



# The AT Messenger

....bringing technology to you

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## Assistive Technology: More Power To You

An outstanding agenda awaits attendees at DATI's Annual Conference this year. We begin the morning with the keynote address, delivered by the Honorable Jane Maroney, known and respected for her support of consumer-responsive laws, policies, and practices. She will discuss the impact of current legislative initiatives on access to assistive technology and other supports for people with disabilities. For the remainder of the day, attendees have their choice of three concurrent sessions in each time slot. We have designed this year's conference so that each time slot includes one session with an educational focus, one session with a health care focus, and one session with an employment focus. Our presenters this year are outstanding; details of their sessions can be found on page 2. Topics include communication, reading, lifting and handling, funding, assistive listening, work-site modification, and daily living, offering something for everyone! We are again featuring the always-popular "Tales from the Trenches," personal accounts of the search for the right assistive technology and the impact it has made on individual's lives.

When you join us for this event on Wednesday, September 25, at the Sheraton Conference Center in Dover, you will be astounded at what your \$25 registration fee gets you—early morning refreshments, all conference presentations, lunch, and access to a record-breaking lineup of exhibits. You'll find a registration form in the middle of this newsletter; please copy and share it with others who don't yet receive the *AT Messenger*!

As with most good things, this is a time-limited offer, so send in your registration today.

### Schedule of Events

8:30-9:00 a.m.	Registration & Exhibits
9:00-10:00 a.m.	Opening & Keynote
10:00-10:30 a.m.	Break for Exhibits
10:30-Noon	Breakout Sessions 1-3
Noon-1:00 p.m.	Lunch
1:00-2:30 p.m.	Breakout Sessions 4-6
2:30-3:00 p.m.	Break for Exhibits
3:00-4:30 p.m.	Breakout Sessions 7-9

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## Session Descriptions

### **1) Matching Client Skills and Needs with Devices using the Guide to AAC Devices**

*Dick Lytton, AIDI Augmentative Communication & Technology Clinic & Denise Peischl, University of Delaware, Applied Science & Engineering Labs*

Using a case study of an AAC evaluation, this presentation will demonstrate how to use the organization and information of the Guide to match devices with clients' skills and needs. Handouts will include excerpts from the Guide and a specific evaluation format.

### **2) Lifting & Transfers: A Review of Techniques & Body Mechanics**

*Nancy Chipman Ranalli & Pam Reuther, Easter Seals Rehab Center*

The workshop will include a review of proper body mechanics as well as an overview of lifting and transferring techniques for a variety of situations.

### **3) Obtaining AT through the Vocational Rehabilitation System**

*Brian Hartman, Disabilities Law Program; a representative of Delaware's Division of Vocational Rehabilitation; and Terry Gallagher, Client Assistance Program*

This session will address the legal and practical aspects of obtaining assistive technology through the vocational rehabilitation system. Advocate, consumer, and agency perspectives will be shared in a panel format followed by a question and answer period.

### **4) Assistive Technology and Reading**

*Maureen Schweitzer & Ed Salisbury, DATI ATRCs; Charles Mac Arthur, University of Delaware; Annie Norman, DE Division of Libraries; Kathleen Persinger, Delmar High School*

We don't all learn in the same manner. This presentation will discuss some non-traditional instructional methods used with individuals with reading difficulties. Panel members will offer approaches to students who have difficulty with print materials due to learning, visual or physical disabilities. Low-tech and high-tech options will be discussed and demonstrated in this session.

### **5) Funding for Assistive Technology Through Public and Private Insurance**

*Ronald Sibert, DATI*

This session will include discussions of criteria for AT coverage through public and private insurance, their similarities and differences, the prescription/claims filing process, and strategies for avoiding or reversing denials.

### **6) Tales From the Trenches: An AT Users Panel**

*Phyllis Guinivan, Facilitator*

Panel of assistive technology users will share their experiences in finding, acquiring, and using devices in their everyday lives.

### **7) Assistive Listening Devices**

*Jim Tyler, Delaware Hearing Consultants*

This session will include an explanation of the basic types of ALDs (FM, infrared, magnetic induction, and telephone and alerting systems), discuss their application in various communication situations, and provide information on the latest product developments.

### **8) Daily Living and Home Control**

*Patty Hove and Mike Meyreles, DATI ATRC and Linda Bruner, consumer*

An overview of low-tech to high-tech equipment available for use in the home, and a consumer's experiences with enabling technologies in her home.

### **9) Worksite Modifications: Entering and Re-entering the Workplace**

*Mike Marotta, Cerebral Palsy of Monmouth & Ocean Counties, Inc.*

This presentation will focus on how job accommodations can be used to enable an individual with a disability to obtain a job or retain a job after acquiring a disability. The ADA will be discussed, as well as the concepts of reasonable accommodation and undue hardship. Costs for job accommodations will be reviewed and potential funding sources for these accommodations will be examined.

# A Better Way to Type: Options for One-Handed Typing

*Ed Salisbury, AT Specialist*

Most people who type with one hand find that the layout of the standard keyboard makes typing slow and tedious. For these people, there are a variety of key layouts available to make typing with one hand more efficient. Keyboards specifically designed for one-handed or even one-finger use can be purchased. For those who are hesitant to purchase a new keyboard, the standard keyboard can be adapted to any number of efficient key arrangements for a relatively low cost. Since most people who type with one hand are not touch typists, it is generally not difficult for them to learn a new keyboard arrangement or input method.

The Dvorak key arrangement, named for its inventor, is the most common key layout for one-handed use. The typist has the choice of two Dvorak layouts: the left single-handed, and the right single-handed. These arrangements place the typist's hand on the home row. The most commonly used letters are placed directly under the fingers, other commonly used letters are placed within reach of the fingers, and the least commonly used letters are placed on the far side of the keyboard. The Dvorak layouts reduce finger travel by up to one third over the standard "QWERTY" style. As a result, typing speed is increased considerably and the threat of repetitive strain injuries related to typing is decreased.

The Chubon arrangement, also named for its inventor, was designed for people with a limited range of motion. This would include people using one hand, one finger, or even a headstick or mouthstick to type. In this arrangement, the most commonly used keys are placed near the center of the keyboard near the space bar. Also, letters commonly used in combination like "th", "ck", and "qu" are placed next to each other.

Layout of the keyboard involves two steps. First, the layout in the form of software must be installed on the computer. Second, the keys need to be arranged according to the new layout. This can be done either by physically removing the keys and placing them in their appropriate location, or by covering them with adhesive keytop labels. If the

computer is one used regularly by other people, it would be a good idea to use a keyboard cover labeled with the new key arrangement. The cover could easily be removed when someone else wants to use the computer.

Dvorak layouts for IBM and compatibles can be obtained free of charge from Microsoft by mail; they also can be downloaded from Microsoft's home page on the Internet. Both the Dvorak and Chubon layouts for Macintosh can be purchased from Keytime in Seattle. Macintosh users who have the Ke:nx hardware/software package from Don Johnston Inc. can use the Assisted Keyboard option to arrange the keyboard in the above layouts or others of their own design.

The Mini Keyboards (for IBM and compatibles, Macintosh and Apple computers) from Tash Inc. utilize the Chubon layout. The Mini Keyboard, having membrane keys measuring only one half inch square, is an excellent choice for people using a single finger, headstick or mouthstick to type. The King Keyboards, also from Tash, are arranged in the Chubon style as well.

Another method of computer access for people typing with one hand is the chordic keyboard. A chordic keyboard contains a reduced number of keys that, when depressed in various combinations, represent all letters, numbers, punctuation and functions of the standard keyboard. Although not designed for one-handed use, the seven-key Braille keyboard is an example of a chordic keyboard. Because the entire hand is used to type each character, the theoretical maximum typing speed of a chordic keyboard is somewhat less than methods that require the depression of a single key for each character. When typing on a standard keyboard using the "QWERTY" layout or any of the one-handed layouts, one finger can be depressing the next key while another finger is lifting off of the previous key. In order to effectively use a chordic keyboard, the typist must learn each chord, comprised of a combination of up to ten keys. Chordic keyboards are excellent for people who

have good fine motor control but limited range of motion. Because of their compact size, chordic keyboards take up very little room on the desktop. They can even be placed on a chair armrest or a person's lap.

The BAT from Infogrip is an example of a chordic keyboard. It is a seven-key, ergonomically designed keyboard available in either left or right-handed models. Because learning the chords can be somewhat time consuming, software is included to help the typist learn and practice the chords specific to the BAT. The Minimal Motion keyboard system for IBM and compatibles from the Equal Access Computer Technology Corporation relies on a chordic style input method using five keys on the standard keyboard for text entry. Equal Access also markets a switch interface and switch kits that allow switches to be positioned by a person's feet or even in a hand splint. A demo of the Minimal Motion keyboard software can be obtained free of charge from Equal Access.

Another one-handed input method using the standard keyboard is called Half-QWERTY. Half-QWERTY for Macintosh or IBM and compatibles is a unique method of typing from the Matias Corporation. This software requires that the person's left or right hand be placed in the home row position. This hand types keys just as a touch typist's hand would. To access the other half of the keyboard, the typist holds down the spacebar and types the keys normally typed by the other hand. This method, although somewhat awkward at first, requires no memorization of specific chords like the BAT and Minimal Motion. A demo of the Half-QWERTY is available from Matias by mail or it can be downloaded from their home page on the Internet.

There are many computer access options available to people using one hand to type. Products mentioned in this article represent only a sampling of the hardware and software available. For more information on any of the above products or any other types of computer access equipment, contact your local ATRC.

## Word Prediction: A Comparison

*Michael Meyreles*

*Rehab Engineer, New Castle County ATRC*

In the last issue of the *AT Messenger*, readers were introduced to word prediction/abbreviation expansion basics. Word prediction/abbreviation expansion programs can effectively increase typing speed by reducing the number of keystrokes needed to complete a word or a phrase. This article will highlight the important features of word prediction programs and allow the reader to compare four programs: **Telepathic** by Madenta Communications, **Co:Writer** by Don Johnston, **EZ-Keys** by Words+, and **HandiWORD** by Microsystems Software. All four of these word prediction programs work with most word processing applications. A few of the important features to consider when purchasing a word prediction/abbreviation expansion program are the platform and price, the dictionary, the display window, the word choice arrangement, prediction methods, and preferences relating to word processing mechanics.

The platforms (Mac vs. PC) on which these word prediction/abbreviation expansion programs run are listed in the chart on page 6. Telepathic, by Madenta, is currently the only word prediction/abbreviation expansion program with versions available for both the Mac and Windows environment. The Windows version of Telepathic will be available sometime during the summer of 1996. Except for EZ-Keys, the cost for these programs is approximately \$300. EZ-Keys is \$1,395 and comes as part of an augmentative communication package, which includes many other components and environmental control capability not offered by the other companies.

Each word prediction/abbreviation expansion program contains a dictionary that can be manipulated by the user, allowing the user to create his or her own personal dictionary. Phrases can be deleted, modified, and added to the standard dictionary. Even though the user has the ability to

customize the dictionary, there may be occasions when a word not found in the dictionary is needed. In this situation, the auto learn feature, found in Telepathic, Co:Writer, and EZ-Keys, automatically adds new words to the dictionary.

The display window or word choice window is a pop-up window containing the predicted word list from which the user selects. Each one of these programs allows a person to change the size and font of the type within the display window. This feature could be beneficial to someone who is visually impaired. These programs also allow a person to adjust the size and location of the word choice window. Words are listed in alphabetical order in every program except Telepathic. EZ-Keys and HandiWORD word prediction lists always remain on the screen because the user enters text from within the word processing application. In Telepathic and Co:Writer, the user enters text within the word prediction window. When an end-of-sentence character is entered, the word prediction program sends the sentence to the word processing application.

The prediction list's location on the screen may be dynamic or fixed. A fixed arrangement stays in one place on the screen as the person types. A dynamic arrangement will follow the sentence as it is typed, usually placing the word prediction list beneath or alongside the letter being typed. A dynamic arrangement does not require the user to visually shift from the text being entered to the word choice window, which some users may find distracting. Telepathic and Co:Writer use the dynamic word choice arrangement but offer the fixed arrangement option, while EZ-Keys and HandiWORD only offer the fixed arrangement.

These four programs are similar in their use of three prediction methods: predicting ahead, predicting by words and phrases, or predicting by grammar and usage. When predicting ahead, the program predicts the next word based on context without waiting for a letter to be typed. All four programs predict phrases that are associated with their respective abbreviations. Telepathic, Co:Writer, and EZ-Keys predict by grammar and usage. HandiWORD's primary means of predicting is by statistical weighting. Statistical weighting refers to the frequency with which the word is

used. Each program utilizes statistical weighting, which is important to the prediction process.

Preferences can be set within each of the four programs that allow the user to control various word processing mechanics. For example, two spaces can be added automatically after an end-of-sentence character is typed, and single spaces can be entered after each word. Three of the four programs will automatically capitalize the first word of a sentence. This feature is especially useful for persons who are one-handed typists. HandiWORD does not offer this option; however, with a sticky key option built into the program, only one extra keystroke is needed per sentence.

Program-specific options available to each application may make the difference when evaluating these word prediction/abbreviation expansion programs. Telepathic, Co:Writer, and EZ-Keys offer on-line help. This is helpful for those looking for a quick solution without having to search through a manual. Telepathic and Co:Writer both speak each of the word choices. Co:Writer also speaks the finished text. This could be extremely beneficial to someone who has a visual impairment or a learning disability and benefits from the auditory feedback. Co:Writer and EZ-Keys also allow a person to make a selection by scanning through the word choices. All four programs allow the user to choose by number, by pointing with the mouse, or via alternate means of input such as an alternative keyboard or any mouse emulating device. HandiWORD and EZ-Keys require a hardware key to be attached to the computer. If these keys are not in place, the programs will operate in a demonstration mode only.

Word prediction/abbreviation expansion programs can assist computer users by decreasing the physical and cognitive demands of typing. There are several word prediction programs/abbreviation expansion programs available. The four programs reviewed in this article are available for preview/demonstration at the ATRC in your county.

<b>Comparison Chart<sup>1</sup></b>				
<b>Features</b>	<b>Telepathic 2.0</b>	<b>Co:Writer</b>	<b>EZ-Keys</b>	<b>HandiWORD</b>
<b>Platform</b>	Mac or Windows <sup>2</sup>	Mac	Dos or Windows <sup>3</sup>	Dos or Windows <sup>3</sup>
<b>Price</b>	\$295.00	\$290.00	\$1,395.00	\$295.00
<b>Dictionary</b>				
Number of words	5000	2-40,000	4750	7000
Add words or phrases to dictionary	Yes	Yes	Yes	Yes
Choice of dictionaries	Yes	Yes	Yes	Yes
Save and load personal dictionary	Yes	Yes	Yes	Yes
Delete or modify dictionary words	Yes	Yes	Yes	Yes
Auto learn	Yes	Yes	Yes	No
Abbreviation Expansion	Yes	Yes	Yes	Yes
<b>Display Window</b>				
Change size of type	Yes	Yes	Yes	Yes
Font choices	Yes	Yes	Yes	Yes
Adjust size of window	Yes	Yes	Yes	Yes
Adjust location of window	Yes	Yes	Yes	Yes
Adjust number of word choices	Yes	Yes	No	Yes
Max number of words	As many as the dictionary will predict	9	6	10
Always on screen	No	No	Yes	Yes
<b>Word Choice Arrangement</b>				
Fixed or Dynamic	Both	Both	Fixed	Fixed
Alphabetic order	No	Yes	Yes	Yes
Hide word choices	Yes	Yes	Yes	Yes
Statistical weighting	Yes	Yes	Yes	Yes
<b>Prediction</b>				
Predicts Ahead	Yes	Yes	Yes	Yes
Predicts words and phrases	Yes	Yes	Yes	Yes
Predicts by grammar and usage	Yes	Yes	No	Yes
<b>Word Modification</b>				
Add Suffix	Yes	Yes	Yes	Yes
Add Prefix	No	Yes	No	No
<b>Preferences</b>				
Capitalize first word in sentence	Yes	Yes	Yes	No (Sticky Key option built in)
Space after period	Yes	Yes	Yes	Yes
Space after word ending	Yes	Yes	Yes	Yes
<b>Options</b>				
On-line Help	Yes	Yes	Yes	Yes
Speak word choices	Yes	Yes	No	No

Comparison Chart <sup>1</sup>				
Features	Telepathic 2.0	Co:Writer	EZ-Keys	HandiWORD
Speak finished text	No	Yes	No	No
Choose by scanning	No	Yes	Yes	No
Choose by number	Yes	Yes	Yes	Yes
Choose by pointing	Yes	Yes	Yes	Yes
Alternate input <sup>4</sup>	Yes	Yes	Yes	Yes
ECU control	No	No	Yes	No
Hardware Key required	No	No	Yes	Yes

<sup>1</sup> The model for this chart can be found in "Predictive Word Processors: Word Prediction Software" by B. Heinisch and J. Hecht appearing in the June 1993 **TAM Newsletter** (Vol. 8 No. 3)

<sup>2</sup> Windows version available Summer 1996.

<sup>3</sup> Windows version of this product described.

<sup>4</sup> Alternate inputs can include any alternative keyboard, any mouse emulating device or any switch interface.

## First State Project With Industry, Inc. Recognizes Ability Is Ageless

In 1983 First State Project With Industry, Inc. (FSPWI) was formed *by business for business*. It is a private, non-profit corporation which works with more than 2,000 employers throughout the state of Delaware matching the skills of people with disabilities to appropriate job openings in competitive employment. The service is free to both the business community and to the individuals with disabilities seeking what many of us take for granted...a job.

Attuned to the needs of industry, in its 13-year history FSPWI has assisted over 1,635 persons with a wide range of physical, mental, and learning disabilities to become competitively employed in service, production, clerical, technical, and professional positions.

As demographics and the business environment change, i.e. companies undergoing cutbacks of thousands, FSPWI is inaugurating an Older Worker Program funded by the Spree Trust Commission. This program is designed especially for those individuals 40+ who also happen to have a specific limitation. At First State it is believed that *Ability is Ageless*. They have learned that more than *anything* else employers want an employee they can rely on. The maturity of the older job seeker provides businesses not only with reliabil-

ity, but also with a solid work history, and a built-in strong work ethic. These qualities contribute to overall profitability and productivity.

For more information call Merrie G. Bailey, Executive Director, at 302-774-4559.

## Enhanced 911 Is Available for All Persons With Disabilities

The State Council for Persons with Disabilities (SCPD), along with the Department of Public Safety, has developed an enhanced 911 emergency information form that is simple to complete and is available to **ALL** persons with disabilities in the State of Delaware. The information will provide 911 personnel with relevant facts and data that are then communicated to emergency medical services (EMS) professionals. EMS professionals will then be prepared to help individuals with disabilities involved in an emergency situation. **The information is voluntary, private and will not be divulged to anyone except to aid in the provision of any emergency service to the address listed on the form.**

Anyone who wishes to obtain this form should contact Kyle Hodges, SCPD staff at: 302-739-3613 (voice) or 302-739-3699 (TTY).

# Computer Assistance for Child With ADHD

*Rita McCommons*

One year ago, our eight year-old son Drew, who attends public school in an integrated classroom, was diagnosed with Attention Deficit/Hyperactivity Disorder (ADHD), a Nonverbal Learning Disability, and a Developmental Coordination Disorder. Having ADHD means Drew has difficulties with both sustained attention and self-regulation. A Nonverbal Learning Disability indicates that Drew is functioning within the average range in verbal cognitive skills such as basic reading and spelling, but has difficulty in integrating basic mathematics concepts, such as catching a ball, balancing on one foot, as well as fine motor skills in which he lacks sufficient strength and stability to form his letters at his peer level. Each could affect his handwriting to a degree and, in Drew's case, it seemed that all three did. He had difficulty making shapes; he recognized his letters, but had a great deal of difficulty remembering how to form them, and with the ADHD he didn't want to take the time to work at it.

One of the recommendations given us by the A. I. duPont Developmental Medicine Clinic was to start Drew on a computer as soon as possible. In this way he would be able to put his ideas on paper without becoming frustrated or losing his train of thought while forming his letters. A. I. suggested that we contact the DATI ATRC located in the Kent County Community School. They felt they would help us to set up a program for Drew in cooperation with the school. Not only did they do this, but the ATRC also apprised us of our rights in education and attended an Individualized Education Plan (IEP) meeting with us. Ron Sibert, DATI Funding Specialist, assisted us in having the keyboarding lessons written into our IEP. To lay the foundation for written communication in the classroom, Drew first had to learn the keyboard.

Patty Hove, OTR/L, has set up a keyboarding program for Drew to do in school with the help of school personnel. She periodically visits the

school to see how he is progressing. In the classroom, Drew has a volunteer tutor that assists him in practicing keyboarding three times per week. He has learned to access the keys by memory (vision occluded) in the "home row (asdfghjkl;)" and the row above the home row," and is just beginning to combine words using those two rows of keys. Drew continues to manually write his letters, words, and sentences when time is not a factor, and has made improvements in the legibility. However, Drew continues to need a lot of repetition from week to week. At home, Drew completes his homework on the computer, devoting his energy to communicating his thoughts rather than the formation of the letters.

Drew seems to be progressing rapidly in spite of his disabilities; we hope that by the time he enters third grade he can do most of his work on the computer. It continues to be a struggle getting Drew to do his homework.

However, we have come a long way in one year and could not have done it without the ATRC. Not only have we learned a great deal, but it has been a great lesson in how the ATRC, family, and school can work together to benefit the child.

For more information on keyboarding software, contact your local ATRC.

*Rita McCommons is a very effective parent advocate for her son with learning disabilities. The Kent County ATRC appreciates Rita's willingness to share information about Drew with others.*

# The Communication Bill of Rights...And Then Some

*Maureen T. Schweitzer, M.A. CCC/SLP*

*Coordinator, DATI ATRCs*

Communication is a human birthright. In 1992 the National Joint Committee for the Communication Needs for Persons with Severe Disabilities published a very powerful document called the COMMUNICATION BILL OF RIGHTS, which clearly and concisely specifies that every person with a severe communication impairment should have opportunities for successful interaction.

The National Joint Committee was comprised of members from the American-Speech-Language-Hearing Association, the American Occupational Therapy Association, the American Physical Therapy Association, the American Association on Mental Retardation, the Council for Exceptional Children, the Association for Persons with Severe Handicaps, and the United States Society for Augmentative and Alternative Communication. The interdisciplinary composition of this committee unequivocally reflects the importance of communication in aspects of life, making it a responsibility of all disciplines.

Therapists, teachers, and professionals working with individuals having severe impairments should be aware of the ethical and philosophical mandates which are the cornerstone of the Communication Bill of Rights. Any consideration of quality of life issues, whether the environment be educational, vocational, independent living, or recreational, must take into account an individual's communication skills and needs. All individuals with severe impairments communicate in some fashion. Communication may include some conventional systems (speech or signs) or non-conventional systems (body movements, non-speech sounds and augmentative communication devices). The Joint Committee defines communication as: "any act by which one person gives to, or receives from another person, information about that person's needs, desires, perceptions, knowledge, or affective states." Intrinsic to this basic need and right are specific communication

rights as outlined in the Communication Bill Of Rights.

Recognizing the rights of individuals with severe communication impairments and the responsibilities of people working with these individuals is the first step in a very important intervention process. Even though these rights are basic, they are holistic and reflect what is needed for individuals receiving services. The Joint Committee states that "it is the responsibility of all persons who interact with the individuals with severe disabilities to recognize the communication acts produced by those individuals and to seek ways to promote the effectiveness of communication by and with those individuals." There are six very important tenets of best practices in meeting the needs of individuals with severe impairments: (1) communication is a social behavior; (2) effective communication acts can be produced in a variety of modes; (3) appropriate communicative functions are those that are useful in enabling individuals with disabilities to participate productively in interactions with other people; (4) effective intervention must also include efforts to modify the physical and social elements of environments in ways to ensure that these environments will invite, accept, and respond to communicative acts of persons with severe disabilities; (5) effective intervention must fully utilize the naturally occurring interactive contexts (e.g., educational, living, leisure, and work) that are experienced by persons with severe disabilities; and (6) service delivery must involve family members or guardians and professional and paraprofessional personnel.

To be effective in addressing quality of life issues for individuals with severe communication impairments, service providers must accept the challenge of creating a positive communication environment to meet the needs of individuals. This can be achieved by respecting the rights of these individuals. Awareness and acknowledgment of

*(cont'd on page 9)*

these rights may also lead to more appropriate goal attainment and functional outcomes. The desired outcomes for individuals with severe communication impairments are the development of interactional skills with family and friends and inclusion in life's activities. Teachers, families, service providers and peers can have an awesome effect upon the progress and participation of an individual with severe communication impairments if support is provided consistently over time. This is not only a challenge but a responsibility as outlined in the Communication Bill of Rights by the National Joint Committee.

For copies of the Guidelines for Meeting the Communication Needs of Persons with Severe Disabilities, please contact your local ATRC. Information about AAC systems and training opportunities are also available through the ATRC in your county.

*This article is based on: National Joint Committee for the Communication Needs of Persons With Severe Disabilities (1992). Guidelines for Meeting the Communication Needs of Persons with Severe Disabilities. **Asha**. 34 (March, Supp 7), 1-8.*

### **Communication Bill of Rights**

1. The right to request desired objects, actions, events, and persons, and to express personal preferences, or feelings.
2. The right to be offered choices and alternatives.
3. The right to reject or refuse undesired objects, events or actions, including the right to decline or reject all proffered choices.
4. The right to request, and be given, attention from and interaction with another person.
5. The right to request feedback or information about a state, an object, a person or an event of interest.
6. The right to active treatment and intervention efforts to enable people with severe disabilities to communicate messages in whatever modes and as effectively and efficiently as their specific abilities will allow.
7. The right to have communicative acts acknowledged and responded to, even when the intent of these acts cannot be fulfilled by the responder.
8. The right to have access at all times to any needed augmentative and alternative communication devices, and to have those devices in good working order.
9. The right to environmental contexts, interactions, and opportunities that expect and encourage persons with disabilities to participate as full communicative partners with other people, including peers.
10. The right to be informed about the people, things, and events in one's immediate environment.
11. The right to be communicated with in a manner that recognizes and acknowledges the inherent dignity of the person being addressed, including the right to be part of communication exchanges about individuals that are conducted in his or her presence.
12. The right to be communicated with in ways that are meaningful, understandable, and culturally and linguistically appropriate.



If you'd like more information, or have equipment or an equipment need, call the DATI office at (800) 870-DATI or (302) 651-6790 or 651-6794 TDD. All items are in good condition and prices are negotiable unless otherwise stated.

### Devices Available:

#### Ambulation/Mobility

Canes, variety, Free  
Lawall Prosthetic Leg Brace for the left leg, Free!  
Upper Body Brace, Free!  
Walkers, Free!  
Walker-Works Fine, \$20  
Walker, Rollator-Swedish, attached seat, New, \$300

#### Augmentative Communication

Apple IIGs System & Monitor & PRC Light Talker w/peripherals to connect to Apple IIGs, inc. many extras, \$1,000  
IntroTalker, \$500  
MultiVoice speech synthesizer, \$550  
Scanning Lightwriter (SL8), \$1,025

#### Computers/Electronic Equipment

B.O.S.S. 8000-Casio Organizer, \$100  
HandiKEY Deluxe, adapted access, speech output, \$100  
HandiCODE, adapted access, speech output, \$100  
Scan Man w/catchword PRO OCR for Windows, \$210  
Unmouse, \$60

#### Hearing

Sonic Alert Baby Cry Signaler, \$20  
Telecaption Caption Decoder, \$85  
Telecaption II Decoder, \$35

#### Personal Care/Home Management

Bath Bench, Free!  
Bath Seat, Child, Free!  
Bath Support Seat, Child (2), \$140  
Bathtub Bench, \$100  
Bathtub Transfer Bench, \$90  
Bathtub Transfer Bench, Carex, \$45  
Bean Pillow with liner & cover, \$55  
Car Seat, Columbia, Child, Free!  
Commode Chairs, Free!  
Commode (2), \$40 each  
Compression Pump for leg or arm, paid \$5,000 new  
EPS SXL Tens Unit, \$300  
Feeding Machine, Windsor, \$700  
Geriatric Chair-Brand New, \$600  
Geriatric Chair, mobile, \$150  
Grab Bar, Metal w/diamond cut, \$100 new, Free  
High Back Toilet Support/Child, \$170  
Hospital Bed, never used, \$1,200  
Hospital Bed, Electric-Excellent Condition, \$700  
Hospital Bed with Trapeze, Electric, \$650  
Hospital Bed Frames, Free  
Hospital Tables, Portable, \$10 each, or take all at \$5 each  
Hoyer Lift, Free  
Hydraulic Lift, Patient, Invacare, \$300

Lift, Recliner Chair, Electric, Burgundy color, \$250 Firm  
Lift, Recliner Chair, Mauve, 6 weeks old, Best Offer  
Lift Chair, Electric, 2 years old, \$600  
Potty, Child, Free!  
Raised Toilet Seat w/rails, \$45  
Raised Toilet Seat, adjustable, \$25  
Seat & Desk Top Combination, Child, Free!  
Shampoo Rinse Tray, \$20  
Shampoo Tray, Portable, \$20  
Sideline (lay baby down), Free!  
Stair Glide, 14 step, \$2,000  
Stair Glide, Stair Lift Model 25, \$2,000  
Toilet Seat Extender, extra wide, w/bars, adj. height, \$50  
Tubby II Chair, Activeaid, \$140  
Tumbleform Feeding Chair, Free!

#### Three-Wheeled Power Mobility

Electric Rascal Mobility Cart with Electric Hoist, \$2,000  
Three-wheeled Scooter, Amigo, Adult, \$300

#### Vehicles/Accessories

Driving Controls, Hand-Operated, \$125  
Gas Pedal, Left, Free!  
Maxi Van, '88 Dodge, 50,000 miles, includes lift, water, toilet storage, electric, cap tie downs, full-size bed, \$20,000 or \$10,000 to qualified person  
Ramp for Van, permanently attaches, \$60  
Van, '84 Chevy, w/Braun Lift, 70,000 miles, inspected, new A/C, raised roof, bench across the back, \$12,000  
Van, '92 Chrysler, w/Braun Entervan II (electric. ramp), 31,000 miles, remote control, power slide door, hand controls, bumper to bumper service contract, \$24,000  
Van, '89 Ford, w/lift, 66,000 miles, \$7,500  
Wheelchair Lift, Pal Swing-Away, \$1,200

#### Wheelchairs

Electric, Child's (1), Free!  
Electric, Child's, Barbie E & J, \$5,000  
Electric, Adult, Standard size, footrests, reclines, 4-wheel drive, never used  
Electric, Highback, needs minor repair, \$200  
Manual, Adult, Small, E & J, headrest, tray, \$150  
Manual, Adult, Invacare, Jay Back, \$600 firm  
Manual, Child, Jay Back, Black & Pink, like new, best offer  
Manual, Teladyne, Lightweight, 3-wheeled, \$50

#### Devices Needed:

Accessible home w/wheelchair ramps & lowered cabinets  
Bath Seat for 3 year old with severe CP  
Flotation Mattress or Pillow/Jelly Pad  
Footrest, right, from a Fortress Commuter Wheelchair  
Ke:nx, a full access system for the Mac  
Leg Braces  
Lift for Rascal Scooter

(cont'd on page 12)

Lift for Van  
Lift Chairs  
Lightwriter (SL35)  
Mac 500 Series Laptop  
Personal Computers  
Print Enlarger  
Reclining Geriatric Chair  
Rolling Shower Chair, Adult, to fit through 20" opening  
Shower Chair with Back  
Talk:About, conversation software for the Mac  
Three-wheeled Powered Scooters  
Walker, Child's, Posterior  
Wheelchairs-Electric, Manual, Travel  
Wheelchair Ramp-portable

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## Dads Keep in Touch on the Internet

DadvoCAT is an Internet bulletin board which was developed at the 1994 Parent to Parent Conference in North Carolina. The Board provides fathers of children with disabilities with the opportunity to communicate with each other and provides mutual support for advocacy. To subscribe contact e-mail: [DADVOCAT@UKCC.uky.ed](mailto:DADVOCAT@UKCC.uky.ed).

Use Millie's Math House to help your child work on the early learning concepts of math, vocabulary, relationship, counting, patterning, and problem-solving. Help the little, middle, and big critters choose their crazy shoes so they will fit. Build-A-Bug encourages a child's creativity to place rolling eyes, wagging tails, and wiggling antennae on their favorite bug. In the Cookie Factory, the child learns the sequence of events needed to feed cookies with jelly beans to Harley the Horse. For Bing & Boing, your child can record his/her own sound or voice with a picture. Millie's Math House activities (plus two more) will provide your child with a fun way to supplement play and school subjects. Millie's Math House is primarily for children ages 2 to 5 and requires the use of the mouse or mouse alternative.

For a demonstration of or more information on Millie's Math House, please contact your local ATRC.

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

Press #1 for English or  
Press #2 for Spanish

then press...



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

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