Hey, I Can Do That Too!

Classroom Participation for Students with Significant Cognitive Disabilities

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Georgia Project for Assistive Technology
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Assistive Technology Device

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 the functional capabilities of children with disabilities.

* EXCEPTION. The term does not include a medical device that is surgically implanted, or the replacement of such device.

(Individuals with Disabilities Education Improvement Act of 2004)
What Are the Benefits of Assistive Technology for Students with Significant Cognitive Disabilities?
Areas of Assistive Technology

- Computer Access
- Switch Access
- Recreation and Leisure
- Activities of Daily Living (ADLs)
- Curriculum Supports
- Augmentative Communication
Prompt Hierarchies
A prompt hierarchy is a system of cueing and when implemented, allows a student the opportunity to complete the task presented. The cues can be sequenced from least to most or most to least directive.

By implementing in this order, the cues allow each student a greater number of opportunities to complete the task with the least amount of support.

Adapted from: Environmental Communication Teaching. Copyright 1991/G.R. Karlan
Prompt Hierarchies

• Important to use with teaching any skill –
  – Be consistent in cueing

  • [http://maaja.tripod.com/prompthierarchy.htm](http://maaja.tripod.com/prompthierarchy.htm)
Computer Access
Benefits and Barriers to Providing Access to Computers

Take a moment in each of your centers to brainstorm both the benefits and barriers to using computers with students with significant cognitive disabilities.
Computer Access

- Devices and software solutions that enable a student with a disability to use the classroom computer
  - Input and output devices,
  - Alternative access aids, including
    - Modified or alternative keyboards,
    - Switches,
    - Special software
Computer System Accessibility

• Where the computer system is located and how the system is set-up often contributes to how successful access to the computer becomes...
  – Is it accessible to all students?
    • Can wheelchairs get to the computer?
    • Can wheelchairs get under the table?
  – Is it safe?
    • Wires safety stored
    • CPU/Monitor stabilized
Computer System Accessibility

• Can students easily access the
  – Monitor
  – Keyboard
  – Mouse

Computer Access
Standard Computer Mouse

Sometimes just slowing the mouse cursor down through the control panel features helps a student use the standard computer mouse.
Computer Access
Standard Computer Mouse

Increase the size of the pointer through the control panel to accommodate tracking and/or vision difficulties.
Computer Access
Standard Computer Mouse

Sometimes placing a sticker and/or glue dot on the left click button helps guide a student to the appropriate place to click.

Wedging a piece of paper in the right click slot will eliminate accidental right click activations.
Computer Access
Adapting Monitor Views

Sometimes changing the font size, background, contrast and color schemes through the control panel features helps a student use the standard monitor.
Computer Access
Adapting Standard Monitors

- External Touch Windows
  - Magic Touch
  - Edmark TouchWindow

- Built-in Touch Windows
  - Desktop Model
  - Laptop Model
Computer Access
Standard Mouse Alternatives

• Trackballs
  – Penny & Giles Rollerball
  – Switch Adapted Mouse (SAM) Trackball
  – Kensington Expert Mouse Pro Trackball, PS2/USB

• Joysticks
  – Switch Adapted Mouse (SAM) Joystick
  – Penny & Giles Joystick Plus
Computer Access
Standard Computer Keyboard Adaptations

• Zoom Caps
• Large Print Keyboard Labels
• Moisture Guards
• Keyguards
Computer Access
Alternative Keyboards

• Large Keyboards
  – IntelliKeys Keyboard
  – Big Keys Keyboards

• Miniature Keyboards
Computer Access
Switch Interface

• Allow switches to be connected to the computer
  — Connect the switch interface to the computer
  — Connect the switch to the switch interface
  — Use specialized software designed for switch use or improvise with “regular” software
Computer Access
Standard Mouse Alternatives

Switch Interface or switch adapted trackball/mouse/joystick or IntelliKeys
Software Designed for Switch Use

Cause & Effect

New Frog and Fly

SwitchMan

Switch Wars

Switch Kids
Cause and Effect Software
Switch Use

- www.helpkidzlearn.com
- www.shinylearning.co.uk
- http://www.switchclimber.com/
- http://www.rjcooper.com/
- http://www.softtouch.com/
- http://www.marblesoft.com/
- http://www.judylynn.com/
Prioritize Equipment Needs

• In small groups at your centers, discuss what assistive technology equipment and adaptations would be needed to make your computer accessible for all students in your classroom.

• Begin to prioritize how you could go about requesting this equipment for your classroom.
Switch Access
Switches

Switches come in a variety of sizes, shapes, and activation modes (pressing, pulling, swiping, twitching, sipping, puffing, rolling…..). Switches may be ordered commercially or custom made. Occupational and Physical Therapists are invaluable resources for switch selection and placement.
Who Can Benefit from Switch Access

Individuals with severe motor involvement who cannot use a more direct mode of input and students with severe visual impairments; such as cortical blindness, progressive syndromes, low visual acuity, unstable vision, and/or visual perceptual difficulties.
Areas That Utilize Switch Access

• Any area that a student needs access to their academic, cognitive, language or communication tasks
  – Communication
  – Language Development
  – Academic
  – Computer Access
  – Mobility
  – Activities of Daily Living/Recreation/Leisure
Benefits and Barriers to Providing Switch Access

Take a moment in each of your centers to brainstorm both the benefits and barriers to providing switch access to students requiring access to switches.
Building Skills of the Switch User: Kelly Fonner (2005)

- Special Education Technology British Columbia (SETBC)
  - 3-part Video Series by Kelly Fonner with related materials
Internet Switch Resources

• Charlie Danger’s Better Living Through Technology, Types of Switches - [http://www.bltt.org/hardware/switches.htm](http://www.bltt.org/hardware/switches.htm)

• Charlie Danger’s Better Living Through Technology, Switch Access - [http://www.bltt.org/switch/index.htm#gen1](http://www.bltt.org/switch/index.htm#gen1)

• Founded by Peggy Paulson, AT4Kids includes numerous resources on several topics including switch use - [http://at4kids.com/](http://at4kids.com/)

• Assist- I.T. - resources for switch access - [http://www.assist-it.org.uk/assets/content/switch_access.htm](http://www.assist-it.org.uk/assets/content/switch_access.htm)
Switch Use Barriers

• Switch Banging/pushing switch away
• Difficulty finding placement/right switch
• Difficulty with frequent practice opportunities
• Fatigue
Switch Use Troubleshooting

• Consult with Physical/Occupational Therapist regarding switch type and placement/mounting
• Variation of switch use activities
• Increase switch use opportunities
Switching To Success
Stages in Switch Development
Tony Jones & Judy King

10 Primary Switch Rules

Used with permission. Adapted from Stages in Switch Development by Tony Jones & Judy King

Web Resource

Tony Jones’ website is a “service by an Educational & AAC Professional to promote Augmentative and Alternative Communication and good practice in the use of Assistive Technology” - www.TalkSense.weebly.com
10 Primary Switch Rules
Tony Jones & Judy King

1. Maintain Switch Position – take a photograph of the ideal position and keep it with the Learner

2. Symbolize the switch to represent the switch’s function – all the time

3. Language should focus on the activity – not the switch. Better to encourage the Learner to “turn on the music” rather than “hit the switch”.
Pressure Switches

Big Red Switch
AbleNet
www.ablenetinc.com

Jelly Bean Switch
AbleNet
www.ablenetinc.com

Specs Switch
AbleNet
www.ablenetinc.com
Pressure Switches

Foot Switch
Treadle Switch
Enabling Devices
www.enablingdevices.com

Plate Switch
Enabling Devices
www.enablingdevices.com
Pressure Switches

Textured Switch
Enabling Devices
www.enablingdevices.com

Petite Pillow Switches
Enabling Devices
www.enablingdevices.com

Micro Light Switch
TASH
www.tashinc.com
4. Whenever possible switches should be mounted and not held. Holding the switch could lead to unintentional Learner assistance.

5. Switch and POLE (Person, Object, Location or Event) should be proximal in space and in time. (minimal time delay from activation of switch)
Pressure Switches

Pinch Switch
Enabling Devices
www.enablingdevices.com

String Switch
Enabling Devices
www.enablingdevices.com
Pressure Switches

Thumb Switch
Enabling Devices
www.enablingdevices.com

Finger Tip Switch
Enabling Devices
www.enablingdevices.com
Pressure Switches

Koosh Switch
Enabling Devices
www.enablingdevices.com

Vertical Plate Switch
Enabling Devices
www.enablingdevices.com
Toggle/Reed Switches

Ultimate Switch
Enabling Devices
www.enablingdevices.com

Wobble Switch
Enabling Devices
www.enablingdevices.com
Toggle/Reed Switches

- Leaf Switch
  Enabling Devices
  www.enablingdevices.com

- Wobble Switch
  Prentke Romich
  www.prentrom.com
Specialty Switches

Sip and Puff Switch (airflow)
Enabling Devices
www.enablingdevices.com

Grip and Puff Switch (airflow)
Enabling Devices
www.enablingdevices.com
6. Switches should be removed when not being used or when it is disconnected.

7. Use the same type of switch for the same type of activity across the curriculum. Thus if a round, large, red switch is used for music in one session then, ideally, a large, round, red switch should be used for music in all sessions (don’t forget to symbolize!)
Wireless Switches

AirLink Cordless Switch
AbleNet
www.ablenetinc.com

Jelly Beamer Wireless Switch
AbleNet
www.ablenetinc.com
8. Switches should not be directly connected to dangerous objects that would expose the Learner to harm (boiling water, fast moving machinery, heated surfaces, heavy objects) that could be pulled onto the Learner by pulling on the switch cable.

9. It is important that facilitators provide a sufficient response time. Facilitators should not interrupt by filling in any lapse in time with additional language which will confuse the Learner.
Specialty Switches

Infrared/Sound/Touch Switch (IST)
Words Plus
www.words-plus.com
10. ‘Maintain the goals’. The main role is to promote ease of access so that the Learner has the greatest chance to understand that the switch is causing the effect and thus, the greatest chance of success.
Other Switch Notables
Tony Jones & Judy King

• Switches need not be hand operated: other parts of the body can be more effective for some people.
• Switches need not be flat mounted: they can be positioned at any angle. In some cases, it is better to mount the switch upside-down just above the Learner’s hand.
• Switch labels can be protected with switch caps.
Group Discussion

Take a few minutes in your center to discuss the types of switches that your students are using and how the rules of switch use are implemented.
Strategies for Success in Switch Use

Repetition

Gretchen Hanser MS, OTR/L & Deanna K. Wagner MS/CCC-SLP are well known assistive technology specialists who have extensive experience in working with students who have access issues. In order to build switch skills they recommend that the student has:

- at least 20 opportunities to practice during one activity
- a daily routine that provides at least 200 switch hits per day
- a large selection of motor training activities to minimize the boredom factor
Importance of Switch Access
Recreation and Leisure
Recreation and Leisure

Electronic and non-electronic aids such as adapted books, switch adapted toys, and leisure computer-based software applications that are used by a student with a disability to increase his or her participation and independence in recreation and leisure activities.
Recreation and Leisure
Access Tools

Battery Interrupters
Enabling Devices

Power Link 4 Control Unit
AbleNet
Recreation and Leisure
Switch Adapted Toys & Equipment

Bubble Machine

Electric Stapler

Paint ‘n Swirl
Recreation and Leisure
Switch Adapted Toys & Equipment

- Battery Operated Scissors
- Switch Adapted Portable Music
Recreation and Leisure
Switch Adapted Toys & Equipment

- Fans
- Wind chimes
- Pin wheels
- Fan with ribbons
Recreation and Leisure
Switch Adapted Toys & Equipment

Rope Lights

Coin Sorting Machine

Massager
Recreation and Leisure
Switch Adapted Toys & Equipment

Tree Lights

Hair Dryer

Blender
Additional Access Tools

Game Playing

All-Turn-It Spinner
AbleNet
www.ablenetinc.com
Group Discussion

Discuss at your centers what assistive technology your students are using for recreation and leisure aids.
Recreation and Leisure

Game Playing

Jumbo Playing Cards

Playing Card Holder
Recreation and Leisure

Game Playing

To keep toys that move around in a contained area, use a hula-hoop
Recreation and Leisure

Puzzles

Large Grip / Adapted Puzzles
Recreation and Leisure

Art

Large Grip Paint Brush

Large Grip Crayons

Adapted Scissors
Loop Scissors
Recreation and Leisure

Art

• Attach marker (marker tip down) to a switch adapted car (or remote control car) / robot
• Student activates toy and “draws” on the paper
Recreation and Leisure
Web Resources

• Zot Artz - Arts For All has art tools that are designed for anyone with limited mobility - [http://www.zotartz.com/](http://www.zotartz.com/)

• NevadaDual Sensory Impairment Project has numerous Tips for Home and School available in both English and Spanish - [http://www.unr.edu/educ/ndsip/main.html](http://www.unr.edu/educ/ndsip/main.html)
Aids to Daily Living
Aids to Daily Living

Includes a range of tools to support independence in dressing/grooming, eating, domestic, and other self-care activities.
Aids to Daily Living
Eating and Drinking Aids

Scoop Dishes

Nosey Cup
Aids to Daily Living
Eating and Drinking Aids

- Build up handle with tube insulation
- Add weights with fishing lead sinker weights
Aids to Daily Living
Domestic Aids

EZ Fill Pouring Device

Switch Accessible Blender with PowerLink
Aids to Daily Living
Domestic Aids

Jug Kettle Tipper

Universal Jar Opener
Aids to Daily Living
Self Care Aids

Toothpaste Dispenser

Button Hook with Zipper Pull
Web Resources
Aids to Daily Living

• The Everyday Life (EDL) project uses interactive, situation-based lessons to teach functional literacy skills - http://www.gcflearnfree.org/everydaylife

• Deafblind Online provides free software for people who are deafblind or have learning disabilities - http://www.deafblindonline.org.uk/index.html
Group Discussion

What types of tools are your students using and how can you work to improve the provision of these types of assistive technology?
Curriculum Supports
How to Access the Resource Board

• Obtain password from Kayse Harshaw: sharshaw@doe.k12.ga.us

• The website address for the Resource Board is: http://admin.doe.k12.ga.us/gadoe/sla/agps.nsf
Resource Board Topic Areas

ELA: Early Elementary

“Three Little Pigs” materials courtesy of Jennifer Farner, Whitfield County Schools;
“Go Away, Big Green Monster” materials courtesy of Pat Beers, Gwinnett County Schools
The Farmer in the Dell (an economic interdependence story – words spoken to “The farmer in the dell”)

The farmer grows the crop. There’s cotton in the fields. This is how the cycle goes, the farmer grows the crop.

The factory buys the cloth to make the pants it sells. This is how the cycle goes, the factory buys the cloth.
Resource Board Topic Areas
Mathematics

Square Roots materials courtesy of Meghan King, Henry County Schools; Money .ppt courtesy of Daphne Cofer, Newton County Schools; Grocery List algebra materials courtesy of Jessie Moreau, Gwinnett County Schools;
You have $5 to spend on snacks
Get five dollars ready

SO, how much can you buy? Let’s look at the prices....
$2 $1 $3

Do you want a brownie, a juice and a cinnamon roll?
$2 + $1 + $3 = $6
Too much!

Do you want a brownie and a juice?
$2 + $1 = $3
Enjoy!

“Poetry Café”.ppt and adapted math materials courtesy of Penni Singleton, Cherokee County Schools
Math concepts are often difficult for students with cognitive difficulties to grasp.

It is important to provide real life examples of math concepts and relate them to functional applications of math.

Manipulatives provide assistance with demonstrating concepts and offer students the opportunity to physically engage in exploring those concepts.
• 3 levels of reading according to Dr. Karen Erickson
  – Emergent
    • Students depend upon pictures within books to understand text
  – Transitional
    • Students are able to read most of the words in text and use pictures to assist with reading unknown words
  – Enrichment
    • Reading level is too high for independent reading, but is used for language expansion
Independent Reading

- Adapting “standard” books for reading:
  - Taking books apart and put in page protectors
  - Using book stands
  - Page fluffers
  - Tape recording books – tapes or CDs
  - Symbolized books
  - Creating interactive books
Adapted Stories Requests

Please note that the stories are now being processed by the Georgia Instructional Materials Center. You will email Jerry Amerson at the GIMC with your request. His email is jamerson@doe.k12.ga.us

To request a copy of these adapted stories/poems you must:

   * Public Domain titles do not require a copy of the book.

2. Use it for educational purposes only.

3. Use it with students who are print impaired.

4. When you receive the CD, the envelope and CD **must** be attached to the inside cover of the book. (Where the CD goes, the book must follow!)

5. **You cannot make copies nor sell these items to anyone.**

6. **Copying the adapted book CD or using it for non-educational purposes may constitute copyright infringement and may be punishable under federal law.**
Adapted Stories Requests

When sending an e-mail to Jerry Amerson: jamerson@doe.k12.ga.us you must include the following sentences:

I own or have in my possession the following books by the original authors that I am requesting on CD. I agree to not copy or redistribute the CDs.

Include the book titles you are requesting. Include your complete mailing address as the electronic copies will be sent on a CD-ROM.

Many adapted story CDs will also contain supplemental materials. Please note that ‘.bm2’ file extensions require Boardmaker software; ‘.pxw’ files require Pixwriter software; ‘.wid’ files require Writing with Symbols software.
Oral language, hearing others read aloud, and discussion are the most effective means of supporting vocabulary growth.

Put Reading First: The Research Building Blocks for Teaching Older Children to Read

http://www.nifl.gov/nifl/pfr.html
Instructional Methods to Build Initial Word Reading Vocabulary

• Teacher Created Texts
  – Create books that incorporate the new, personally relevant keywords

• Word Wall
  – As the words are introduced put them on a word wall and teach daily word wall lessons

Koppenhaver & Erickson
• Resources for creating custom books:
  – PowerPoint
  – Boardmaker
  – My Own Bookshelf
  – Classroom Suite
  – Clicker 5
Calendar Books
Vocabulary Development & Reading Comprehension

• Guided Reading Strategies
  – Building & accessing prior knowledge using visual webs
  – Picture walks
  – Making predictions
  – Directed Reading Thinking Activity
    • What you know now
    • What you want to learn
    • What you learned
Vocabulary Development & Reading Comprehension

• Read books repeatedly
  – Setting purposes – “Everybody read to…..”
    • Calling up & connecting – use what you know and connect what you know to text
    • Predicting or anticipating – read so you can tell me what happens next in text
    • Organizing – read so you can put events in order, sequential or cause/effect
    • Summarize or conclude – read so you can tell what character wants to accomplish
Reading Resources

• Software based:
  – Running Start Books – SoftTouch
  – Balanced Literacy – IntelliTools
  – Switching On American History – SoftTouch
Reading Resources

• Software based: (continued)
  – Start to Finish Literacy Starters – Don Johnston
  – Start to Finish Core Content – Don Johnston
  – Start to Finish Library – Don Johnston
Software for Authoring
PixWriter
http://slatersoftware.com/

Before Hiding

Anne Frank was born in 1929. At that time, the Nazi Party, led by Adolf Hitler, was in power. Hitler tried to control certain people, especially the Jews, by taking away their businesses, not allowing them to use public transportation, putting them in prison, beating, and murdering them. Jews had to wear yellow stars to identify themselves. Hitler's power began in Germany, but his army invaded other countries, and his control spread.
Software for Authoring
Boardmaker Plus
www.mayer-johnson.com
Web Resources
Curriculum Supports

• The Center for Literacy and Disabilities Studies, University of North Carolina [http://www.med.unc.edu/ahs/clds](http://www.med.unc.edu/ahs/clds)

• Adapted Stories – New York City Schools [http://schools.nyc.gov/Offices/District75/Departments/Literacy/AdaptedBooks/default.htm](http://schools.nyc.gov/Offices/District75/Departments/Literacy/AdaptedBooks/default.htm)

Free Resources
Curriculum Supports

Moving from Reading to Writing

• Enlarged pencils
• Raised line paper
• Writing grids
• Tracing paper
• Letter boards/flip charts
Moving from Reading to Writing

• Alternate pencils
  – Eye gaze frames (Writing With Alternative Pencils CD - The Center for Literacy and Disability Studies)
  – Magnetic boards/erasable boards
  – Letter stamps
  – Standard keyboards
  – Alternate keyboards – IntelliKeys
  – On-screen keyboards
  – AAC systems
Group Discussion

Discuss at your centers, what you see as the benefits and barriers to providing your students with access to academic activities.
Augmentative Communication
Augmentative Communication

An augmentative communication device is a type of assistive technology.
Augmentative Communication

Most often use the term augmentative communication because it acknowledges that all people communicate in some way, so we are augmenting the person’s communication, not providing an alternative.
Communication Modes

All students, regardless of the type or severity of their disabilities, need a functional and independent means of communication.

– Most often includes multiple communication modes.

– Communication mode used dependent on partners, environments, and functions.
Communication Difficulties

Students who can benefit from AAC are not limited to one type of communication difficulty. These can include students who:

– are non-verbal
– have limited verbal skills
– have poor speech intelligibility
– have non-functional language
Augmentative Communication Systems

- Components of an augmentative communication system:
  - **Symbol set** (Object, Line Drawing, Photograph)
  - **Vocabulary** (Selection & Organization)
  - Display (Static vs. Dynamic)
  - Access technique (Direct vs. Indirect)
  - Output (Digitized vs. Synthesized)
Symbol Sets

afraid

finished
Types of Symbol Sets Used
With Students with Significant Cognitive Disabilities

Objects
Types of Symbol Sets Used
With Students with Significant Cognitive Disabilities

Types of Symbol Sets Used
With Students with Significant Cognitive Disabilities

Photograph

Line Drawings
PCS Symbols
Symbol Resources

• Slater Software’s free online symbol resource search tool for non-commercial use -
  http://www.slatersoftware.com/PixLibrary.html

• dotoLearn.com has black and white picture cards that are provided to help make schedules, story strips and talking back cards -

• Straight Street’s free online symbol resource search tool for non-commercial use - http://straight-street.com/gallery.php

• Free symbol set used with AMDI communication products - http://www.amdi.net/utility-software/
• Aided Language Stimulation: term coined by Carol Goossens', Sharon Sapp Crain and Pamela S. Elder: (Also Natural Aided Language Stimulation – Joanne M. Cafiero)

• Engineering the Environment
  - AAC immersion
  - communication displays readily available in student’s environment
Aided Language Stimulation
Teaching Symbol Meaning

• Core Vocabulary (Gail Van Tatenhove)
  − http://www.vantatenhove.com/index.html
  − http://teachinglearnerswithmultipleneeds.blogspot.com/2010/03/dont-be-language-stealer.html
  − http://www.aaclanguagelab.com/other/core-vocabulary
Core Vocabulary
Remember: AAC Competency Takes Time!

Jane Korsten points out that the average 18 month old child has been exposed to 4,380 hours of oral language at a rate of 8 hours/day from birth. A child who has a communication system and receives speech/language therapy two times per week for 20-30 minutes sessions will reach this same amount of language exposure in 84 years.
Examples of Frequently Used Tools
Types of Augmentative Communication Systems

- A range of communication systems are available
  - Systems range from easy to use to more complex and from inexpensive to more expensive

No Tech

Low Tech

Mid Tech

High Tech
Communication Boards, Books, Folders and Wallets

- Examples

**Picture Boards**

**Object Boards**
Communication Boards, Books, Folders and Wallets

• Advantages of communication boards, books, folders and wallets:
  – Easily constructed and modified
  – Highly customizable (number, size and organization of pictures)
  – Lightweight, durable and highly portable
  – No programming to learn
  – Dependable (no batteries, no repairs)
Communication Boards, Books, Folders and Wallets

Folders
Communication Boards, Books, Folders and Wallets

- Disadvantages of communication boards, books, folders and wallets:
  - No speech output.
  - Most require direct selection access.
  - Communication partner required to be in close proximity.
Communication Boards, Books, Folders and Wallets

- Examples

Portacom Support Apron
Made by Mom Creations

Portacom Standard Waist Pack
Made by Mom Creations
Compartmentalized Communicators

• Features
  – Holds any type of symbol system desired, but especially designed for object presentation
  – Many models have a location for picture symbol presentation with object
  – Generally devices are large and not extremely portable
  – Some models offer voice output – Digitized Speech
  – Direct selection and scanning models available
Compartmentalized Communicators

• Examples

Compartmentalized Communicator
Four Compartments
Enabling Devices

Super Sized Communicator
Enabling Devices
Compartmentalized Communicators

• Example

Take N’ Talk Lapboard
Enabling Devices
Single Location
Single Message Systems

• Features
  – Most models hold any type of symbol system
  – Generally small and portable
  – Voice output – digitized
  – Direct selection
  – Variety of sizes and access surfaces
Single Location
Single Message Systems

• Examples

BIGmack Communicator
AbleNet, Inc.

101 Uses BIGmack

LITTLEmack Communicator
AbleNet, Inc.
Single Location
Single Message Systems

Examples

Partner One
AMDi

Put-Em-Arounds
Enabling Devices
Single Location
Sequential Message Systems

• Features
  – Holds any type of symbol system desired
  – Voice output – Digitized Speech
  – Direct selection
  – Some models available with single switch access
  – Variety of sizes and access surfaces
  – Allows for messages to be presented in a sequential order
Single Location Sequential Message Systems

- Examples

**BIG Step-by-Step**
AbleNet, Inc

**LITTLE Step-by-Step & Step-by-Step with Levels**
AbleNet, Inc.

100 Ways to Use Sequential Messaging

Teaching Learners with Multiple Needs
Single Location
Sequential Message Systems

• Example

Partner One/Stepper
AMDi
Single Location
Multi-Message Systems

• Features
  – Most hold any type of symbol system desired
  – Messages available range from 2-40
  – Voice output – Digitized Speech
  – Direct selection
  – Single switch and dual/multi switch access
  – Visual and auditory scanning available in some models
Single Level Multi-Message Systems

- Examples
  - iTalk2 Communicator
  - AbleNet
  - Partner/Two
  - AMDi
Single Level Multi-Message Systems

- Example

Twin Talk
Enabling Devices
Single Level Multi-Message Systems

- Example

Partner/Four
AMDi
Multi-Level Multi-Message Systems

• Features
  – Many hold any type of symbol system desired
  – Wide range of total messages available
  – Voice output – Digitized Speech
  – Wide range of access methods available
  – Single switch and dual/multi switch access
  – Visual and auditory scanning available in some models
  – Generally easy to program and navigate
Multi-Level Multi-Message Systems

- Examples
  - GoTalk 4+
    Attainment Company
  - GoTalk 20+
    Attainment Company
  - GoTalk 9+
    Attainment Company
Multi-Level Multi-Message Systems

• Examples

Tech/Talk AMDi

TechSpeak AMDi
Multi-Level Multi-Message Systems

Go Talk Express 32
Attainment Company

Go Talk Pocket
Attainment Company
Multi-Level Multi-Message Systems

- Examples

Visually Impaired Communicator w/ background illumination
Enabling Devices

Symbol Communicator for the Blind
Enabling Devices
Multi-Level
Multi-Configuration Systems

• Features
  – Many hold any type of symbol system desired
  – Those with dynamic display use photographs, line drawings, printed words, and keyboards/letters
  – Wide range of total messages available and button configurations versatile
  – Access to a large pool of vocabulary
  – Those with dynamic display use electronic pages so paper overlays are eliminated
Multi-Level
Multi-Configuration Systems

• Features (continued)
  – Voice output – Digitized Speech
  – Wide range of access methods available
  – Single switch and dual/multi switch access
  – Visual and auditory scanning available in some models
  – Some require more in-depth training for programming, navigation and use
Multi-Level
Multi-Configuration Systems

• Examples

SuperTalker Progressive Communicator
AbleNet, Inc.

Communication Builder (single level, 4 & 7 level)
Enabling Devices
Dynamic Display Systems

Maestro
DynaVox Technologies, Inc.
www.dynavoxtech.com

Springboard
Prentke Romich
www.prentrom.com
Mainstream AAC Tools

• iTouch, iPhone, iPad Applications
  – Proloquo2go
  – iCommunicate for iPad
  – iConverse
  – Tap to Talk
  – Assistive Chat
  – Alexicom AAC

And many more……..

http://www.spectronicsinoz.com/article/iphoneipad-apps-for-aac
What’s All the Talk About Vocabulary?
Without a doubt, vocabulary can make or break one’s drive and desire to communicate.

Success is compromised when WE pick what WE want our student to communicate rather than what they want to communicate.
Begin with the following activity to create a communication board:

• Draw a 4 x 8 grid on a piece of paper

• Write at least 16 vocabulary items into your grid you think your student/child needs to communicate

• Think about vocabulary that is "functional"
Vocabulary

• Look at the vocabulary you selected.

Did you have any of the following?

eat _______drink_________ bathroom
Frequently, eat, drink and bathroom are among the **first** vocabulary items chosen by parents and professionals. Communication boards are then constructed to represent these messages and the child does not use them. The child is then accused of "not being ready for a communication system" or "not liking communication boards" and the idea of their using an AAC system is abandoned.
Taking a closer look at this scenario, we typically find that the child's basic needs such as eating, drinking and toileting are taken care of regardless of whether they request it or not. Thus, the child is left with little motivation or need to communicate these messages.
Vocabulary should be selected for activities throughout the school day! Communication competency cannot be established and built using one or two activities for the entire school year.
Helpful Hints:

- Use language that creates communication opportunities, such as “what do you want?” versus “do you want a cookie?”
- Choose your vocabulary wisely
  - Complete activity-based inventories
  - Vocabulary selection should be on-going
  - Listen to other children to help select vocabulary
Vocabulary

• Helpful Hints:
  − Choose a variety of vocabulary types!
  − Provide vocabulary for commenting, describing, rejecting, teasing, and so forth
  − Move beyond wants and needs vocabulary
  − Make the vocabulary accessible
Benefits of Assistive Technology

- Participation
- Achievement
- Independence
- Inclusion
- Accountability
- Expanded learning and life experiences
- Increased self-motivation
Teacher Resources

Every Move Counts
emc3

Tangible Symbol Systems
Design to Learn
Teacher Resources

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