

Keyhole Communiqué

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The Assistive Technology Educational Network (ATEN) is a specialized center in the Florida Diagnostic and Learning Resources System (FDLRS).

Meet Michael Phillips A.T. User Extraordinaire

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Editor's Note: This article originally appeared in the *FAAST Update*, (Vol.4, No.3, January 1998), a newsletter published by the Central Florida Regional Demonstration Center. *FAAST* is the Florida Alliance for the Assistive Services and Technology (813-251-7591).

Assistive technology has truly changed my life. The list of the things that I could not do would be much longer than the list of the things that I can. A little box, called a string switch enables me to access another box, called a Ke:nx, which in turn accesses my computer. What the Ke:nx does is put all of the functions of the keyboard and mouse onto the monitor. With the string switch I access the menu by scanning at a rate that can be set to a speed that one is comfortable with. Most people think because you access a computer differently, the computer is special. No, I use a Macintosh 3400 PowerBook—nice, but not “special.”

With my Mac and assistive technology, I can write a column for my school newspaper, get on the Internet, create 3D artwork with Bryce II, create my own web page, work on my photography (continued on page 2)



Michael Phillips

(continued from page 1)

with Adobe Photoshop and last but not least, do my homework! The list of things that I can do is practically limitless, there just doesn't seem to be enough hours in the day!

It took a long time for me to receive assistive technology—but once I did, it was well worth it. The advice that I would give others in school who need this technology, would be to visit FFAST to see what types of assistive technology are available and determine what would benefit your needs.

Locating the right equipment might be a lot easier than receiving it. If you are in school, you should request an evaluation and make sure to get assistive technology onto your IEP (Individual Educational Plan). The benefits of being able to access a computer has resulted in my being fully included in all “regular ed” classes at Plant High School. I will also be able to take my HSCT (High School Competency Test) on my computer, once the State of Florida is able to create this format. That is another thing that anyone in school should be aware of—you need to list “how” you can take your tests on your IEP.

Assistive technology has been a very necessary addition to my life, one that has turned my disability into ability!

Michael Phillips
Junior, Plant High School
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<http://palpatine31.home.mindspring.com>
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Age: 16

Michael Phillips attends Plant High School in Hillsborough County and is enrolled in its gifted program. Michael's underlying medical diagnosis is Werdnig-Hoffman disease or spinal muscular atrophy. Due to his illness, the signals to his muscles are weak and, as a result, he is unable to walk.

This has not stopped Michael. Over the course of the last three years, Mike has photographed Dan Rather, David Letterman, Siegfried and Roy, soap opera stars, Hollywood celebrities, the Pittsburgh Steelers (the day before they played in the Super Bowl!), the Tampa Bay Lightning, a number of New York Yankees, the USA Women's Soccer team at the Olympics in Atlanta, Vice President Al Gore and Tipper Gore at the Vice Presidential Debate in St. Petersburg, and President Bill Clinton two days before the election! Michael has traversed the country to photograph these people and all the while maintaining a 4.123 grade point average.

A few months ago, Mike was awarded a Chair Scholarship that will enable him to attend any public college or university within the state of Florida. He is an avid “Macintosh” computer user and accesses his computer and camera through the use of assistive technology. He is assisted at school by an aide. Mike resides with his Mom, his brother Brian and two dogs, Winston and George.

Mike is also a member of the FFAST Council of 100, consumers with disabilities across the state who provide direct input and feedback on consumer needs and program effectiveness.

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"If all my possessions were taken from me with one exception, I would choose to keep the power of communication, for by it I would soon regain all the rest."

Daniel Webster

All correspondence regarding contributions or newsletter articles may be addressed to the Assistive Technology Educational Network, 434 North Tampa Avenue, Orlando, FL32805-1220, (407) 317-3504, (800) 328-3678, Fax (407) 317-3518. The Keyhole Communiqué is a publication of the Assistive Technology Educational Network (ATEN), a specialized FDLRS center, fiscally managed by Orange County Public Schools; funded through IDEA, Part B, to provide diagnostic and support services to Florida students. ATEN is an equal opportunity agency. Permission for reprinting of noncopyrighted material, with acknowledgment to the Keyhole Communiqué, is hereby granted.

Spotlight On: Ridgeview Elementary School

by Holly Cromer

Ridgeview Elementary (Orange Park, FL) is a K-6th grade school of approximately 1000 students. It is the county's site for all elementary age students who are in the profoundly mentally handicapped program. Five years ago, we converted to an engineered learning environment for the benefit of the "higher" functioning students. As class makeup changed, the techniques were used with a wider and wider variety of students—with great success at every level. Due to amazing progress, students moved to other classes. The majority of new students had no prior environmental stimulation. We exposed each new student to some language and literacy training with improvements occurring in these students within one week! At the same time, the engineered environment continued to positively affect students who had been in the program for just a few months.



P.J. Schellinger

We began the process by labeling every item in the classroom with a printed word and by covering the entire room with opportunities for communication. Large Yes/No symbols were attached with velcro to every conceivable surface. As we grew into the process, we added frequently used overlays and other choice-making boards. Activity choices were posted on photographs. Later, printed words were added to picture choices and pictures were eventually dropped from the boards. We had seen extensive food choice displays in other engineered settings (both classroom and cafeteria), but we were having a tough time finding an adequate supply of "good" pictures.

One day we tried using color-coded word cards (without symbols) during lunch. We color-coded the word choices for food groups for discrimination purposes to see if it would work. On the first day, we had "chicken" (red), "green beans" (green), "rolls" (brown), "peaches" (orange), and "milk" (black—all drinks are labeled in black). The process was initiated with the most-likely-to-succeed student, P.J. He was told what each food card meant as it was

placed on a non-skid mat within his pointing range. His lunch was placed in view. Whenever P.J. pointed to a food card, he was given a small portion of the food item. During breakfast the next day, he was shown the food cards for "waffle," "milk," and "juice." He got up and found the food cards from the day before and brought "peaches" over to us. He was told that this food card was from yesterday and that today's choices included "waffles," "milk," and "juice." He continued to point to "peaches." We took the card and threw it into the trash to show him that the "peaches" were gone. He, however, found the colored makers, got out the orange one, and brought it to us. We ran to the cafeteria to ask for some peaches! What an amazing accomplishment for P.J.! Other students in our classes have since used the system at varying levels

from pictures to words. Our theory is that for students with profound mental handicaps looking at pictures is an act of decoding just like sight word reading (because they don't understand what the picture or word represents). We feel that for some students, it is more difficult for them to learn one system and then learn another. Therefore, if an advanced system is usable, go for it! Using words is so much more adaptable to any setting. We have a board of laminated 3x5 color-coded word cards for meals and for all other choice-making boards (e.g., activities, positioning equipment, etc.). The students in two of our classes use these color-coded word cards as their primary communication strategy.

If you are a teacher of students with profound mental handicaps, you may find this a little hard to believe, as I did when I first started. As the make-up of my class changed, word cards were introduced to a wider variety of students. A student came to my class from another state. She is non-verbal, visually-impaired, and in a wheelchair. Her mother said that all she basically did at her old school was to sit in
(continued on page 5)

Gap Capsules

Making Accessible Quizzes

by Donna Kazee

This is the second article in a series about technology and strategies presented at Closing the Gap. The next **Gap Capsules** will feature “Worksite Accommodations for People who are Visually Impaired/Blind” and “Accessibility Tips for Web Page Developers.”

Mindy Brown, Vicki Lauck, and Isabel Castro presented a session entitled, “Uses of Technology to Encourage Language and Literacy in Blind Children.” Many students with communication, physical, or visual impairments cannot take tests using traditional methods. The quiz feature of IntelliPics offers testing solutions to students with a variety of disabilities. For example, a totally blind student can use IntelliPics software and the IntelliKeys keyboard to take a quiz using a multiple-choice format. A teacher can test this student on his knowledge of animals by creating an IntelliPics quiz. The student answers the questions (e.g., Where is the cat, the dog, the horse, the pig, the cow?) by choosing one of the five animal pictures using IntelliKeys.

The instructions in this article are designed for persons who have knowledge and experience with the IntelliTools programs. The names of buttons, menu items, or commands appear in **bold**; the text to be entered by the programmer appears in “quotations.” Do not type the quotation marks (“”).

Follow these steps to create an IntelliPics activity and overlay. A detailed tutorial for Overlay Maker and IntelliPics can be downloaded from the ATEN web site (www.aten.ocps.k12.fl.us).

1. Create an IntelliPics activity for the quiz with desired picture items (e.g., five farm animals).
2. From the **File** pull-down menu, select **Make Overlay**.
3. Save the IntelliPics overlay.
4. Open the overlay and adjust the size of the picture squares to create one row of five symbols.

5. Create a second row of empty squares (without key content) as place holders for the tactile symbols. (See Diagram A.)

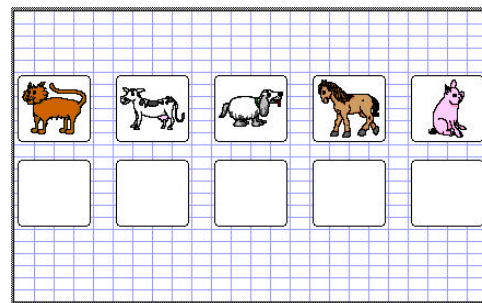


Diagram A

I created a Thanksgiving activity and quiz by using the the following picture items: pilgrim, turkey, cornucopia, Native American, and pumpkin. I made a 2-row by 5-column overlay with squares large enough to fill the entire page. I placed the squares that sent the answers (e.g., “turkey”) to the IntelliPics program in the top row. For students with visual impairments, I placed the tactile squares in the bottom row where the student could feel the symbols without sending anything to the IntelliPics program.

For students who use their vision, I placed large pictures in the squares in the top row. After printing the overlay, I outlined the squares in the top row with raised fabric paint. I placed miniatures of the picture items (that I found at craft stores or created with quick-set clay) on the tactile squares in the bottom row.

Follow these steps to create the quiz:

1. Open the IntelliPics activity created for the quiz. From the **Create** pull-down menu, select **Quizzes**.
2. Select **New**. Type in a name for the quiz (e.g., “Animal Quiz”) and press the **Return** key.

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3. In the box next to **Answer(s)**, type “[picture]”. (The computer inserts the name of the picture in place of [right].)
4. From the **Sound for** pull-down menu, select **Initial Question** and type “Where’s the [right]” in the **If synthesized** box. (The computer inserts the name of the quiz answer in place of [right] and speaks the prompt.) Click on **Play** to preview the prompt.
5. Depending on the visual ability of the student, either leave the **Prompt item** box blank or type “[right]” to have the program flash a visual prompt for the picture item.
6. From the **Sound for** pull-down menu, select **Correct Response** and type “Great! You found the [right].”
7. From the **Sound for** pull-down menu, select **Incorrect Response 1** and type “Try again.”
8. From the **Sound for** pull-down menu, select **Incorrect Response 2** and type “Sorry, try again.”
9. From the **Sound for** pull-down menu, select **Incorrect Response 3** and type “Look Closer.”
10. From the **Sound for** pull-down menu, select **Incorrect Response 4** and type “Ask someone for help.”
11. Quit the quiz creation mode by selecting **Done**, then select **Done** again.
12. If you have not already specified a spoken name for the picture items to be used in the quiz, from the **Create** pull-down menu, select **Picture Item**. Click **Edit**, then click **Advanced**, and then click **Spoken Name**. Type in the name and click **Done** until you are out of the picture item windows and back to the activity.
13. From the **Play** pull-down menu, select **Play Quiz**. Double-click the quiz you created and use the IntelliKeys to answer the questions.

Spotlight on Ridgeview Elementary

(continued from page 3)

her wheelchair and “look” out the window all day. On her first day with us, we asked her if she wanted to get out of her wheelchair. We put a large Yes/No board in her lap and put her hand (repeatedly) on each side, telling her, “This is Yes;” and “This is No.” She slowly raised her arm in the air and dropped it down on the “Yes” side. Within one week, she was making a choice for music and selecting between two tapes. Whenever she heard the music she chose, she lit up with a big smile and “hummed” along. From nothing to all this in one week!

As self-esteem increases, appropriate behavior increases and inappropriate behavior decreases. We also have seen an increase in head control, attention to task, and increased desire to communicate. We have even seen students begin to toilet train. Students now have communication skills that can travel with them wherever they go. A mother can grab a napkin in a restaurant, write down meal choices, and her child can communicate what she wants to eat.

Finally, and most importantly, every person deserves to be treated with the utmost dignity. When we work with our students using a literacy-based program, we are treating them as intelligent human beings. It not only increases self-esteem, but it also influences how they are viewed by others. It thrills us to see the amazing progress made. But even if there was little or no progress, it would still be worth it because we have treated our students with dignity!

1998 ATEN Calendar



Thank you to the following people whose photos appear in the 1998 ATEN calendar:

Sarah Mallette
Alexis Rogers
Philip Wickman
Jacquelyn Flowers
Jimmy LoPorto
Miranda McCune
Kenneth Sapp

Cody McDowell
Devona Hardrick
Jennifer Jay
Oliver Love
Susan Koeppen
Barbie Freeman

Go Ahead, Ask Me!

by Denise Lance

*Editor's Note: The Winter 1996 issue of the **Keyhole Communiqué** featured Denise Lance and her story titled, "My Webbed Feet: Confessions of an Internet Addict." Denise acquired cerebral palsy (CP) at birth and uses her feet as most use their hands. Questions may be addressed to Denise through e-mail at detommd@mail.firn.edu or by calling ATEN at (800) 328-3678.*

What comments do you hear from strangers and people you know regarding your disability that frustrate you the most?

What frustrates me the most is when strangers say things to me that indicate they think I am mentally retarded. I want to say, "Guess what? I'm getting a Ph.D. I don't have an intellectual impairment. Even if I did, I would deserve your respect as a human being! If you had a daughter, sister, or aunt with cerebral palsy, would you want people to speak to her like you were speaking to me?" I don't mind children's comments. They are just curious. But I think adults should know better!

The part of my disability which bothers people the most is my drooling. I understand that it is not the most attractive thing. Barbie and Miss America don't drool. A few months ago, my mother and I were out at a casino playing slot machines. When the waiter stopped by, even before he asked what we would like to drink, he asked Mom if I needed a napkin or something. Mom just said, "No, she's fine. Thanks." I felt as if all that waiter saw was one big drooling mouth!

My family members are always reminding me to wipe my chin with the sports wrist band I always wear. I sometimes tire of hearing this, but I know they are just trying to save me from unkind comments and stares.

Many people in the disabled community take offense when people use outdated or misguided language (not politically correct). What are your feelings about this?

I grew up in the age before political correctness and attended a preschool named, *The Crippled Children's Nursery School*. "Crippled" is the one label of which I am least tolerant. I'm an advocate for disability

issues but not an extreme radical. I prefer people first, label second (e.g., individuals with disabilities, person who has disabilities, student with cerebral palsy.) However, if I catch someone saying "handicapped person" or "LD kid," I don't attempt to wash their mouths out with soap. At times, even I have to make a conscious effort to be politically correct. I catch myself describing someone as "autistic" rather than "having autism." So, I cut people some slack.



I have noticed that the local television news reporters have not gotten the message yet. They often have stories about "the disabled" or "the mentally handicapped." I think they are trying to save words, but I know many special education professors who would give a paper a failing grade that used those same terms. I also wish the *Handicapped Parking* signs were changed to *Parking for Disabilities*—It's just one more word!

Who are the real decision makers regarding assistive technology?

This depends to some extent upon the age of the person needing assistive technology. Early childhood and elementary students are often at the mercy of the assessment teams choosing their devices. Secondary students may have slightly more input, and adults even more. Of course, a person of any age can demonstrate his or her opinion about a device by either using it or abandoning it. Sadly, it is when users abandon or refuse to use assistive technology that some teams realize that they should have consulted the student from the beginning of the assessment process. Currently, I think the ultimate decision makers in many cases are those that approve or deny funding. (continued on page 7)

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What and how much input did you have in the process of selecting your assistive technology?

I was very involved in finding the assistive technology I use, mainly because the professionals I consulted did not find assistive technology which met my needs. I was the one who finally decided that abbreviation expansion was what I needed.

(Editor's note: Abbreviation expansion provides for the transmission of a message with a reduced number of keystrokes.)

When did you learn about assistive technology?

I first heard about high tech assistive technology in high school and began reading about assistive technology during my first few years of college. It was not until the end of my sophomore year that I received my first computer and began to research access methods. I have an essay about this process on my web page:

<http://tootype.home.ml.org/cogs.html>

IDEA Reauthorized

After two long years of debates and compromises, IDEA was reauthorized by Congress in May 1997 and was signed by President Clinton on June 4. The right of a student with disabilities to a "free and appropriate public education" has been maintained in this bill. In addition, IDEA '97:

- includes provisions that schools must include students with disabilities in assessments with appropriate modifications, and that states must develop alternate assessments for the small number of students who cannot take regular assessments.
- requires that transition planning begin no later than age 14 and that a student's transition plan focus on the course of study the student will pursue in high school.
- requires that specific considerations be made for certain groups of children with disabilities. IEP teams must consider, for example, communication needs of children and the use of assistive technology for those who require it.
- states that parents be included in groups making eligibility and placement decisions about their children with disabilities in addition to the right to be included at IEP meetings.

Thoughts by Seth

An Old Friend in Trouble

by Seth Taylor



When I was five my classroom got a new Apple II, not a IIe or even a IIc. It was an Apple II. I think the first program I liked was "Hop-a-long Cassidy." I forget what it did, but I liked it. Then there was "Hodge Podge"—when you pressed a key a picture would come up. When I was ten years old, I learned a few basics and started to write little programs. I drew an ice cream truck with some music playing in the background.

When I moved to a new house, the people in the Sarasota School System gave me an Apple IIe, which I ran into the ground. A couple of years ago I bought a MacIntosh Performa which was supposed to last at least until the millennium. Now, unfortunately, it doesn't look like that will be true. The modem isn't fast enough, the memory isn't big enough, it keeps crashing, and it doesn't have a good enough printer. If that wasn't enough, I've discovered that if you own a MacIntosh, the world treats you differently. In the two years I've owned my MacIntosh, I've experienced more discrimination from owning a Mac than I ever did from being disabled. A prime example is the Tampa Bay Devilray website where you can take a virtual tour of Tropicana Field—only if you own an IBM compatible computer! SORRY ALL MAC USERS! When I think of everything I owe to Steve Jobs, it breaks my heart to think this might be the last Apple computer I will ever use. It's like watching a friend sink in quicksand.

Bright Ideas

Guided Reading: Following the Path to Comprehension

by Dianne Mathews

In the Fall 1997 issue of the Keyhole Communique, I discussed information from a workshop I attended called, "It's A Balancing Act!! Integrating Technology and Literacy in Elementary Schools." The workshop was conducted by Dr. Karen Erickson from the Center for Literacy and Disability Studies, Duke University, and Dr. Caroline Ramsey Musselwhite from Special Communications. This article will continue to explore the Four Block method for Literacy by reviewing some of the steps involved in Guided Reading.

Guided Reading Activities

Guided reading is intended to help students learn that reading involves thinking and comprehending text. With beginning readers, guided reading includes introducing the book's concept and then reading the book to the students. The students read along with the teacher the second time and fill in predictable and repeated text. After the first few readings, the teacher conducts activities to reinforce the words and concepts of the story.

Five Steps to Teaching Reading Comprehension

As students' reading skills improve, lessons begin to focus on providing direct instruction in reading comprehension. These strategies are taught using this five-step approach:

1. Build or activate a background knowledge.
2. Set a purpose for reading a selection.
3. Read the selection alone or with a partner.
4. Complete a group task directly related to the purpose.
5. Provide informative feedback on completion of the task.

Selecting Guided Reading Materials

Select reading materials from a variety of sources (e.g., stories from basal readers, sections from subject area books, and/or magazines). When choosing reading materials, alternate the reading difficulty level from grade level (or whatever the average reader in your class can handle) to below grade level books. If several students have difficulty understanding a passage, reread it for different comprehension purposes.

Including Students With Disabilities

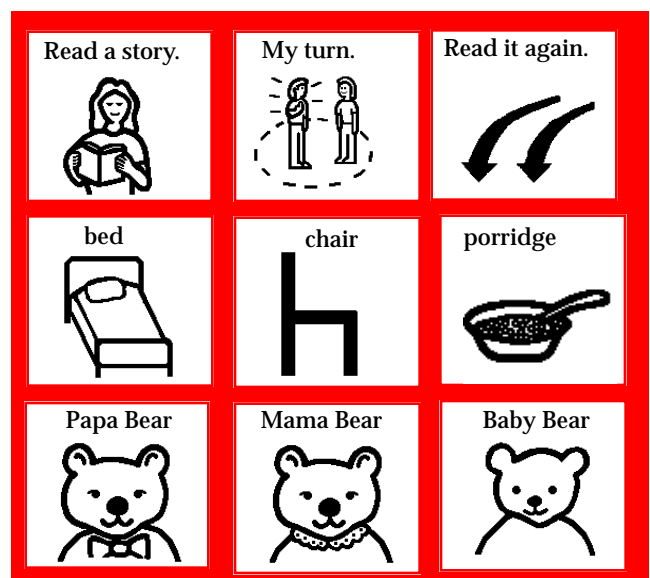
Including students with disabilities in the guided reading process involves some planning and preparation. Provide students with opportunities for interaction with printed materials, assure access to books, and provide a method for students to relate the story to prior knowledge and experience.

Promoting Literacy Through Symbol Use

The idea of a print-rich environment has been promoted by many experts in the field of AAC to increase literacy opportunities for students with disabilities. Symbols with the printed word attached promote literacy and provide a means for students to communicate information about what they are reading. They can describe what is happening in a story, what the characters are doing, and where things are located. At a prereading stage, students can point to symbols to label and match pictures.

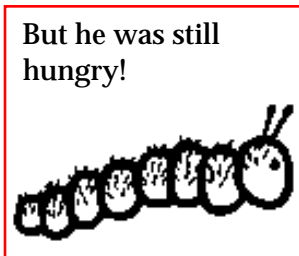
Reading materials can be adapted in the following ways:

- Create a story-specific communication display. Use symbols to represent the main concepts from a story (e.g., for Goldilocks and the Three Bears, use the following symbols: bed, chair, porridge, Baby Bear, Mama Bear, and Papa Bear) and include phrases (e.g., Let's read a book, My turn, and Read it again). (continued on page 9)

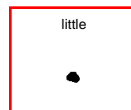
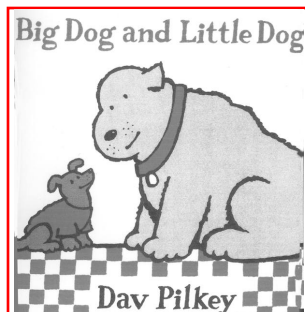


(continued from page 8)

- Use a symbol to represent the repetitive line from a story (e.g. “But he was still hungry!” from the book, *The Very Hungry Caterpillar* by Eric Carle).



- Create removable symbols for matching pictures in storybooks (e.g. for *Big Dog and Little Dog* by Dav Pilkey, use symbols for concepts such as adjective: big, little; nouns: dog, food; and verbs: sleep, eat).



Promoting Literacy Through the Use of Voice Output

Opportunities to actively participate in a variety of literacy activities can be provided to students with disabilities by using voice output devices.

- Record a repetitive line from a book into a single-message, voice output device (e.g., BigMack, Mini Talking Card Reader, a talking picture frame, a tape recorder with a continuous loop tape, etc.).
- Use a short, children’s book (with two to three lines on each page). Record each page into a message area on a voice output device (e.g., Hawk, AlphaTalker, Macaw, etc.).

For more information on literacy and technology for students with disabilities, write to

The Center for Literacy and Disabilities Studies
Department of Surgery
Duke University Medical Center
Box 3108
Durham, NC 27710

ATEN will be facilitating a custom administration of the



RESNA Credentialing Examination

to be held in Orlando on the morning of Monday, June 1, 1998.

In order to administer the exam, RESNA requires a minimum of 25 registered participants. Applications may be downloaded from the RESNA web site (www.resna.org).

The deadline for registration is April 27, 1998. Forms must be received at the RESNA office by this date.

RESNA
ATTN: Credentialing Program
1700 North Moore Street
Suite 1540
Arlington, VA 22209-1903
703-524-6686

Book Reviews

by Kathleen Bastedo

Children with Visual Impairments: A Parents' Guide

M. Cay Holbrook, Editor

Bethesda, MD: Woodbine House, Inc.

Price: \$16.95

ISBN: 0-933149-36-0

This guide is designed for use by parents who have children with mild to severe visual impairments. The following topics are covered: diagnosis and treatment, family and life adjustment, child development, early intervention and special education, literacy, orientation and mobility, multiple and visual disabilities, legal issues, and future concerns and expectations. Additional resources such as lists of organizations, school, publications, and a glossary are provided at the end of the book.



The New Language of Toys Teaching Communication Skills to Children with Special Needs: A Guide for Parents and Teachers

Sue Schwartz and Joan E. Heller Miller

Bethesda, MD: Woodbine House, Inc., 1996

Price: \$16.95

ISBN: 0-933149-73-5

The activities and toy dialogues in this book help parents and teachers use a hands-on approach to help stimulate language development in children with special needs from birth through age six. Chapters focus on language development in children, activities to help children learn and be creative, toy dialogues to help teach language in a variety of ways, computer technology, and toy safety. The appendices include a resource guide, toy manufacturers directory, and a materials list.

Technology in Early Intervention

James A. Blackman, Editor

Gaithersburg, MD: Aspen Publishers, Inc., 1995

Price: \$29.00

ISBN: 0-8342-0649-8

This softcover book is the third in the Infants & Young Children Series and is a great resource for all professionals who work with infants, children, and their families. Topics covered in this book include technology intervention for very young children with disabilities, early intervention for technology-dependent infants and young children, effective inclusion of technology into developmental plans, and safe transportation for infants and preschoolers with special needs.

Freestyle

The Freestyle is a full-featured Macintosh computer housed in a sturdy case. It has a 750 MB hard drive with 16 MB RAM (upgradable to 64 MB) and a 100 MHz Power PC 603e chip. Built-in features include: a touch screen, switch jacks (for up to four switches), printer/modem port, sound input jack, SCSI port, PCMCIA card slot, ADB port, infrared capability for X10 modules, built-in microphone and microphone port, and 12X CD-ROM drive. A jacket protects the Freestyle when closed and can be used to create a wedge or reading stand for the device. Optional accessories include a carrying case with an adjustable strap, a wheelchair mount, and an adapter so the device can be powered from a wheelchair battery. The Freestyle weighs 6.4 pounds and is 11.5" w x 9.75" h x 1.875" in depth.



Mac OS version 7.5.3. Rev2 system and Companion software come installed in the Freestyle. The Companion software is an authoring tool for creating interactive computer applications. It allows an individual to create screens using graphics and sound (e.g., creating buttons to open applications, developing picture menus, accessing environmental controls through picture cues, and using the on-screen keyboard to type). It has the ability to combine graphics, text-to-speech (MacinTalk) or digitized speech, sound labeling, and QuickTime movies. Other software can be accessed through the CD-ROM or installed on the hard drive through the use of an external floppy disk drive. The manufacturer recommends attaching an external keyboard and mouse to install software.

The Freestyle is available for \$5,495 from:
Assistive Technology, Inc.
850 Boylston Street
Chestnut Hill, MA 02167
800-793-9227
www.assistivetech.com

Macintosh Computer

Synergy produces a Macintosh computer similar to the Freestyle which can be customized with a variety of access options (e.g., single switch, Touch Screen, HeadMouse). When ordering a computer from Synergy, the buyer must specify which options they want included.

The Macintosh computer is available for \$4,995 (base price) from:
Synergy
412 High Plain Street
Suite 19
Walpole, MA 02081
508-668-7424

Assistive Technology Educational Network
Orange County Public Schools
434 North Tampa Avenue
Orlando, FL 32805-1220

Non-profit Organization
US Postage
PAID
Permit No. 885
Orlando, FL

Mark Your Calendar

March 5-7, 1998, **Florida Educational Technology Conference**, Orlando, FL

Contact: Florida Educational Technology Corporation, P.O. Box 13468, Tallahassee, FL 32317-3468, (850) 894-3810
<http://www.fetc.org>

March 17-21, 1998, **CSUN 13th Annual Conference**, "Technology and Persons with Disabilities," Northridge, CA

Contact: CSUN, Center on Disabilities, California State University, Northridge, 1811 Hordhoff Street, Northridge, CA 91330-8340
<http://www.csun.edu/cod/>

April 2-3, 1998, **Meeting the Needs of Infants and Young Children In the Family and Community**, "Triumphs and Challenges," Sarasota, FL

Contact: Early Intervention Program (941) 917-7550 or (800) SMH-Talk, X7550



May 21-24, 1998, **FLASHA**, Marco Island, FL
Contact: Melanie Howe, FLASHA Office, (800) 243-3574

June 26-July 1, 1998, **RESNA '98**, "The State of the Arts and Science," Minneapolis, MN
Contact: RESNA, 1700 N. Moore Street, Suite 1540, Arlington, VA 22209-1903, (703) 524-6686

October 20-21 (pre-conference)
October 22-24, 1998, **Closing the Gap**, Minneapolis, MN
Contact: Closing the Gap, P.O. Box 68, Henderson, MN 56044, (507) 248-3294
<http://www.closingthegap.com>

Visit ATEN on the web at www.aten.ocps.k12.fl.us

Try This On For Size

by Mark Sardo

Editor's Note: Refer to the Spring 1997 issue of the Keyhole Communiqué (pages 4-6) for information on customizing Windows 95.

The following information is a summary of suggestions for customizing the Macintosh OS so that it may be used more effectively by individuals with visual impairments. (Choose the changes appropriate for each student.)

Desktop Fonts, Sizes, and Icon Spacing

Mac OS 8.0 and later:

1. From the **Edit** pull-down menu, select **Preferences**.
2. To increase the size of the desktop font:
From the size pull-down menu, select the point size of the font. (For 15" monitors and smaller, use 14. For 17" monitors and larger, use 14–18.)
3. To change the desktop font type:
From the **Font for view** pull-down menu, select a font type. [A sans serif font (e.g., Geneva), one without curls at letter ends, is easier to read on a computer screen.]
4. To increase the space between the desktop icons:
Click on the **Wide** radio button, next to **Grid Spacing**.
5. Click the **Close** box of the **Preferences** window.

Mac OS 7.6.1 and previous:

1. From the **Apple** pull-down menu, highlight **Control Panels**, then select **Views**.
2. To increase the size of the desktop font:
From the font size pull-down menu, select the point size of the font.

3. To change the desktop font type:
From the **Font for view** pull-down menu, select a font type.
4. Click the **Close** box of the **Views** control panel window.

Folder/Icon Sizes

Mac OS 8.0 and later:

1. To change the size of the desktop icons:
 - a. Click on the desktop, to make the Finder menu active.
 - b. From the **View** pull-down menu, select **View Options**.
 - c. Next to **Icon Size**, click on the radio button to select a size.
 - d. Click **OK**.
4. To change the size of a folder icon
 - a. Open a folder.
 - b. From the **View** pull-down menu, select **View Options**.
 - c. Next to **Icon Size**, click on the radio button to select a folder size.
 - d. Click **OK**.

Mac OS 7.6.1 and previous:

1. From the **Apple** pull-down menu, highlight **Control Panels**, then select **Views**.
2. To change the List View size of the icons:
Under **List Views**, click on the radio button to select a size.
3. To change the icon spacing:
Under **Icon Views**, click the **Straight** grid radio button. (Straight grid only impacts windows being viewed in the 'by Icon' format.)
4. Click the **Close** box of the **Views** control panel window.

Common Computer Terms

Operating System: the software of a computer that allows the user to direct the hardware to execute a particular function, e.g., allows the user to open, save, close, and print files. Examples of operating systems are the Macintosh OS, Windows 95, and Windows 3.1.

Control Panel: a software program that is part of the operating system that provides the means to make a change in the system, e.g., the Views control panel of the Macintosh OS and the Display control panel of Windows 95 are where the font size of desktop icons is adjusted.

Desktop: the "area" of the computer that contains icons and menus for opening/manipulating files, folders, and applications.