



DREAMMS FOR KIDS, inc.

DIRECTIONS

Technology in Special Education

For Parents & Professionals

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Communication Devices

Whether a child is able-bodied or has a disability, the goals for effective classroom participation remain much the same. Children need to be able to communicate using focused vocabularies related to specific topics. They also need to be able to “converse” or interact with the teacher and with peers using age-appropriate syntax and pragmatic skills. They need to be able to use both spoken and written communication skills to demonstrate mastery of course competencies (e.g., count to 10, name colors, classify objects).

Able-bodied children generally achieve the goals for effective classroom participation without the use of assistive technology and without modification to the classroom environment. For children with severe communication impairments it is often the use of an augmentative communication system (AAC), that facilitates effective classroom participation. The type and severity of the disability, both physical and cognitive, impact on the type of AAC system that may offer the most effective means for achieving academic success. In selecting an AAC system, whether high or low-tech, an important consideration must be the way the vocabulary will be organized. The vocabulary selection approach must match the child’s cognitive abilities and communication needs, and should enable the child to communicate effectively in educational, recreational, and social situations.

Low Tech Approaches

Manual Communication Boards: A manual communication board is synonymous with a low-tech system. Manual boards, in addition to serving as back-ups to high-tech system can be valuable “primary” communication tools. Unlike high-tech systems, manual boards are not constrained in the number of items they can display at a given time; they do not require training to operate; they do not require extensive time to program; nor do they break down. Manual boards do provide therapists an effective tool for teaching language and for enabling a

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My Dear Friends,

8/96

It's August (almost September) folks..... the leaves are getting ready to change to brilliant colors and make their inviting piles all around the bottom of the trees. How I wish I were a child again and could run and jump into the big pile my father had raked to the bottom of the lawn. We'd mess it all up and he'd rake them all up again. I'll never forget the smell :-)

The disabled community in the state of Florida, and I personally, lost a true friend this past month. Karen Jacobs, Director of the Tampa Regional office of the Florida Alliance for Assistive Services and Technology (FAAST), and advocate for using technology to help the disabled, passed away of colon cancer. Before becoming part of FAAST, Karen was the head of Tampa General Hospital's adaptive sports program and led others to compete from their wheelchairs, organizing the hospital's national championship quad rugby team. She also carried the Olympic Torch in July !

Karen's newest program, "The Great Escape", was founded in order to help finance assistive technology for people that are confined to their surroundings by their disabilities. This program is designed to allow people "who can't escape with their body to escape with their minds" and expand their world through the use of the Internet. If you would like to support this wonderful program, send your donations to: *In Memory of Karen Jacobs - The Great Escape Project, Tampa General Health Care Foundation, P.O. Box 1289, Tampa, FL 33601.* Pleasant journeys Karen, we'll all miss your enthusiasm, positive outlook, and smiles!

My Kindest Regards Till Next Month.....

Janet

DIRECTIONS

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FATIC/DREAMMS Strategic Alliance

DREAMMS for Kids, Inc., a non-profit information clearinghouse, and publishers of *DIRECTIONS: Technology in Special Education*, and FATIC, Inc. announce the formation of the FATIC/DREAMMS Strategic Alliance. The recently privatized FATIC, Inc. and the non-profit parent service agency, DREAMMS for Kids have formed a strategic alliance in order to address the demand by educators, parents, and consumers for information and training on the use of computers, assistive technology and innovative educational programs for people with disabilities.

Contrary to the common image, inspiration does not often come to a lonely recluse at the top of a mountain. It more frequently develops in a supportive atmosphere of shared communication. At the Florida Assistive Technology Impact Conference (FATIC) a group of people consisting of teachers, therapists, counselors, technologists and parents brought such inspiration to others in a presentation that related the story of Andy Hagen. Their presentation tells of building bridges of communication and collaboration to accomplish a worthwhile objective. The goal? Providing educational opportunities for Andy.

Andy lives in Greenville, Florida, a small town in Madison County just 45 miles east of Tallahassee. Beverly Sloan, Speech/Language Pathologist,

says that "Andy is a person that will always depend upon technology to achieve his goals in life. Technology has been a bridge to inclusion for Andy." Andy has Cerebral Palsy and communicates using a laptop computer with a chin switch and voice synthesizer. However, obtaining the equipment, training educators in the technology, and helping Andy learn to use it to increase his reading, writing, and communication skills presented challenges that could only be met if many people worked together to achieve a common goal. So, as a team, they accomplished their objective and, as a team, they shared their experience with the FATIC attendees so that others could benefit from their experiences. Taking inspiration from their joint efforts, DREAMMS and FATIC will collaborate with many other groups, including the Florida Federation of the Council for Exceptional Children, Technology and Media Division to successfully achieve the common goal of providing educational opportunities and assistive technologies to special needs students.

FATIC is scheduled for the fall of 1997 and will be sponsored by DREAMMS for Kids. Details will be announced at the *Building Bridges Relational Training Seminar* in October of this year. FATIC will continue to offer presentations by, and for, teachers, parents, rehabilitation agencies,

administrators, and researchers from around the world. Sessions will address issues related to at risk children, vocational rehabilitation, sensory, physical, mental, emotional, speech and language impairments. A Hands-On Lab for participants to experience the latest in adaptive and assistive hardware and software, expanded half and full-day workshops, and innovative, futuristic vendor exhibits will enhance the educational program. FATIC will showcase the tremendous abilities of students, offer well deserved recognition to teachers, and honor the parents who provide the foundation they all build upon.

Andy Hagen's story provided another lesson in showing how *everyone* benefits from such collaborative efforts. As Gail Dickey, Andy's teacher, said, "I want to stress the effect that he has had on his peers. He has made them into more avid learners just by them watching him everyday. He is a dynamic example . . . This child has had such a tremendous effect on everyone. I see it everyday. I see kids who have learned to accept differences. Kids who have learned to interact socially. Kids who initiate. Andy has made my day, everyday." Thank you, Andy, and thanks to all the people who brought us your story and your inspiration.

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ATFSCP Notes

The Assistive Technology Funding and Systems Change Project

FREQUENTLY ASKED QUESTIONS ON ASSISTIVE TECHNOLOGY FUNDING --- WITH ANSWERS

By Susan Goodman, Esq.

This article features frequently-asked questions posed to ATFSCP staff through the project's trainings, technical assistance, and outreach activities.

Q: What is assistive technology?

A: Assistive technology devices and assistive technology services are defined in the Technology-Related Assistance Act for Individuals with Disabilities Act of 1988 (Tech Act) as follows:

Assistive technology device: Any item, piece of equipment, or product system, whether acquired commercially off-the-shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

Assistive technology service: Any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology service.

An assistive technology device may be a "high-tech" device such as a computer or an augmentative communication device, or it may be "low-tech," such as eyeglasses, a tape recorder, or a cushion for better positioning. It can also include training for parents, teachers, and related service staff.

Q: What are the state Tech Act projects?

A: The Tech Act created programs in each state to develop statewide, consumer-responsive programs of technology-related services for individuals with disabilities of all ages. In 1994, the Tech Act was amended to focus Tech Act agency efforts on systems change and advocacy activities that are necessary to develop statewide programs that have a long-lasting impact on the ways that individuals with disabilities access assistive technology. Just some of the activities of the state Tech Act agencies include:

- Events and locations where individuals can try out devices and equipment;

- Statewide toll-free numbers for information and linkages to AT services and suppliers;

- Funding Guides listing AT resources and funding options;

- Innovative ways to get technology into local communities (e.g., mobile van outreach services);

- Equipment exchange and recycling programs; and

- Training of people with disabilities, families, service providers, and others in AT.

Q: Do state Tech Act projects conduct minority outreach?

A: State Tech Act programs are required, by law, to conduct outreach to underserved populations. Several states have initiatives to reach Hispanic populations. For example:

In Kansas City, Missouri, the Center for Assistive Technology works closely with Children's Mercy Hospital (CMH) on augmentative communication evaluations and other assistive technology issues. CMH provides services to many children from minority and other underrepresented groups. Therefore, this collaboration enables children and families to access the appropriate devices and services.

The Dakota Link Project in South Dakota conducts outreach to Native American populations. It has been successful in assisting people in accessing technology.

If you want more information on the activities conducted in your state, contact your state Tech Act agency.

Q: Can the Protection and Advocacy agency in my state help me and my child get the listening device that h/she needs?

A: Each state Protection and Advocacy agency sets priorities with respect to the type of cases in which they will provide legal representation. In addition, each state Protection and Advocacy agency gets special funds designated to handle assistive technology cases. Be sure to ask for the assistive technology attorney when you call your P&A office.

Q: People representing minorities receive very few services in our area. Can P&A lawyers help these people get the services that they need?

A: Again, within the priorities determined by the state P&As, people from under-represented groups should receive the same consideration as others in determining which clients their P&As are able to represent.

State P&As are required, by law, to conduct outreach to under-served populations. If you wish to find out about initiatives in your state, contact your local P&A office and ask to speak to the person in charge of outreach for under served populations.

Q: Do I have the right to an Individualized Written Rehabilitation Program (IWRP) through Vocational Rehabilitation (VR)?

A: Vocation Rehabilitation is the program which provides employment-related services to persons with disabilities. Unlike Medicaid (in its current form), and special education, it is not an "entitlement" program. This means that, even if an individual has a disability and is not employed, s/he does not have a right (is not legally entitled) to receive services from VR. Therefore, s/he would not be "entitled" to services or an IWRP.

However, if an individual is found eligible for services, the right to an IWRP is triggered. Like the Individualized Education Plan (IEP) in special education, the IWRP is the document that states the specific plan of services for the individual who is receiving VR services.

The Client Advocacy Program offers help to individuals who are trying to get assistance through the VR system. The phone number of this program can be found in the state government section of your local phone book, listed under Vocational Rehabilitation or Protection and Advocacy agency.

Q: My husband and I used our savings to purchase a laptop computer for our child who has severe fine motor disabilities and is unable to write. He needs to use the computer at home to do his homework. The principal refuses to allow him to bring it to school because she claims that the school cannot be responsible if it is damaged.

Is there anything I can do?

A: If your child needs an assistive device to benefit from his/her educational program, it should be written into the IEP. The Office of Special Education Programs in the U.S. Department of Education issued a policy letter on the subject of school liability for family-owned devices. That letter stated: "If a child needs assistive devices to benefit from his educational program, the school is liable for a family-owned device used at school." (The OSEP policy letter stating that technology may be taken home is dated November 21, 1991.) ■

To secure general information on the project, contact: Assistive Technology Funding & Systems Change Project, 1660 L Street, NW, Suite 700, Washington, DC 20036 Tel: (202) 776-0406 Fax: (202) 776-0414 Email: atfscp@aol.com. To secure information & individual assistance on AT funding issues, contact: 1-800-827-0093 (voice) 1-800-833-8272 (TDD), or (404) 919-8305 (fax).

The opinions expressed herein do not necessarily reflect the position or the policy of the U.S. Department of Education, and no official endorsement by the U.S. Department of Education of the opinions expressed herein should be inferred.

Technology & Inclusion

Entering School with Assistive Technology - Kindergarten through Grade 2

Jamie Judd-Wall

Introduction

In this month's article we are going to be discussing assistive technology and students with disabilities in the primary grades- kindergarten through grade two. Federal law requires that schools consider which assistive technologies are appropriate for use with each student with a disability. For every student in special education programs, there should be some documentation in either the IEP or in the comprehensive individual assessment (CIA) that indicates the nature of the assistive technology assessment that was conducted, what technologies were considered and how it was determined what technologies were appropriate for your child.

As students move out of PPCD programs and into the general body of public school education, our expectation of the student changes. Students, even students in kindergarten, have specific academic criteria to meet. Assistive technologies suggested for use in the primary grades must support student participation in meeting these specific goals.

What is an assistive technology assessment?

The challenge for the professional in special education is to determine the

nature of an assistive technology assessment. Unfortunately there is no 'cookbook' assessment procedure to use. An assistive technology assessment for a student with motor involvement is quite different from an assistive technology assessment for a student with a learning disability. There are, however, a few common threads in each process:

- * The student should use the technologies that are being considered. Data about task performance both with and without the technology should be collected.

- * The technology should be used both in isolation and in combination with other modifications to determine its actual applicability in the classroom.

- * The student's and parents' opinions should be included in the information being gathered.

- * Technologies should be considered which not only empower the student for communication and mobility, but enhance participation in classroom activities.

What Technologies Are Out There?

One of the greatest problems in using

assistive technology assessment is the confusion between program planning and assistive technology assessment. In program planning strategies, like the SETT (student, environment, task, tool), the team addresses global barriers to student success, not just technology. Unless the team is familiar with the full range of assistive technologies, appropriate items may not be woven into the program plan. In assistive technology assessment, the team selects specific technologies to be used to meet the unique needs of an individual student. The team uses the technologies selected with the student in a fixed process, collects data on the technology use and develops a plan for the implementation of recommended technologies in the classroom and other instructional settings.

Two Aspects of Assistive Technology Use

Generally speaking, as students move into the primary grades, especially if the student is in an inclusive setting, we look to assistive technology to fill one of two roles:

- š Assistive technology can absorb some of the performance load. For students who might, under other circumstances, participate for largely socialization purposes, assistive

technology can bridge the gap between academics and socialization. I refer to these as developmentally necessary technologies. In these cases the technology is accompanied by a modification of the level or complexity of the classroom task.

for example: Jonna is a first grade student with Down Syndrome. She uses an IntelliKeys keyboard programmed with the letters of her name and two rows of spelling words. As the other students are practicing their spelling words, Jonna writes her name and matches the spelling words to each other. The computer reads her words aloud and provides feedback about the correctness of her spelling matches.

§ Assistive technology can provide a student with access to classroom tasks. For a student who, under other circumstances might dictate their work or perform the task with hand-over-hand assistance, assistive technology enables the student to be independently productive. I refer to these as personally necessary technologies. In these cases the technology provides access to the same task the other students in the classroom are doing. There may be a modification in the length of the task, but the complexity and level of the task remain unchanged.

for example: Keith is a second grade student with cerebral palsy. He uses a single switch with Ke:nx. His geogra-

phy words are programmed into the Ke:nx scan. Each location on the map is identified A, B, C ect. Keith selects the name of the states from the Ke:nx scan that correspond to the letters on the map. Keith prints his list and hands it in with the worksheet ... but instead of doing 25 states Keith only does 15. The teacher checks the modified assignments carefully to be sure that by the end of the unit, Keith has used all the states in at least two tasks.

The Power to Perform

As we integrate technology into daily classroom activities in the primary grades, we offer each child the opportunity to extend their learning. As children learn and grow, technology empowers them to perform and participate in school, at home and in the community. As you implement these education strategies for assistive technology, you will find - as I have - that students are achieving more, that your classroom is more exciting than before and that you really are a great teacher!

References

SETT, Joy Zabala, Region IV Education Service Center, Houston, TX

IntelliKeys, IntelliTools, 55 Leveroni Ct #9, Novato, CA 94949

Ke:nx, Don Johnston Inc, 1000 N. Rand Rd #115, Wauconda, IL 60084

Editor's Note

Technology & Inclusion is a not-for-profit, tax exempt 501(c)(3) organization based in Austin, TX. Created by a small group of concerned parents and professionals in 1994, their vision was to establish an organization that would work with individuals with disabilities, their families and professionals with the ultimate goal being maximally inclusive service delivery - at school, at work and in the community. Jamie Judd-Wall is the Executive Director of this organization.

Next Month: Assistive Technology as an Instructional Modification - grades 3-5. ■



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We Need More than Stories

by Alexandra Enders
Chairperson for the RESNA QA Committee

Now that comedian Jeff Foxworthy (of “you might be a redneck..” fame) has arrived on prime time television, people are beginning to understand criteria for recognizing a genuine redneck. Don’t you wish we could as easily popularize recognition of when its appropriate to use assistive technology? Word like “criteria for service” and “indicators for use” are not nearly as fun as the stories that Foxworthy tells. David Law may be able to come up with an irreverent Assistive Technology (AT) song that we could use. But we will need something in writing to back up a song if we are going to part of the coverage discussions on whether or not AT devices and services will be included, or excluded, from reimbursement.

We need to be able to clearly convey to service providers, policy makers and other decision makers how, when and why AT should be included in services, policies, and coverage. Consumers also need this information, so they can develop accurate expectations about what technology can do for them. Outcome measures, including consumer satisfaction measures, needs to be firmly connected to clear expectations of what is possible. And consumers, as well as providers, need to be able to convey this

information clearly to service providers, case managers, and payers if they are to function as advocates.

There is considerable ambiguity surrounding AT inclusion. Tony Langton, in describing Tech Points admits that “even with the mandate to include rehabilitation technology as part of the vocational rehabilitation process since 1986, these services are still not effectively integrated into regular case management activities.”

What does it mean that AT should be included “when appropriate?” Who decides when AT is appropriate? Whose expectations for either the individual or the technology will be used to determine criteria for service? Langton’s Tech Points provides guidance as to when AT should be included in the VR process, and has demonstrated progress in systems change. Where are the models for health care, education, independent living?

Other fields have guidelines. For example, coverage of occupational therapy services in home health is determined by the need for “skilled care,” not by a specific diagnosis. AOTA suggests that “selection of an

appropriate functional diagnosis can help claim reviewers understand the need for skilled OT services”. But OTs have guidelines for skilled care and skilled therapy, as do other groups. They can explain when it is appropriate to consider their services in a care plan, and in coverage decision making. Can we do that for AT?

Unless we can succinctly, consistently, and accurately portray when AT should be considered in terms decision makers can understand, we might just as well join Jeff Foxworthy, with a good collection of amusing old boy stories, and now way ever be taken seriously. We might be the rednecks!

If you are interested in being part of a work group to start developing consensus documents on this issue or have existing material to share, please contact RESNA’s QA Committee. RESNA, 1700 North Moore St., Suite 1540, Arlington, VA 22209-1903; (703) 524-6686.

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“Words Around Me”

Software Review - Edmark - 1.800.362.2890

Edmark’s Done It Again! Their *Words Around Me* is a vocabulary development software program specially designed for students with unique learning needs. With help from an encouraging character named Greenie, students will learn to associate spoken words with a variety of visual representations, including photographs, drawn images and animations. Words can be learned in English or Spanish.

In an engaging step-by-step environment for learning vocabulary, students progress through a sequence of five Activities: Word Identification, Plurals, Categorization, Sameness and Differ-

ence. Four Review Games—Make-A-Match, Hide and Seek, Picture Puzzle and What’s Missing?—provide playful opportunities for students to use the words they’re learning. Through this sequence of Activities and Review Games, students learn to identify the spoken word with pictures of the word, reinforce word concepts and develop visual perception, memory, listening, categorization and comparison skills. All activities are accessible with a mouse, TouchWindow or single switch.

The vocabulary words are presented in seven Word Collections, each made up

of forty words. Because each word is represented by more than one image, students learn that words are symbols, not titles for particular pictures.

Our testers were quite taken with Greenie, and were anxious to see his antics with each correct choice. The program execution and interface is very well planned, and leads students with easy graphical selections. We’d like to see a Home Version available at lower costs for parents though!

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child to participate in the classroom.

Topic Boards: Topic boards provide a focused vocabulary related to a specific topic. For example, a topic board for morning circle would contain the vocabulary needed to participate in the circle activity (e.g., weather, day, month). On a topic board, vocabulary can be arranged in a variety of formats. Each format is intended to serve a specific purpose and should match the needs and abilities of the child.

Conversational Board: A common arrangement for a conversational board is the Fitzgerald Key which was developed to help teach language structure to the deaf. In the Fitzgerald Key, words

are organized according to grammatical categories and arranged in the format - subject, verb, preposition, adjective, adverb, object, location and time. This is precisely the sequence that one finds in a declarative sentence. By moving from the left side of the communication board to the right side, the child selects the appropriate word from each of the grammatical categories.

High Tech Approaches

All high-tech systems are designed to accommodate one of the following vocabulary organization strategies - levels and locations, dynamic displays, or Semantic Compaction (i.e., Minspeak™).

Levels/Location Devices: Levels/location (LL) devices accommodate any type of symbols (e.g., photos, Mayer-Johnson, alphabet) and allow any combination of words, phrases, or sentences to be stored within each location. Vocabulary is generally accessed by selecting a single location, although some devices accommodate picture sequencing. Each level of the device may have its own arrangement, and levels may interact with or duplicate information stored on another level.

An LL device can meet the communication needs of many nonspeaking individuals. This is especially true for individuals who function on a more concrete

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The Magazine for Families and Professionals



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level. They require little training on the part of the user or the individual programming the device, however, most users are dependent upon their communication partner to change overlays for them when the topic changes. This task of changing overlays is typically beyond the physical abilities of the user.

Dynamic Displays: Dynamic display devices are automated LL systems, however, a dynamic display device contains pages or screens rather than levels and contains a menu page which guides the user to what is available on other pages. Dynamic display devices use computer graphics to represent vocabulary. Depending upon the device being used, a dictionary ranging in size from 1000 - 3000 symbols may be available. Additional pictures can be scanned

into the system's dictionary with some Dynamic Display devices.

Dynamic display devices require little training for the user. They do, however, like most other high-tech devices, take considerable time to program and/or customize. They can be designed to mix single word conversational vocabularies with topical arrangements.

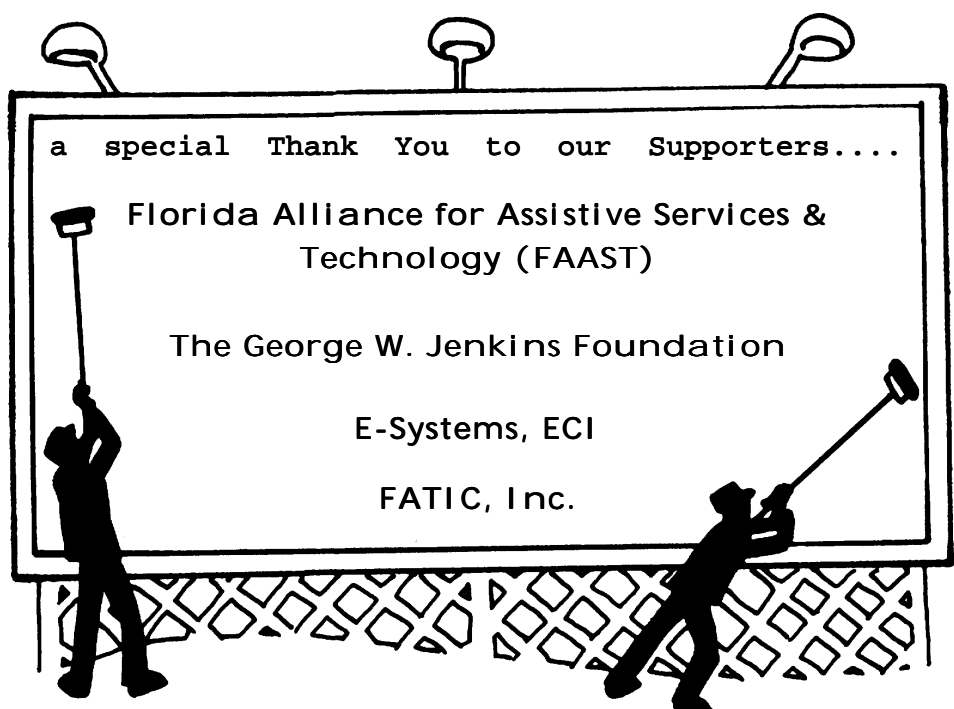
Semantic Compaction: Semantic Compaction or Minspeak™ uses a single overlay containing multiple meaning icons. Messages are encoded by sequencing the multi-meaning icons. Icon meanings can range from concrete to abstract associations. Messages can be words, phrases or sentences. Systems are consistent in their organization and once the organization is learned, users reportedly can deduce other meanings.

This type of system places heavy training demands on the user, the family and the school staff. The conversational partner must learn the icon sequences and the various associations assigned to each vocabulary item in order to serve as a language model or facilitator for the child.

Matching the Child with The Appropriate AAC System

To demonstrate mastery of an educational goal, the targeted vocabulary must be available to the child. Some educational goals can best be met by utilizing a topical vocabulary format (e.g., identifying weather, numbers, seasons), while other educational goals require use of a conversational or single word interactive vocabulary (e.g., identifying past/present tense of a verb). This is true whether the system is high or low-tech. For preliterate children, the targeted vocabulary must be available in a symbol format which they will understand.

In a competitive educational program, classroom vocabulary changes on a weekly/daily basis, therefore, the child must be able to quickly learn the symbols which represent the targeted word and/or concepts. It is impractical for the child to learn complex or abstract associations for topical vocabulary that will no longer be needed when the lesson is completed, and it may even restrict the child's academic progress and ultimate success. The needs of the



Please see DEVICES on Page 13

Six Things to Consider When Choosing a Communication Device

Technology has made it possible for non-speaking individuals to communicate their thoughts, ideas and feelings more quickly and easily than ever before. But what should speech therapists, parents and users consider when choosing augmentative communication equipment?

The following tips are designed as general guidelines to help individuals when they are evaluating communication devices. While every person is different, these tips will apply to almost all users of communication aids.

Look for solutions that are easy to use

Some solutions require users to memorize codes, which requires a lot of drill and practice. Today's technology makes such memorization unnecessary. Computerized dynamic display screens allows individuals to compose messages using familiar methods. This technology also offers "rate enhancement" methods so a person can communicate faster.

Choose portable devices

Portable devices are convenient to carry, and allow non-speaking individuals to take their "voices" anywhere. Also, some solutions require many separate pieces. Make sure they can be assembled in a "clean" portable package.

Consider flexible devices

Communication devices are only effective if users can access them. While some users may be able to make selections through a touch screen, other individuals may require a switch or other methods to communicate effectively. An individual's needs may even change over time. So look for devices that offer a variety of access options.

Require excellent voice quality

Sound projection and quality are obviously important. The communication must be clear. Also see if the voice output can be personalized. Some augmentative communication solutions offer a variety of voices, including male and female, child and adult.

Look for a device that "grows" with the user

Think about an individual's needs a few years down the road. Will the solution broaden and enhance the user's self-expression as their personal communication experiences grow? Can vocabulary be added and used quickly without a lengthy drilling period? Can the person use vocabulary independently?

Choose durable, reliable devices

Can the communication device withstand the stress of daily usage, especially if it is going to be mounted on a

wheelchair? Reliability is important.

You don't want the device to be inoperable when a user needs it most. Make sure the device's battery life lasts long enough to meet a user's needs. ■

Tips courtesy of Sentient Systems Technology, Inc. Sentient Systems Technology, Inc., headquartered in Pittsburgh, Pennsylvania, is a leading supplier of advanced augmentative communications products for those with speech, learning and physical disabilities. Since 1983, SST has provided communication solutions for thousands of non-speaking individuals around the world. For more information about SST and its products, call 1-800-344-1778.

CONFERENCES

Date: September, 1996
Event: Rehabilitation Institute of Chicago, National Conference on AT
Location: Chicago, IL
Information: 312.908.9558

Date: Sept 16 -18, 1996
Event: Instruction, Inclusion and Technology
Location: Austin, TX
Information: 512.280.7235

Date: October 12, 1996
Event: DREAMMS for Kids, Building Bridges: Basic AT
Location: St. Petersburg, FL
Information: 607.539.3027

Date: October 17, 1996
Event: Forum '96, Exceptional Parent Magazine
Location: Anaheim, CA
Information: 1.800.EPARENT

Date: October 24 - 26, 1996
Event: 14th Annual Closing the Gap
Location: Minneapolis, MN
Information: 507.248.3294

DEVICES Continued from Page 11

child and the goals of the classroom should dictate whether a high or low-tech system is implemented. The following table summarizes which types of vocabulary organization approaches can best accommodate the course competencies associated with elementary school subjects.

	LOW-TECH SYSTEM		HIGH-TECH SYSTEM		
SUBJECT	TOPIC BOARD	CONVERSATION BOARD	LEVELS/ LOCATIONS	DYNAMIC DISPLAY	SEMANTIC COMPACTION
Reading		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Composition		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spelling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lang. Arts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soc. Studies	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Health	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Science	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
Math	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Effective utilization of manual boards and voice-output devices requires that the AAC system accommodate the educational goals and the communication needs of the child. Vocabulary must be appropriately selected and organized. Both low and high-tech systems can serve as effective solutions for facilitating conversation as well as participating in activities requiring focused vocabularies. Clinicians must be aware of the pros & cons of each system option, and select systems accordingly. ■

Excerpted from, *Considerations in Selecting an AAC System for School-Aged Children*, by Joan Bruno, Ph.D., CCC-SLP. Speech and Hearing Department, Children's Specialized Hospital, 150 New Providence Road, Mountainside, NJ, 07092.



ALLIANCE Continued from Page 3

DREAMMS for Kids, Inc. is a non-profit parent and professional service agency, specializing in assistive technology related research, development, and information dissemination.

Founded in 1988 by the parents of a Down syndrome child, DREAMMS is committed to facilitating the use of computers, assistive technologies, and quality instructional technologies for students and youth with special needs in schools, homes, and the community.

FATIC, Inc., provides information and training on the use of computers, assistive technologies and innovative educational programs for persons with disabilities. We believe that the use of assistive technology can empower students with special needs and that educators deserve professional support and adequate training in technologies integral to providing quality educational opportunities for all students. In order to discover dynamic solutions to the challenges they all face, FATIC offers a forum for collaboration and communication between organizations, educators, parents, and assistive technology consumers. ■

For further information, please contact Mary A. Stoltz, FATIC, Inc. at 813-781-1239, or stoltzm@mail.firn.edu or Janet Hosmer, DREAMMS for Kids, Inc. at 607-539-3027 or at DREAMMS@aol.com or visit the Web site at <http://users.aol.com/dreamms/>

Edmark Software Savings

Redmond, WA -- Edmark, the award winning developer of children's software announces special back-to-school savings on their *Early Learning Series* software. Whether your child is preparing for preschool or kindergarten, Edmark's *Early Learning Series* offers the highest quality and value. This comprehensive series offers proven educational techniques, captivating activities, and friendly characters kids love. Offer expires Sept. 30, 1996.

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Overlay Maker for Windows

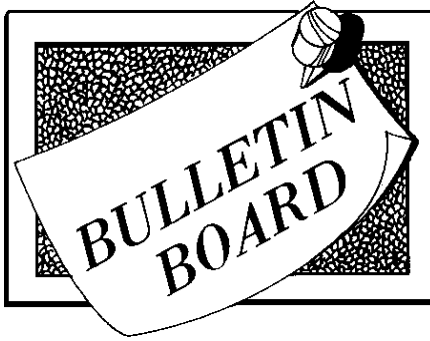
Novato, CA -- IntelliTools proudly presents *Overlay Maker for Windows* - the first in a series of Windows products for IntelliKeys. *Overlay Maker* has been one of the company's most successful products allowing users to design and edit their own overlays for IntelliKeys. With a few simple steps, it's possible to create overlays to meet a broad range of learning needs. For a limited time only you can get *Overlay Maker for Windows* for the low introductory price of \$69.95, a savings of 30% off the retail price of \$99.95.

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Big Buddy Button / Ultra One

Ajax, Ontario -- TASH Inc. has introduced a larger version of the infamous *Buddy Button* switches. *Big Buddy* is a single switch whose reliability and durability is unsurpassed. It can be activated by pressing anywhere on the top surface. It provides both a tactile and auditory feedback and is ideal for individuals requiring a large and visible target area. It can be securely fastened on popular mounting. Available colors are red, yellow and happy face. Pricing is \$39 US

TASH Inc. is also introducing the *Ultra One* cordless ultrasound system that is used for controlling simple appliances and switch activated devices. It consists of a colored transmitter and matching receivers. One press of the transmitter activates the device you wish to control. It has automatic latching and it is available in red and yellow. The system price is \$99 US (batteries included)

TASH, Inc.

Unit 1 - 91 Station Street

Ajax, Ontario, Canada L1S 3H2

1.800.463.5685

Online Access

Columbus, OH -- CompuServe, Inc. and Henter-Joyce have agreed to work together on a solution that updates accessibility to the CompuServe Information Service and the Internet by visually impaired members. During the third quarter of this year, the two organizations will offer a package that includes Henter-Joyce's JAWS for Windows screen reader, CompuServe's interface software for the Windows operating system and a set of training audio tapes to help instruct the visually impaired user on the use of CompuServe as well as the screen reader.

CompuServe, Inc.

500 Arlington Centre Blvd.

Columbus, OH 43220

1.800.336.5658

HumanWare on the WWW

HumanWare, Inc. a leader in adaptive technology and information for people who are blind and visually impaired joins the World Wide Web. Their page is text oriented and provides enlarged text areas for its readers. The site also provides national information and networking contacts for educators, parents, students, retinal specialists, low vision specialists and organizations. Free local consultation, catalogs & brochures.

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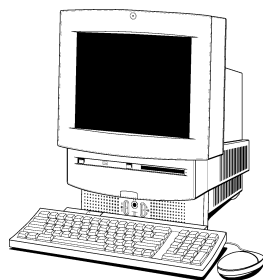
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Web: <http://users.aol.com/dreamms/>

By Postal Service: DREAMMS for Kids, Inc., 273 Ringwood Road, Freeville, NY 13068-9618

By FAX: 607-539-3027

By E-Mail: DREAMMS@aol.com

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Chet Hosmer: Technical Director, DREAMMS for Kids, Inc.

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YES	NO	Are you a prime candidate for this seminar?
<input type="checkbox"/>	<input type="checkbox"/>	1. Are you a teacher or caregiver for a child with special needs?
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<input type="checkbox"/>	<input type="checkbox"/>	3. Would you like "hands-on" help with computers and assistive technologies?
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<input type="checkbox"/>	<input type="checkbox"/>	5. Is your technology program suffering from the "budget cut blues"?
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