anticipated by such a challenging class.

Shock was the reaction by all in attendance. How was this possible? Through gentle persuasion by parents and teacher, it was agreed that the placement would not change, with a close watch to see how the year evolved. Curiosity drove me to question what was behind this turn of events. I began to question our son, his teacher, and even a few

of his friends. What was happening in this classroom that was providing such positive feedback?

When I questioned my son, I received information on history lectures, including places, dates, names of generals, and the number of soldiers participating, right down to the last detail. When checking the history notebook it appeared as sloppy and disoriented as ever. My last attempt to unravel the mystery was through a class visit. The pieces began to fall into place. On that visit, the teacher began the second lecture on the battles of the Civil War. I noticed the look of intent concentration on my son's face. As the teacher paused, a brief period of sloppy, hurried notes ensued. As soon as the lecture continued, the scribbles stopped and again an intent focus on the speaker.

Bingo!! Oral teaching! My son was no longer faced with reading from the textbook, or coding from the blackboard. The textbook was being interpreted through lecture. Previously, the process of reading, brief review, note taking and processing the new information was eliminated. The processing breakdown was coupled with poor motor skills, which lead to a focus on copying information, not absorbing it.

At my request, testing was done and revealed a learning disability. Testing, counseling and, having a teacher who not only understood, but whose teaching style corresponded to his learning style, elevated our son's academic achievement. As high school graduation approached, we investigated the direction that would best address his diagnosis and provide him with the opportunity for college success. A post-graduate year was the chosen option with a focus on training the student to work with his/her learning disability rather than fight it or try to hide it.

From this setting we were provided with assistance from counselors who helped to explore and find a college with a Learning Disability Department. As a newly admitted freshman with LD, many services were provided. These included a classroom mentor; class lectures were recorded and typed on computers. There were extended testing times for written exams, and oral exams were options. The professors were trained in the teaching techniques that students with learning disabilities require. The sophomore and junior years found our son needing less and less help, becoming more confident and developing into an adult who accepts and understands what he requires to learn and succeed.

With the senior year approaching and a degree in Commercial Art just within reach, we have come to understand how very important it is that every parent views each step and each decision with the whole child in mind. Abilities or deficits do not predict success or failure. We must take these traits, study them, understand them and finally work with them in order to become the best that we can be.

Accessibility Champion Recognized for Contributions

by Gwen Carleton

MADISON, Wis.—Gregg Vanderheiden was bemused in April when, upon arriving late for the awards segment of the Sixth International World Wide Web Conference in Santa Clara, California, friends hustled him up to a seat in the front row.

Vanderheiden, an engineering professor at the University of Wisconsin, didn't know what to make of it. As director of the Trace Research and Development Center, he had received awards in the past, but this one, the third annual Yuri Rubinsky Memorial Web Award, was different.

“Never in a million years did I think I would get it,” Vanderheiden said this week. “The last two people who got it were Vinton Cerf, who developed the Internet, and Doug Englebart,” inventor of the mouse and the modern computer interface.

Even so, Vanderheiden has joined that elite group of computer innovators receiving the Rubinsky award—a statue embedded in a hefty chunk of granite and a \$10,000 check—for his work on computer access for people with disabilities. “I was stunned,” he said.

Colleagues will tell you that such modesty is typical of the man who, more than any other innovator, has made computers accessible to millions of people with disabilities. Yet, Vanderheiden is no stranger to accolades. Back in the Trace Center's crowded offices at the UW's Waisman Center, a file stuffed with kudos from executives at Microsoft, International Business Machines, Apple Computer, Sun Microsystems, Digital Equipment Corporation and other computer industry giants attests to the influence of his work.

“The Trace Center is among the most important forces in this area,” Microsoft's Gregory Lowney wrote. “And this sentiment is echoed by other organizations and vendors in this field.”

Apple's Alan Brightman, who has worked with Vanderheiden for more than a decade, attested to both the professor's impact and his refreshing lack of self-importance in an industry rife with hubris. “Gregg has made a difference here that's more enduring than he'll ever know,” Brightman said.

Vanderheiden, a cheerful, restless, 46-year-old academic, founded Trace in the early 1970s to help a Madison boy with severe motor impairments caused by cerebral palsy. Then a UW undergraduate, he used his own savings, borrowed space and scavenged parts to create a device called “Auto-Com” (for automonitoring communication board). Using magnetic sensors and a primitive computer, Auto-Com allowed the boy to com-

municate independently for the first time. The device was patented in 1974, and the first major grants to Trace's student researchers soon followed.

A decade later, the center's influence expanded when Vice President Dan Quayle asked Vanderheiden to address a group of federal officials from the executive and legislative branches, researchers, and industry representatives at a special meeting to discuss accessibility issues. Asked to respond to complaints that the emerging personal computer industry was excluding people with disabilities, Vanderheiden explained that computer companies not only could, but should, do more. Some computer company executives in attendance learned for the first time that people with disabilities were among the users of their products.

Vanderheiden recalled: "The response was—and this was typical: 'People with disabilities use our computers?' Then the next thing was: 'There's something we can really do?'"

Nevertheless, persuading fiercely competitive companies to devote space in their operating systems and applications for Trace's code proved difficult.

Apple led the way. By 1987 the company's Macintosh operating system, hardware and mass-marketed applications were offering features to accommodate users with motor problems, deafness, low vision, missing limbs and other limitations.

Today, access features pioneered by the Trace Center have been incorporated in nearly all the major operating systems, including Apple's MacOS, the UNIX X Window System, IBM's OS/2 and Microsoft's Windows 95 and Windows NT.

Yet, those features continue to surprise the same executives who helped realize them. Vanderheiden recalled a computer company executive who was thrilled to discover a function on his PC that allowed him to keep working after he shattered an elbow. Brightman said he had witnessed similar epiphanies at Apple when employees found themselves limited by repetitive stress injuries or other disabling health problems.

"People don't expect to become disabled," Brightman said. "When it happens, the last thing they expect is their computer will accommodate their needs."

The Trace Center now employs 14 full-time and 20 part-time staff members and students, with backgrounds ranging from computer science to occupational therapy. Their mission is to ensure that new high-tech products and cyberspace itself are accessible to everyone, including the more than 30 million people in the United States alone who suffer disabilities or functional limitations.

Since a major cause of such problems is simple aging, Vanderheiden argues, the number of those in need of the center's products is steadily increasing as Baby Boomers hit middle age. Including Trace features in future technologies not only is a moral impera-

tive, he insists, but makes good economic sense.

As for the non-impaired—whom Vanderheiden classifies as the “temporarily able bodied”—the same technology that benefits disabled users can allow a person with normal hearing to work in a noisy room or someone with good eyesight to access his computer while driving—examples of worker flexibility already in growing demand.

Soon after accepting the Rubinsky award, Vanderheiden made that point to his colleagues at the conference. “The message you think I’m going to deliver is that access is important and it’s beginning to be required by law,” he said. “That’s all true, but it’s not what I’m going to talk about.” Instead, he described how closely their own primary research areas were related to developments in disability access. He reminded them that the Jacuzzi, the vibrating pager, the cassette tape and closed-captioned television were all invented for people with disabilities. Then he showed charts illustrating how, in the next few decades, thousands of Baby Boomers like themselves would, in all likelihood, find their vision, hearing and motor skills slipping away.

“I’m currently still among those who don’t have a disability,” he told his colleagues. “But lately I’ve noticed my eyes aren’t working like they used to, it takes longer to focus, and my hand has been really bothering me.

“How are you feeling?”

The “Wheel Deal:” Wheelchair Considerations

(Part II)

*Nancy Chipman Ranalli, PT
Chief Physical Therapist
Easter Seal Rehabilitation Center*

In the May/June 1997 *issue of The AT Messenger*, I discussed important considerations when obtaining the appropriate wheelchair to meet one’s needs and to promote independence in mobility. This article will briefly discuss the importance of proper seating systems, focusing on seat and back cushions. Because it is imperative to receive a proper wheelchair assessment and training by qualified professionals prior to purchasing a wheelchair, specific brand names of cushions will neither be discussed nor endorsed.

Seat Cushions: The seat cushion is an essential part of a good seating system. This cushion serves a variety of purposes, including pressure relief, positioning, and comfort. Seat cushions range from a basic foam cushion without any contour or pressure relieving qualities, to a custom molded cushion designed specifically for the consumer, and a score of other styles in-between, including gel, air, and different densities of foam. When choosing a cushion, each consumer must be aware of his/her particular seating needs. For instance, if skin breakdown on the buttocks is a concern, a cushion which is designed to allow good pressure distribution would be appropriate. If the consumer has postural issues (structural limitations) which need to be accommodated, such as a curvature of the spine or the presence of bony prominences, a cushion which will allow significant flexibility with positioning may be recommended.

Back Cushions: The back cushion is also an important part of the total seating system. There are almost as many options for back cushions as there are for seat cushions. Some consumers require a back cushion that provides support to aid them to sit more upright, while others may prefer to have a very low back cushion to allow more freedom of movement. Again, each consumer must be aware of his/her desired outcome to choose the most appropriate back cushion and supports.

As noted in Part I of this article, it is in the consumer’s best interest to take the time needed in the initial stages of purchasing a wheelchair to insure that the most appropriate wheelchair is obtained and to prevent problems once it is delivered. Getting assistance from professionals who understand wheelchairs and seating and positioning will allow one to make an informed choice.

Meet Bobby[®], a HTLM analyzer

A visit to Bobby[®] is essential for web page designers and illustrators who want to police their work for accessibility to people with disabilities. Bobby[®] (as in British police officer) is the latest development from the universal design lab at the Center for Applied Special Technology (CAST).

Bobby[®] was designed to detect a wide variety of accessibility problems commonly found on web pages. After entering in the URL of the page you want him to analyze, Bobby[®] will redisplay an annotated version of the original page. At every place where there is a disability access problem, he will place a small disability access violation symbol followed by a letter and a number (like E1 for Error 1). If the access problem does not affect those with disabilities, but is a browser compatibility problem, then Bobby[®] will place a miniature Bobby[®] icon on the annotated page. Clicking on either access violation symbol will display a description of the error. Bobby[®] places all these descriptions at the end of the annotated document and you can see them all at once by dragging your browser's vertical slider bar to the bottom of the annotated web page. If the error message seems confusing, just click on it (it's a hypertext link) and a more detailed description will be displayed with possible solutions to the problem.

Bobby's error messages are divide into three main categories: **errors**, **warnings**, and **suggestions**. An error is a problem that would cause a page to be inaccessible to many people and is often something that is important to fix. A warning usually means an access problem that should be fixed, but doing so could substantially limit the designer's choices (i.e., not using HTML Tables). And finally, a suggestion is Bobby's way of telling you that there might be something you want to consider adding or changing on your web page, but it's not imperative.

For more information call (508) 531-8555 (V), (508) 531-3310 or online <http://www.cast.org>.

Summer Fun

*Michael Meyreles, ATP
New Castle County ATRC*

When you think of summer, what is the first thought that comes to mind? For most people, it's swimming. Others might think of going to the beach, golfing, fishing or any number of other outdoor activities. For individuals with a disability, the use of assistive technology enables them to gain access to recreational activities.

There are many assistive technology devices available for individuals with a disability wishing to go swimming or access the beach. For the individual wishing to access a pool from a wheelchair, there are a couple of options. First, the pool could be designed to have an access ramp built descending into the pool. If an existing pool cannot have a ramp added to it, a mechanical or hydraulic lift can be installed to assist in transferring into the pool. Flotation devices are designed to aid persons once they enter the water. These flotation devices can range from a simple head float, which is designed to keep a person's head from submerging, to a full body float. An example of a flotation device is called the Water Walker. This device is designed to allow a person's body to maintain a vertical position that will facilitate weight bearing, body control and independent movement in the water.



At the beach, individuals find it extremely difficult to propel a wheelchair through the sand. Luckily, there are many companies that produce wheelchairs that make beach accessibility possible. They have oversized pneumatic tires that will allow a wheelchair to maneuver through the sand more easily. The frames are usually constructed of a material that will not rust such as plastic tubing, PVC pipe, or aluminum. The seat and back are made out of nylon type material that will stand up to the salt air and water.

Assistive technology devices available for fishing range from slings and cuffs designed to aid an individual in holding the fishing rod to a battery powered electric reel. The electric reel is designed for one-handed use; the index finger controls the casting trigger and the thumb controls the retrieve by activating the motor control. This device is also designed so a person can set the drag, play the fish, and experience the feel of the fight so that the fun of fishing is undiminished.

Golf is another activity that a person might like to participate in during the warm summer months. Examples of assistive technology available for an individual wanting to golf are special cuffs designed to aid in gripping the club or a set of clubs shortened to accom-

modate a person in a wheelchair. Some golf courses are built to be accessible to a person using wheelchair, but it would be wise to call the golf course to determine if wheelchairs are permitted on the course.

The Delaware State Park System offers many accessible recreational activities to Delawareans and others with disabilities.

For example, Lum's Pond State Park

has a sensory trail for

persons who are blind as

well as a wheelchair accessible

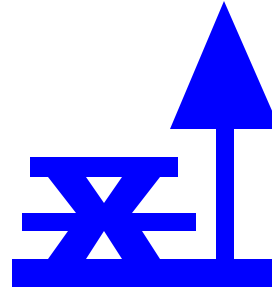
fishing dock. Killen's Pond

State Park has wheelchair

accessible cabins available for

overnight camping. All of Delaware's State Parks are designed to be wheelchair accessible and offer many activities that will accommodate a person with a disability.

The items and topics that were discussed in this article are only a small sampling of what is available to individuals with a disability. Topics such as competitive sports and winter recreation for persons with a disability will be presented in future issues of *The AT Messenger*.



Financing Assistive Technology

IDEA Reauthorized: A Look at the Old and the New

Ron Sibert, DATI Funding Specialist

Certain federal laws are passed on a time-limited basis and must be reauthorized in order to remain in force. This gives Congress and the President the chance to make adjustments as the times and people's needs change. Such is the case with the Individuals with Disabilities Education Act (IDEA)—the special education law. This important law's recent reauthorization came with several notable changes—some that are likely to impact how public schools provide assistive technology (AT) devices and services. Here's a brief look at a few of the old and new provisions of the IDEA that are likely to affect AT.¹

Interagency Requirements

There is sometimes substantial overlap between services schools provide as part of their free appropriate public education (FAPE) mandate and those that other agencies (such as Medicaid and other public entitlement programs) are required to provide.

Old: The old law has a very limited (historically ineffective) provision that prohibited other funding sources such as Medicaid, SSI, etc. from reducing their assistance with respect to individuals eligible for FAPE.

New: The new section requires an identification of (or method for defining) the potential contributions of other agencies with responsibility for funding. It specifies that the responsibility of the other agencies may precede the financial responsibility of the school (assuming the other agencies' eligibility requirements have been met). It also allows schools to pay for the educationally necessary part of FAPE and then bill other responsible agencies—public or private insurance for the medically necessary portion, for example—when appropriate. Finally, the new section requires interagency financing agreements to be addressed through state law, regulations, signed agreements, or other appropriate written methods. Delaware's Department of Education has already established agreements with agencies such as Medicaid and the Division of Vocational Rehabilitation, but the AT-related aspects are still being refined.

Inclusive Assessments

One newly adopted provision requires children with disabilities to participate in state-wide and district-wide assessment programs with appropriate accommodations. Any necessary modifications in state- or district-wide assessments or alternative assessments are to be used. Voice activated software, voice recording, and language simplifi-

1. Several of the comparisons include excerpts from materials provided by the Missouri Assistive Technology Project.

cation are examples of accommodations that have been or are being explored by our State Education Department.

Comprehensive IEPs

The new law is more explicit about what is required on the Individualized Education Program (IEP).

Old: The old language required special education & related services to be included on the IEP. It also called for the consideration of AT and other supports in developing the IEP.

New: The newly reauthorized law includes not only special education and related services, but also mentions supplementary aids and services and program modifications and support for school personnel. In addition, it adds a list of special factors that are to be considered by the IEP team. These include behavior support needs for students with behavior problems, language needs of students with certain types of learning disabilities, braille needs of visually impaired students, communication needs of hearing impaired students, and “whether the child requires assistive technology devices and services.” Of course the issues of how the need for such supports is determined, and how they are deployed are yet to be addressed.

Attorneys’ Fees

There are new requirements for parents seeking to recoup due process-related attorneys’ fees. The word is: “proceed with caution.”

Old: School districts were required to pay families’ attorneys fees *if* the family prevailed in its dispute with a school district.

New: The new law restricts public payment of attorneys’ fees for any IEP meeting or mediation that occurs before the filing of a due process action. Similarly, attorneys’ fees may be denied legitimately if parents fail to notify the school of their concerns prior to filing a due process action. Note that in addition to a description of the complaint, this prior notification must include the student’s name, address, and a proposed problem solution.

In summary, the new law contains additional protections and responsibilities for schools and families alike. In Delaware, several of the new provisions will simply serve to clarify or fine tune already well established practices—a good thing. However, we will not know the effects of several of the more complex provisions until Congress renders final regulations and the State begins adjusting its policies accordingly. Stay tuned... there are bound to be some interesting developments in the coming months. n

Shareware and Freeware Make Computing Easier

Ed Salisbury, Kent County ATRC

For many people, the purchase of a computer is not a one-time expense. Peripherals like color printers, scanners, and digital cameras are too tempting for most to resist. One must also not forget the need for continuous upgrades. It seems there is never enough processing power, memory, or disk space available on one's computer. Software is another expense the computer owner rarely escapes. With commercial software generally costing fifty dollars or more per title, the expense can be somewhat overwhelming. Luckily, there are thousands of software programs available that range in price from zero to fifty dollars. Not only is this free and low cost software readily available, most people don't have to leave their home to get it. Actually, most of these programs can be obtained electronically in a matter of minutes. This free and low cost software falls into several categories.

The first category of software, called *public domain software*, is completely free. One who acquires this type of software can use it, give it away, modify it, or incorporate it with his or her own software. Public domain programs generally lack the "bells and whistles" contained in commercial software, but tend to be very functional.

The second category is called *freeware*. Freeware is very similar to public domain software with one exception. The author of the software asks that it not be changed in any way nor distributed without its original documentation. For most people, this is not a problem. Generally, only computer programmers have the resources available to modify software.

The third category is called *shareware*. Shareware is commonly of the same quality and functionality as commercial software. Programmers generally use the shareware market as a means of testing their software as well as to get the attention of the large commercial software companies. This software can be freely distributed and used for a limited amount of time without cost or obligation. If one decides to keep the software, he or she is asked to send a minimal registration fee to the author in return for what is usually complete documentation and notification of future product upgrades. Paying registration fees to the shareware authors is an excellent way to ensure continued development of quality software.

There are many ways to obtain public domain software, freeware, and shareware. For those who have access to the Internet, software can be downloaded (copied) directly to their computer's hard drive. Internet World Wide Web sites such as www.macworld.com and www.download.com contain extensive software libraries. National on-line services like America On-line also allow downloading from their software libraries. For those who have a computer and modem but no Internet access, many local Bulletin Board Services, or BBSs, post software for downloading. If one would rather obtain software by a

more traditional means, these programs can be found in CD-ROM and floppy disk collections in retail stores and mail order software catalogs. Hundreds of free and shareware programs can be purchased on a single CD-ROM. Be aware that the purchase of the collection does not negate the need to register and pay for the individual shareware titles that are found beneficial. Of course, public domain, freeware, and shareware can be shared via floppy disk among friends and co-workers.

The following are software programs that the ATRC has downloaded from the Internet and found to be particularly helpful:

Typelt4Me 4.5.1 is a shareware abbreviation expansion program for Macintosh. Words, sentences, paragraphs, and even addresses can be stored as small abbreviations. When the abbreviation is typed in a document, spreadsheet, database, etc. it is automatically expanded into the full text. For computers using DOS, a shareware program called **Abbreviator 3.0** is available, and for computers running Windows 3.1 a shareware program called **Global Abbreviator 1.5** is available. When searching shareware libraries, use the search terms “abbreviation expansion” or “macro” to find these and similar programs.

Flash-It 3.02 is a shareware utility that enhances the built in screen capture capability of the Macintosh. Screen capture is simply taking a picture of the contents of the computer screen. This picture can then be modified in a paint or draw program or added to a word processing document. Screen capture is especially beneficial when programs contain pictures that would be useful in educational activities, but do not provide a means of copying or downloading the picture. CD-ROM Encyclopedias are an example of this type of program. Flash-It provides the capability to selectively capture parts of the screen, scale the captured image, capture pull-down menus, and even eliminate the cursor/pointer from the picture. For computers running Windows 3.1 or Windows95, a shareware screen capture utility called **SnagIt 3.1.3** is available. SnagIt contains all of the features of Flash-It with the added ability to save the captured image in a number of graphic formats. When searching shareware libraries, use the search terms “screen capture” to find these and similar programs.

SoftwareFPU is a Macintosh extension that emulates the FPU chip, or math co-processor. Many new software programs, especially educational and multimedia applications, require an FPU to operate. Installation of an FPU can be costly and time consuming, and may not always be an option. SoftwareFPU will allow most of these programs to run with only a slight decrease in speed. When searching shareware libraries for this software and similar software for Macintosh and PC, use the search terms “FPU emulator” or “math co-processor emulator.”

StickyClick is a Macintosh shareware utility that eliminates the need to “click and drag” the mouse when accessing a pull-down menu. A single click on the menu and a second

click on the selection within the menu is all that is necessary. This closely resembles the action of Windows and Windows95 menus. StickyClick is an excellent utility for anyone who has difficulty using the mouse as well as for those who are accustomed to the Windows environment.

MathHomework is a Macintosh shareware application that lets teachers and parents create math worksheets that can be completed by the student on the computer. MathHomework guides the student through the addition, subtraction, multiplication, and division problems in a columnar format similar to that which is generally presented on paper. Several levels of pre-programmed worksheets are also available. Because MathHomework is not a calculator, it can easily take the place of using pencil and paper for solving math problems.

Math Flight is a Windows shareware application designed to give students practice in addition, subtraction, multiplication, and division. Once a difficulty level is chosen, the student is presented with a series of math problems. He or she is given verbal feedback as to whether or not the problem was answered correctly. The opportunity is given for repeated attempts at difficult problems. The software can be set to focus on specific numbers on which the student may need extra practice. Worksheets, containing randomly generated problems at the student's skill level, can be printed for additional practice.

Electronic texts, or E-texts, are books and other documents that have been made available in an electronic format. These text documents can be found as public domain, but are generally considered freeware. Although there are a variety of Internet sites containing E-texts for download, the largest library can be found at the Project Gutenberg site (www.prairienet.org/pg/). Once in an electronic format, books can be opened by a word processor and printed, or read aloud using a screen review program and a speech synthesizer. Both the Simpletext program and Claris Works for Macintosh take advantage of the Mac's built-in speech capabilities to provide speech output. Commercial programs like Intellitalk, Write:OutLoud, and The ULTimate reader are available for both Macintosh and PC. These talking word processors contain advanced reading and highlighting features ideal for people with learning disabilities or reading difficulties.

Listed above is only a small sampling of free or low-cost software available. Browsing Internet download sites can be a fun and easy way to obtain software for education, system utilities, graphics, fonts, and games. n

Children's Computer Software Resource

Patty Hove, ATRC Assistant Coordinator

Thinkin Things Collection 1

So music is your game? With Oranga Banga, the silly orangutan, on drums or Toony Loon on xylophone, your child can develop auditory discrimination and memory through patterns, or tunes can be created on one's own. Need something visually stimulating? Visit the Fripplle Shop where your child helps the customers find just the right purple striped fripple with glasses, or yellow polka dotted fripple, while at the same time learning the attributes of AND, OR and NOT. These are just a few examples of Thinkin Things Collection 1 from Edmark, which promotes learning through a child's strengths and learning styles (visual, auditory) and encourages skill development in the areas mentioned above.

Included with the Teacher's Guide are suggestions for easy at-home activities, classroom activities and an "adult section" on how to customize the software for students and how to adapt the program for students with special needs. Thinkin Things 1 can be used with mouse alternatives and via scanning with a single switch; levels of difficulty can be changed. By using KidDesk by Edmark, a personalized desktop allowing use of only those programs preset by the teacher or parent, you can customize the child's program according to degree of difficulty, and monitor their progress.

Thinkin Things 1 is available for the Macintosh and PC computers. Stay tuned for future articles on Thinkin Things 2 and 3! n

Employment Connections

The University of Delaware Center for Disabilities Studies and Chimes, Delaware are sponsoring Employment Connections, a free eight-week training session which combines four weeks of classroom instruction with four weeks of hands-on internship. This program is available to those interested in working in the field of Developmental Disabilities. Students who successfully complete the program qualify for job placement assistance. Applications are now being accepted for two sessions remaining this year. The first will be held in Dover beginning September 1997 and the second will be held in Wilmington beginning October 1997. Registrations are now being accepted. For more information please contact Mike Kersteter for the Dover class at 302-672-7221 and Alisha Raiford for the Wilmington class at 302-831-2305. n

Delaware Recycles AT

If you are interested in an item, please call the number listed next to the item.

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

Devices Available:

Ambulation/Mobility

2 Braces, Child, f/2 year old, \$50, Dave, 455-1432

Cane, 4-legs, \$35, Kathy, 644-2214

Walker, Swedish Rollator w/wheels & attached seat, \$300 or best offer, D.C., 629-9569

Walker, collapsible, \$65, Howard, 994-5565

Walker, std, neg., Albert, 322-6600 or 738-0422 after 6 p.m.

Architectural

Rancher, 3 BR, w/c accessible, no steps, \$121K, Sam, 479-0819

Wooden Ramp, 3 steps, \$200, Ellen, 856-6141

Augmentative Communication

Lightwriter, Scanning (SL8), \$500, Carolyn, 856-7946

Computers/Electronic Equipment

B.O.S.S. 8000 Casio Organizer, \$50, Carolyn, 856-7946

Educational

Hooked on Phonics, books & tape, \$150, Donna, 337-7642

Hearing

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

TTY, Ultratec Compact, portable, \$275, Melissa, 410-822-3949

Personal Care/Home Management

Bath Chair, Tubby II Folding Bath Bench Chair, \$70, Sandy, 328-2872

Bath Lift Chair, water powered, self operated, \$300, Christine, 322-3766

Bath Support Seat, Child's (2), \$70 ea., Sandy, 328-2872

Bathtub Bench, New, \$100, Sarah, 322-8112

Bedside Commode, \$20, Sandy, 328-2872

Bedside Commode, freestanding or over the commode, \$45, Kathy, 644-2214

Commode, Child's, High-Back, \$85, Sandy, 328-2872

Commode, portable, \$65, Howard, 994-5565

Commode, portable, w/arms, folds, neg., Albert, 322-6600 or 738-0422 after 6 p.m.

Commode Portable, arm rests, back support, neg., Maryanne, 737-6215

Fluctuating air mattress w/pump, new for single bed, \$95, Michael, 322-4543

Geriatric Chair, new, w/reclining chair, adj. foot rests, & attachable tray, \$400, Sarah, 322-8112

Hospital Bed, Electric, \$500, Leroy, 834-4856

Hospital Bed, Electric, \$1,200, Billie, 322-7863 after 6 p.m.
Hospital Bed, Electric, \$200, Richard, 610-565-3636
Hospital Beds (3), Manual, Free, Harry, 855-1692
Lift Chair, Recliner, \$300, Ralph, 368-5550
Linear Pump, Wright, aids circulation, Free, Lucille, 836-1283
Mobilaire, Invacare Mobilaire 5 w/Sense 02, best offer, Robert, 325-4063
Oxygen Machine, \$1K, Millie, 800-982-2248
Patient Lift, Invacare, hydraulic, \$200, Debra, 366-1010
Peristaltic Gradient Sequential Compression Pump, neg., Joanne, 658-5878
Pulmo-Aide Compressor, \$40, Millie, 800-982-2248
Restraint Belt, neg., Maryanne, 737-6215
Shower Bench, small, \$20, Kathy, 644-2214
Shower Chair, no wheels, back or arms, neg., Albert, 322-6600 or 738-0422 after 6 p.m.
Stair Glide, 10-12 steps, \$700, Betty, 368-0526
Stair Glide, (2) Cheney, perfect condition, neg., Sandra, 329-7440
Stair Glid, Silver Glide II, neg., Jay, 734-8400
Traction Belt, Foam Padded, neg., Maryanne, 737-6215
Transfer Bench, used twice, \$50, Kathy, 644-2214
Transfer Bench, \$65, Howard, 994-5565

Three/Four-Wheeled Powered Scooters

Scooter, Rascal, 3 wheel, chair w/arms, horn, flag, double batteries, charger, \$1,500, Kathy, 644-2214
Scooter, 3 wheel, electric all terrain, w/battery & charge, \$1,500, Albert, 322-6600 or 738-0422 after 6 p.m.

Vehicles/Accessories

Hand Brake/Throttle, new, GM, \$395, Barbara, 678-0515
Ramp, permanently attaches to a van, \$60, Elizabeth, 422-2896
Van, 89 Ford E 150, blue, Braun w/c lift, automatic, \$8K, Richard, 610-274-0242
Van, '88 Dodge Maxi Van, 2-tone brown, 50K, lift bed, toilet, storage, electric, \$20K or \$12K to qualified buyer, Franklin, 368-4675
Van, '87, Convertible, new w/c lift, 80K miles, \$6,500, Howard, 994-5565
Van, '90 E150, white & gray, w/Crow River Lift, 72K miles, garage kept, best offer, Ken, 784-6266
Van, '85 Ford E150, Conversion, Vangater lift, 75K miles, \$4K, Jenny, 633-3973
Van, '88 Ford E150 Van Ricon, sidedoor w/c lift, driver hand controls, remote control, 89K miles, Jaclyn, 325-2528

Vision

Voyager CCD, Telesensory, \$1,500, Nicholas, 645-6797

Wheelchairs

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

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

Adult, Electric, Invacare, 16" wide, w/tilt & space recliner, removable joystick on tray, \$7K, Jo/Jim, 610-622-4276

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

Adult, Electric, new w/battery & charger, \$2K, Albert, 322-6600 or 738-0422 after 6 p.m.

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

Adult, Electric, E&J xtra width, w/recharger, gel cushion, and joystick, \$2,500, Dorothy, 875-7863

Adult (large), lightweight, \$150, Leigh, 945-9523

Adult, Manual, \$500, Rose, 335-4659 evenings

Adult, Manual, 18", Invacare w/footrests, \$350, Cindy, 475-2904

Adult, Manual, std, \$50, Leroy, 834-4856

Adult, Manual, Invacare, Jay Back, \$600 Firm, William, 652-1914

Adult, Manual, Tracer 1000 Series, std, Lightweight, \$150, Michael, 328-7753

Adult (small), Manual, no arms, \$50, Betty, 368-0526

Adult, Travel Chair, lightweight, collapsible, std size, \$350 Firm, Alice, 998-4537

Child, Quickie P10, Electric, \$1,200, Richard, 610-565-3636

Child, E & J, Electric, Barbie, \$5K, Joanne, 215-335-0589

Child (6-18), Electric, Invacare 9000, \$500, Susan, 610-793-1470

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

Child, Quickie, Manual, w/tray, \$200, Vernessa, 655-9840 eve.

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

Devices Needed:

Accessible Home with w/c ramps and lowered cabinets, Sarah, 322-8112

Bed Rails, Pam, 328-9366

Bicycle, pedal w/hands, Pat, 653-6892

Commode, adult-sized w/restraints, Sheila, 697-8404

Headrest for w/c w/mounting bracket, Michael, 322-4543

Lift for Rascal Scooter, Dawn, 738-5336

Lift Chair (donation), Raymond, 349-5610

Phone Flasher for TTY, Tricia, 832-8082

Portable Ramps, Dave, 328-4143

Scooter, electric, heavy duty, Sarah, 322-8112

Scooter or electric wheelchair, xtra wide, Ruth, 422-5294

Shower Bench or Chair, small, Kristen, 658-0672

Standing Table, Ken, 831-2430

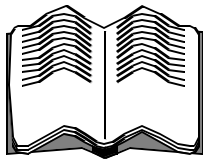
Tilt Table, Theresa 651-6015

Tricycle, Adult w/coaster brakes, Mary Anne, 998-2171
Tricycle, Adult w/ or w/o coasters, Loretta, 478-7912
Tricycle, Child's, accessible, Marcy, 609-478-0656
TTY, Tricia, 832-8082
Van w/lift, Larry, 424-0536
Van Lift, Pat, 653-6892
Van Ramps, 7-10', EZ access, Cindy, 284-9575
Van Ramps, Pat, 653-6892
Wheelchair, Electric, 16" seat w/control on right side, Kristen, 672-1960
Wheelchair, Electric, adult (tall), Arlene, 856-5063
Wheelchair, 22", collapsible, Barbara, 834-2267
Wolf Communication Device, Liz, 429-4062
Wolf Communication Device, Kim/Karen, 323-9732

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

Coming Soon!

*The 1997 Guide to Funding Resources
for Assistive Technology in Delaware.*



New Options, updated eligibility information,
and great strategies that WORK!

Available in June 1997

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

Press #1 for English or

Press #2 for
Spanish



#3 for the Central Site office or

#4 for the New Castle County ATRC or

#5 for the Kent County ATRC or

#6 for the Sussex County ATRC

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