

# *The CCATT Show's*

## Top Ten Tips

*Closing the Gap, October 21, 2000*

### Top Ten Tips for Implementing AAC

- ⑩ " The eyes have it! "
- ⑨ " Are you pondering what I'm pondering? "
- ⑧ " That's reinforcers that reinforce "
- ⑦ " I get by with a little help from my friends. "
- ⑥ " I think in pictures. "
- ⑤ " Letters! I love those letters! "
- ④ " It could work... "
- ③ " I didn't know you did anything creative. "
- ② " Never give up the flashlight. "
- ① " It's not working! What's wrong!? "

#### *Credits...*

##### ***Featured Guests:***

Patricia Walsh-Cassidy, CCC, SLP  
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## “The Eyes Have It” Eye Pointing and Eye Gaze

what



### What is it?

Using the eyes for communicating is a useful strategy for students with significant physical challenges. The two techniques we use most are:

#### 1. Partner- Assisted Physical Choice

The Communication partner provides a touch cue on two or more body parts of the Augmented Communicator to provide choices. The Augmented Communicator then eye points (or head points) to the area of their choice. This technique is particularly useful as it does not require any equipment. One disadvantage to using this method is that it can only be used for predetermined choices. The Augmented Communicator cannot generate communication beyond the choices given. One way to help expand this method is to make one of the choices “None of those.” This means that the Augmented Communicator has the option of rejecting the choices given and can then initiate a 20 questions type of approach.

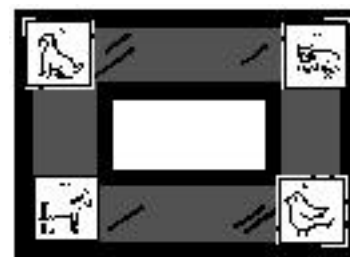
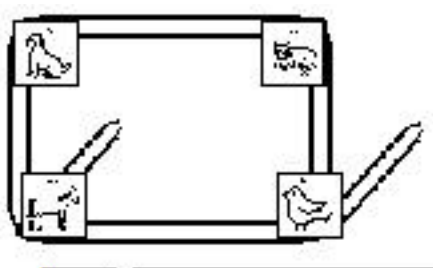
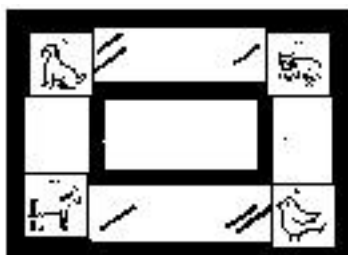
The most commonly used choice points are the left shoulder, right shoulder, looking up (forehead), and looking down (chest or chin). It is important that everyone use the same system to minimize confusion.

Another disadvantage is that the Augmented Communicator has to remember which choice is at each site. Touching the area does provide some tactile-kinesthetic input which seems to make it easier.

#### 2. Eye Gaze

An eye gaze frame is needed for this technique. This can be a clear plexiglass rectangle with a square cut out of the middle; a CPVC pipe frame with velcro to attach symbols or words to the frame; foam core board with a hole cut in the middle; or any other stiff material where the center can be cut out. The augmented communicator is prompted to look at each one of the choices. After looking at his/her choice, (s)he then looks at the communication partner.

*This step is critical as it is much easier to read the response.*





## When is it used?

Partner-Assisted Physical Choice and eye gaze can be used to generate communication in any situation, but is often used for making choices. The benefits of using the eyes for selection are that it is easily learned with little or no cost for equipment, and can be used spontaneously.



## How can I get help?

A resource for tips, tricks and philosophy to providing quick and meaningful communication opportunities is the book, *Emergent Literacy Success: Merging Technology and Whole Language for Students with Disabilities* by Musselwhite and Goossens' (available from Creative Communicating or Mayer-Johnson.)



## Why Use Eyes for Communicating?

For further information and rationale for the use of eye gaze, please refer to: *Engineering Training Environments for Interactive Augmentative Communication* (adolescents and adults) by Pamela Elder and Carol Goossens' and *Engineering the Preschool Environment for Interactive Symbolic Communication* by Carol Goossens', Sharon Sapp Crain and Pamela Elder (both available from Mayer-Johnson).

## *“Are You Pondering What I’m Pondering?”*

-- Pinky & the Brain

### Writing to Talk

what



#### What is it?

Using the written word to communicate is as old as hieroglyphics -- but now there is more technology than ever to make it happen. Hand-held memo devices (Radio Shack, Franklin), talking word processors (too many to list), and personal notetakers (AlphaSmart, DreamWriter, Link) are just a few of the devices out there that can be used for communicating through writing. Having the text-to-speech feature is a plus, but not required for communication to happen.

when



#### When is it used?

Using the written word for communication is an effective repair strategy for individuals who are: 1) non-verbal, 2) verbal but not always intelligible, and 3) not comfortable using a voiced-output device.

how



#### How to use Writing to Talk?

Writing to talk devices and software can be used to:

- build a message
- print out a message
- read a message
- store a message
- do conversational turn-taking

*Note: Never underestimate the power of the printed word --  
don't settle for a computer without a printer!*

why



#### Why use Writing to Talk?

- “Synthesized speech provides a much clearer speech signal than human speech
  - “Children... can learn to write grammatical sentences before they can speak them...”
  - “...hearing the synthesized speech on a computer leads to improved spoken language skills.”
  - “Written language can help children develop spoken language skills...”
- quotes taken from the research of Laura F. Meyers, Ph.D. & Research linguist

“Teach me my language, not your language” -- Herbert Brun, 1986

## PECS

*Key to Success: Choosing Reinforcers that Reinforce!*

what



### What is it?

The Picture Exchange Communication System (PECS) is a systematic way to rapidly acquire functional communication skills. The student learns to exchange a picture to obtain a desired item. Verbal prompts are not used. The student is responsible for initiating communication from the beginning, thus avoiding prompt dependency. The student then learns to discriminate between symbols and then to put them all together in simple "sentences." Children are also taught to comment and answer direct questions.

when



### When is it used?

PECS was developed for individuals with autism and other developmental disorders. It is particularly helpful with individuals who do not initiate communication or do not discriminate between symbols.

how



### How do you use it?

The most vital step of the PECS process is often skipped. The teachers and parents who know the individual **MUST** make an inventory of preferred reinforcers. Introducing PECS by teaching the individual to ask for the bathroom is setting the scene for failure. Often broad categories can be defined. Then brainstorm a group of related activities. If the student likes to watch things spin, start a collection of spin toys. Periodically review the reinforcers to make sure that they are still truly reinforcing. Occupational therapists can be a great resource for brainstorming and getting potential reinforcers.

why



### Why should we use PECS?

There is accumulating evidence (Silverman, 1996) that use of visually based systems enhance the likelihood of the development or improvement in oral speech. For further information and training materials, go to:

**WEB site: [www.pecs.com](http://www.pecs.com)**

## *"I Get By With A Little Help From My Friends"* Instant Messages Using Dry Erase Boards

what



### What is it?

Dry erase boards can be purchased at almost any store (including office supply, department store, dollar stores and even grocery stores). They can also be made using dry erase contact paper, turning any surface into a dry erase board. Metal pieces can be covered with dry erase contact paper to make magnetic dry erase boards. (ex. cookie sheets)

when



### When are they used?

Dry erase boards can be used in any situation where spontaneous communication could occur. Symbols (hand drawn) or text can be used. Selection is made by pointing (hand, finger, eyes, etc). The choices can also be scanned by a partner with the student vocalizing or hitting a switch that says "That's the one I want!" for the desired choice.

*TIP: To be successful, there must be a method of securing a dry erase marker since licking your finger to write on the board doesn't work.*

how



### How can I get help?

Caroline Musselwhite and Gretchen Hanser have written a series of Project Books called the Project Planbook Series (available through the [www.aacintervention.com](http://www.aacintervention.com) website). In their *W.R.I.T.E : Writing with Really Innovative Tools for Everyone* planbook they have a **Write on Board** made from Sintra, a lightweight plastic. Sintra is available from home supply/building stores or ordered from Sintra at 1-800-626-3365.

why



### Why use Dry Erase Boards?

Anyone who has tried to implement aided communication techniques in the real world has come face to face with the issue of TIME. While struggling to assemble systems, life goes on and communication opportunities are missed. Using quick tech tools, like dry erase boards, to create 'mini-boards' and instant messages, allows staff to take advantage of more spontaneous communication opportunities. And let us not forget Carol Goossens' 30 second rule: If it doesn't happen in 30 seconds, it often doesn't happen at all.

*"I Think in Pictures"**-- Temple Grandin, Ph.D.***Visual Supports**

what

**What is it?**

Visual supports means to take language and make it visible using pictures. In this category are calendars, daily schedules, communication boards, and social stories all created with the use of pictures (either photographs or picture communication symbols (PCS). These visual tools both aid communication and create structure, which can help children be more interactive, independent and successful.

when

**When is it used?**

Visual supports can be used:

- for self-monitoring behavior
- to remind students of the next step of the activity
- to help an individual anticipate the structure of their day
- whenever a student has a visual-spatial learning style

how

**How can I get help?**

1. <http://neurosci90.health.ufl.edu/start.html> - An excellent resource is "Where to Begin with Visual Supports" - Provides rationale, bibliography, examples.
2. <http://members.tripod.com/trainland/pecs.htm> - Describes how and why to use visual symbols. Hint: check on-line grocery shopping sites for realistic photos!
3. <http://mayerjohnson.com> - Under the downloads for Boardmaker section there is a wonderful template file for making schedules and showing steps to an activity.
4. <http://www.mcps.k12.md.us/curriculum/pep/teachercreate.html> - a collection of Teacher Created Resources. Download communication and schedule boards made with Boardmaker.
5. <http://teachnet.org/docs/Network/Project/NewYork/webpages/ps255/hanwit/halloween.htm> - shows technology-based lesson plan. Describes lesson goals, and how to tell if goals were met.

why

**Why Use Visual Supports?**

For more information and research on this topic, go to:

<http://www.sasked.gov.sk.ca/currinst/speced/autism.html>

Hogdon (1995) reports that people with autism need additional time to process language. Visuals help because they are static and stay in place longer. Quill's research (1995) has shown that people with autism tend to have problems with abstract thinking, social cognition, communication, and attention. These skills are associated with oral language. Strengths for the autistic person tend to include: concrete thinking, rote memorization, and skill in visual-spatial relationships. These skills are supported by using visually based communication systems.

***“Letters! I Love Those Letters...”***

*--anonymous, but discovered by Nancy J. Hogan*

## Initial Letter Cueing

what



### What is it?

Initial letter cueing is having a communicator use an alphabet board to provide the listener with additional cues to aid in comprehension. It is truly an augmentative system, as the user must speak to supplement the initial letter cues.

when



### When is it used?

Students who benefit from initial letter cueing may be unintelligible at times and/or have a speaking rate that is more rapid than their level of motor control.

Tip: If the person does not currently recognize letters, shapes or small pictures can be substituted. Physical adaptations may assist in promoting accurate, rapid pointing.

how



### How do you use it?

The communicator is provided with a portable alphabet board, and then prompted to point to the first letter of desired words for clues to aid in the listener's comprehension. This decreases the rate of speech, which gives the listener additional processing time in order to decode the words. The benefits of initial letter cueing are that it is similar to natural speech in rate, linguistic flexibility, portability, and accessibility.

why



### Why should we use it?

This strategy was first described and explored by Beukelman and Yorkston (1977). Goossens' & Crain (1985) have developed an Initial Letter Cueing test that may help to determine if the strategy will be helpful. See the Augmentative

Communication: Assessment Resource at [www.donjohnston.com](http://www.donjohnston.com)

More recently, Katherine C. Hustad & David R. Beukelman presented a paper at the 1999 ASHA convention titled: Enhancing Intelligibility Through Application of AAC Strategies. This paper can be found at:

[http://aac.unl.edu/ASHA1999/Hustad\\_ASHA99.htm](http://aac.unl.edu/ASHA1999/Hustad_ASHA99.htm)



*"It Could Work..."*

## Scripting for Success Using a STEP BY STEP

what



## What is it?

Using a **Step by Step** (Ablenet) speech output device programmed with several messages, this strategy provides practice for more frequent interactions and increased initiation. A Step by Step with scripts gives the user a chance at reaching the *'200 hits per day'* that Gretchen Hanser recommends.

when



## When is it used?

Scripts allow the user to achieve greater social closeness and curriculum involvement. It can also open the door to novel conversations, increased turn taking, and more natural conversational timing. The user can ask a question, make a comment, and give opinions quickly and efficiently. We call these messages **scripts**. A script can be **academic** or **social**.

Academic scripts: programmed facts for review, or to help classmates to drill math facts, spelling words, vocabulary lists, and general studying.

Social scripts: jokes, trivia questions, giving information, relating a personal experience, a story, asking for a favor, relaying info, or directing an interview.

how



## How do you use it?

The anatomy of a **script**:

- An opener or hook, to get others ready to listen ("guess what I heard...")
- Kid & situation appropriate language
- Take the student's personality into consideration.
- The ability to have 5 or 6 conversational turns
- Messages to turn the conversation over to the other person. ("Has this ever happened to you? Do you like this? What do you think about that?")
- A message for ending the conversation. ("See you later, Bye for now, Catch you another time,")

why



## Why should we use it?

Augmented communicators often have a respondent role, few initiations, and unequal turn taking. (Kraat., 1985). Four agendas that are fulfilled within scripted interactions include: expression of wants/needs, information transfer, social closeness, and social etiquette. (Musselwhite 2000)

*"I Didn't Know You Did Anything Creative"**-- Michael J. Fox***Using Adapted Books, Songs, and Poetry**

what

**What is it?**

AAC users need interaction and involvement with printed materials. Learning about reading involves not just learning about the forms of written language; it means learning about its functions and use as well (Coleman, Koppenhaver & Yoder, 1991). Pairing symbols and text helps increase receptive understanding of the symbols. These symbols should also be used in corresponding communication boards so the student can make comments, predictions, and ask/answer questions about the text.

when

**When is it used?**

Symbol supported materials are used with emerging readers in typical preschools and kindergartens, and in inclusive classrooms with students who need symbol support to communicate and learn.

how

**How do you use it?**

BoardMaker's (Mayer Johnson) drawing component can be used, or symbols can be brought into word processors to make books and/or charts. Writing with Symbols 2000 (Mayer Johnson), a 'picture processor,' automatically adds symbols to the text.

why

**Why should we use symbols for teaching literature?**

Caroline Ramsey Musselwhite, Ed.D. reported at the MinSpeak Conference (1995) that Pati King-DeBaun (1990) was the first to suggest that the ideal approach for students who use AAC systems was a combination of the whole language approach with the aided language emphasis recommended by Goossens', Crain, & Elder (1992). As the teacher presents the lesson, the facilitator highlights the matching symbols on the student's board or device.

## *“Never Give Up the Flashlight”*

-- Patricia Walsh-Cassidy, CCC, SLP

# Prompting

what



## What is it?

Prompting is the key to successful communication for the AAC user. The prompting hierarchy consists of aided language stimulation (modeling), contextual clues (sabotage), naturally occurring verbal cues, light cues, and physical assist cueing.

when



## When is it used?

The prompt hierarchy is used while training an individual to use alternative and augmentative communication.

how



## How to use a prompting hierarchy?

While using **Aided Language Stimulation (ALS)** the facilitator highlights symbols on the augmented speaker's overlay *while doing an activity*. After a few sessions, proceed to prompting the augmented speaker to select a message.

**Prompting:** Offer prompts from least to maximum assist.

- Entice the student to communicate (finding motivating activities is a must!)
- pause (and continue to give generous 'wait time' throughout)
- Use self-talk ("hmmm...I wonder what you want to do...")
- Provide a **search light cue** (scan the light across the whole array of messages).
- Proceed to **momentary light cue** (shine light for 2 secs. on the target message)
- If still necessary, use **constant or flashing light cue** (flash light on the symbol for a full 5 sec.)
- Verbal cueing should be embedded naturally in with light cueing
- Comment on the subsequent event thereby heightening the awareness (sabotage).
- Warning: **At no time** say "Push the button"
- Physical Assist cueing - use only as last resort and then as a gentle touch from **underneath the arm or wrist** - **never dragging user's finger to device**

why



## Why use prompting?

If the communicator is trained in a highly interactive format, there is a greater likelihood that they will use an AAC system in a generative and interactive fashion. (Goossens, Crain, Elder 1992)

For further information, go to: [www.aacintervention.com](http://www.aacintervention.com)

*"It's not working ... What's Wrong?"*  
 -- an over-worked therapist/teacher/parent  
**Positioning Aides to Improve AAC Access**

what



## What are they?

The CCATT center's top three positioning aides include easels, rug grip, and the Movin' Sit Cushion.

1. **Easels** can be bought from a variety of sources or made from foam-core board.
2. **Rug grip** is available almost anywhere, but the dollar store is our favorite source.
3. **Movin' Sit** cushion is available from SportTime Abilitations or Therapro

## When are they used?

when



Easels uses:

- to improve posture
- to improve the ability to see and process visual materials
- to protect materials from fluids (coffee, drool, wine)
- to improve wrist and finger stability

Rug grip uses:

- to stabilize items such as AAC devices, books, computer monitors, switches, ...
- to stabilize elbows, feet on a stool, or under a seat to prevent sliding
- to stabilize mounts and under devices to prevent slippage

Movin' Sit Cushion are used:

- to improve sitting posture for accessing AAC devices
- to provide more sensory input
- to improve foot position and provide more input through the heel

## How can I get help?

how



Books with an excellent chapters on positioning are:

*Utilizing Switch Interfaces With Children Who Are Severely Physically Challenged* by Goossens' and Crain (available from Mayer Johnson)

*Assistive Technology for Rehabilitation Therapists*, by Jennifer Angelo and Shelly Lane, published by F. A. Davis, in Philadelphia, PA.

## Why Consider Positioning?

why



*"When given the choice of answering the math fact of the day or falling off the chair, the brain will usually put it's energy into staying on the chair."*

-- Dale Gardner-Fox, MS. RPT

An article we refer to frequently: "AT Begins with Positioning and Access" by Miriam Struck, MA, OTR/L ATP (email: mstruck2@aol.com)