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Every child has a right to communicate, and there are many different ways in which children communicate their thoughts and needs. Whether it is through speech, gestures, sign language, pictures, or a voice output communication system, the important thing is that your child can begin communicating and learning with you.

https://www.pbs.org/parents/inclusivecommunities/augmentative3.html
Why Is Integration Important?
“Technology and Augmentative Communication Systems can be very powerful, but they are useless in enabling children to realize their potential without appropriate training and a supportive environment.”

Implementing augmentative communication and assistive technology consumes an enormous amount of time and energy from therapists, teachers, parents and the child. This is especially true if it is an addition to the curriculum instead of an integral part of it.

“The focus of intervention should not be merely to teach a child how to operate or use an AAC device or system.”

Intervention should be focused on teaching the basic communication and language skills that will improve an individual’s life by enabling participation in ongoing events and activities in his or her environment.

Taken from the website for Augmentative and Alternative Communication Connecting Young Kids (YAACK)[online] http://aac.unl.edu/yaack/index.html
Remember: AAC Competency Takes Time!

Think about the way that adults model language for babies when we expect them to speak. We speak to them so that they have hours and hours of input before they begin speaking back.

*The typically developing child will have been exposed to oral language for approximately 4,380 waking hours by the time he begins speaking at about 18 months of age.*

Compare that to a child using AAC, who may only have modeling/teaching on the system during speech sessions (in this example, twice a week):

*If someone is using a different symbol set and only has exposure to it two times a week, for 20-30 minutes each, it will take the alternate symbol user 84 years to have the same experience with his symbols that the typically developing child has with the spoken word in 18 months!!* – *Jane Korsten*
So What Does Successful AAC Integration Get the Student?
• Establishing a Means of Communication and Social Interaction
• Promoting Language and Speech Development
• Supporting Cognitive Development, Enhancing Work and Educational Opportunities
• Enhancing Social Participation
So How Do We Integrate AAC?
Strategies

• Aided Language Stimulation (ALS)
• Engineering the Environment
Aided Language Stimulation
What is Aided Language Stimulation?

“Aided Language Stimulation is a teaching strategy in which the facilitator highlights symbols on the user’s communication display as he or she interacts and communicates verbally to the user.”

Goossens, Crane and Elder, 1999
What is Aided Language Stimulation?

• In Aided Language Stimulation the communication facilitator points to pictures (or highlights) symbols on the student's communication display and speaks simultaneously.

• The concept of using symbols interactively is modeled through this process.
Benefits of Aided Language Stimulation
Benefits of Aided Language Stimulation

- Shows them how to use the AAC system successfully
- Shows them how to put together messages
- Shows the child that people accept their AAC system because they are willing to use it
- Makes you more aware of what it is like for the child to use the system
- Makes you aware of what words are needed on the AAC system

Excerpts from: Factsheet-Augmentative and Alternative Communication (AAC) Training (www.novita.org.au)
Benefits of Aided Language Stimulation

• Teaches symbol meaning
• Promotes comprehension of the symbol through the visual cue and the spoken label
• Models use of symbols for communication
• Eliminates the need for specific therapy time for learning (comprehension and expression)
Benefits of Aided Language Stimulation

When Aided Language Stimulation is used on a routine basis, during all classroom activities there is no need to conduct BORING stimulus-response training and no need to set aside therapeutic time to work on symbol comprehension training.

(Goossens', Crain, & Elder)
Research on Aided Language Stimulation
This study followed 3 preschool children with moderate cognitive disabilities who were functionally nonverbal. Results of the study showed that all three children displayed increased symbol comprehension and production following the implementation of aided language stimulation.
This study followed a nonverbal, behaviorally and cognitively challenged adolescent with autism. Using a natural aided language approach and picture communication boards, the student was provided with intense visual-paired-with-verbal-language input in each activity and environment of his school day. Without training or prompting, the young man's picture language receptive and expressive vocabulary increased during the intervention.
This study followed 5 preschoolers (three who used voice output communication systems, two who used non-electronic communication boards) where Aided AAC models were provided. Four of the five preschoolers learned to consistently produce multi-symbol messages; the fifth did not demonstrate consistent gains. The four preschoolers who met criterion all evidenced long-term use of symbol combinations and generalized use of symbol combinations to novel play routines.

One Kids Place Video

https://www.youtube.com/watch?feature=player_embedded&v=vUY6oQoSTXw
Prompt Hierarchies
Prompt Hierarchies

- A prompt hierarchy is a system of cues that provide a student with support in completing the task presented. The cues can be sequenced from least to most support or most to least support.
- By implementing prompts in the least to most order of cues, the student is provided with more opportunities to complete the task with the least amount of support.
Prompt Hierarchies

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!)

Top Ten Tips for Implementing AAC, Closing the Gap 2000, CCATT Center, Northampton, MA
Prompt Hierarchies

• Pause (and continue to give generous ‘wait time’ throughout)
• Use self-talk (“humm..I wonder what you want to do..”)
• Provide a **search light light cue** (scan the light across the whole array of messages)
• Proceed to **momentary light cue** (shine light for 2 seconds on the target message)
Prompt Hierarchies

• Warning: At no time say “Push the button”, “Show me ______”, or “Touch the _______”
• Physical assist cueing – use only as last resort and then as gentle touch from underneath the arm or wrist – never dragging user’s finger to device

Top Ten Tips for Implementing AAC, Closing the Gap 2000, CCATT Center, Northampton, MA
At First......

pointing to pictures as you speak may seem or feel awkward and silly. Keep doing it. The more you point, the more fluent and proficient you will become. Practice. Practice. Practice. It helps to learn where the pictures are! Be patient with yourself. If you feel frustrated, think about what your kids are experiencing.
Aided Language Practice

Choose a partner and select one of the scripts provided to practice Aided Language Stimulation.

– Decide who will be the student and who will be the teacher
– After completing the script, swap roles
– After completing the activity, discuss the impact of this strategy on the student and the teacher
Language Techniques when Using Aided Language Stimulation
Language Techniques when Using Aided Language Stimulation

• Scripting – utilizing a script for a frequent or highly desired activity for both student and partners
• Parallel Talk – Describe the ongoing actions of the student (i.e., “you popped the bubble!”)
• Self Talk – Describe your ongoing actions (i.e., “I’m washing the dishes.”)
Language Techniques when Using Aided Language Stimulation

• Breakdown – Repeat and rephrase student utterances into smaller, less complex utterances (i.e., “I need to get some play dough.” to “need play dough”)

• Build Up – Repeat and rephrase student utterances into longer, more complex utterances (i.e., “more bubbles” to “I want more bubbles.”)
What’s All the Talk About Vocabulary?
Begin with the following activity to create a communication board:

- Use the 4 x 8 grid provided
- Write at least 16 vocabulary items into your grid you think your student/child needs to communicate
- Think about vocabulary that is "functional"

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.
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.
Engineering the Environment
What does it mean to engineer the classroom?

• Carol Goossen’s, Sharon Sapp Crain and Pamela S. Elder coined this term in the early 1990’s.

• It means embedding augmentative communication into the classroom in a way that ensures that students have access to opportunities for communication.
Engineering the environment(s) is the base foundation for modeling, training, teaching, using aided language stimulation, giving opportunities to communicate, teaching in natural settings and using pictures as your second language.
It is a communication rich environment that supports and expands on a variety of communication modes.
It may involve the use of varied symbol sets....
... and varied modes of access.

- Direct Selection
- Adapted Direct Selection (pointers, adapted pointers)
- Alternate Access Devices (auditory/visual scanning)
Communication is a major focus in all instruction.

• There are no set times for communication training.
• Every activity/event provides an opportunity for communication instruction.
• Instruction occurs throughout the school day.
• Carol Goossens explains that children need to learn symbol use by being immersed in it, just as second language learners need immersion.
Communication is taught in natural environments.
Why is it so important to teach communication skills in natural environments?

• Provides the topic and context necessary for communication

"Without participation, there is no one to talk to, nothing to talk about, and no reason to communicate" (Beukelman & Mirenda, 1992).

• Instruction in natural environments aids in the generalization of skills
What does an engineered environment look like?

Let’s tour a well engineered classroom!
Designing Effective Learning Environments Video

https://www.youtube.com/watch?v=e4pyVbIOToY
Classroom Picture Schedule

- All classrooms should have a schedule! Schedules help students transition between activities and plan their day! Schedules may be classroom and/or individual student oriented.
The focus of schedules may initially be teaching RECEPTIVE skills. Remember, the teacher is the one referencing the schedule.

EXPRESSIVE skills are the natural outcome of using schedules.

Question: What would you do if a student went to the daily schedule and pointed to a picture? Would you stifle the communication attempt? Would you see it as progress and acknowledge the communication?
Blocks/Legos

Helpful Hints:

• Put your pictures directly on the box or storage bin lid that you keep your blocks in.

• If you use those heavy cardboard blocks - tape the pictures directly on several of the blocks or use a cutting board.
Music

Helpful Hint: Put your pictures directly on a CD case.
Wagon/Wheelchair Walk/Ride

Helpful Hints:

• Place pictures on wheelchair tray or on cutting board
• Use a device that holds one, two or four messages
Playing Ball

Helpful Hint:

- Tape the pictures directly on the ball!
Shoebox Tasks/ Work Tasks

Helpful Hint:
• Put pictures on the storage bin lid.
• Use an adapted work tray
Circle Time

Helpful Hint:

- Have student pictures attached to a big board. Talk about who is home and who is at school.
Helpful Hint:
Place pictures of colors and other art vocabulary directly on box/container where markers/crayons are stored.
Painting

Helpful Hint:

• If using an easel, tape pictures around outside edges of easel
Computer Time

Helpful Hint:
Velcro or tape pictures around the outside of the computer monitor.
Bathroom/Diaper Changing Area

Helpful Hint:

- Tape/Velcro pictures over changing area or tape to bathroom stall/wall
Washing Hands

Helpful Hint:
Tape pictures around the sink area or directly on the mirror
Outside Play

Helpful Hint:

• Attach pictures to a bracelet/key ring and let student “wear” their communication
Arrival and Departure

Helpful Hint:

• Tape/Velcro pictures around door frame in classroom and door frame leading outside the building
Arrival and Departure

Helpful Hint:

• Attach pictures to bookbag using a book ring
Community Based Instruction

Helpful Hint:

- Attach symbols to a backpack with metal clip fastener
Breakfast, Lunch and Snack

Helpful Hints:

• Attach pictures to a placemat
• Attach pictures directly to the eating table
Breakfast, Lunch and Snack

Helpful Hint:
Tape pictures on lunchboxes or lunch bags
Breakfast, Lunch and Snack

Helpful Hints:

• Print pictures on printable magnetic sheets and attach to metal surfaces (refrigerator, dishwasher, file cabinet..)
Breakfast, Lunch, Snack Clean-Up

Helpful Hints:

• For wiping mouth/face, provide a small locker size mirror with pictures around the edges

• Provide picture cues as to what goes in the sink, trash and refrigerator
Story Time

Helpful Hint:
Tape your activity-based vocabulary to a cutting board – this props up easily.
Manicure

Helpful Hint: Tape your activity-based vocabulary to a cutting board or firm cardboard – this props up easily.
Watching A Movie/Video
Use a communication board
Bingo

Use a communication board
Watching Ball Game

Use a communication board
Bowling

Helpful Hint:
Use magnetic symbols and mount these temporarily to the ball return.
Library

Put symbols on key ring attached to bookbag
Adapt door hanger for hall pass
Exercising Communication Board

- Lie down
- bend
- count
- exercise
- weight lifting
- jump
- stretch
- relax
- jog
- tired
- I'm strong
- I'm weak
- It's heavy
- It's light
- music
- weights
Swimming/Taking a Bath/Portable

- Use floatable, waterproof communication board
- Use iron communication supports
Accessing the Curriculum
How to Access the Resource Board

• Send an email with your first and last name and your preferred email address to Debbie Reagin (dreagin@doe.k12.ga.us)

• The website address for the Resource Board is: http://admin.doe.k12.ga.us/gadoe/sla/agps.nsf
Susan has created a variety of instructional materials on the elements of a personal budget, including a game which can be played. Also included are materials for repeated practice and assessment and come in larger sizes for group activities as well as individual work-samples.
These activities are based on the standards below. Not all parts of the standards are addressed in these activities.

**Social Studies:**
- Grades 1-5
  - The student will correctly use words and phrases related to chronology and time to explain how things change.
  - before, after

**English/Language Arts:**
- Grades 1-5
  - retell familiar stories, including key details,
  - With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
  - retell a story or events in a story using key details and provide a reason for their inclusion.
  - retell a story, including key details, and demonstrate understanding of the central message or lesson.
  - Write narratives in which they create sequence of events (e.g.,的发生) appropriate to their purpose. Include descriptive details in narrative
  - retell a story or events in a story using key details and provide a reason for their inclusion.
  - retell a story, including key details, and demonstrate understanding of the central message or lesson.
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  - retell a story, including key details, and demonstrate understanding of the central message or lesson.

**Original Before/After Activity:**
- bear
- badger
- mole
- owl
- hedgehog
- mole
- boy

After
- the fox climbed into the mitten,
- the ___________________ climbed in.
Incorporating Voice Output Devices.

• Include devices as part of the engineered environment. Devices used as the sole mode of communication won’t work.

• Don’t worry that every symbol is not available on a communication device. That’s where engineering comes in handy!

• Ideally, core vocabulary should always be on the device.

• Device use may not be immediate. Some students require intensive exposure, modeling and training.
The Engineering Idea

• Communication symbols are everywhere.
• Communication symbols should always be placed in reach of students.
• Place communication symbols in the environments where they will be used.
• Engineering is more than labeling classroom items.
How Do I Begin to Engineer the Environment?

1. Identify and prioritize communication activities.
2. Decide on vocabulary for each activity and select the symbol set.
3. Depict vocabulary on communication displays appropriate for the target student.
4. Place communication symbols in the environments where they will be used.
5. Implement a systematic approach to cueing and teaching students to use the boards.
Vocabulary

Re-visited
How Do I Decide On Vocabulary?

• Choose vocabulary that allows you to provide a rough running commentary of what is taking place (you’ll never have all the vocabulary you need)
• Provide vocabulary for commenting, describing, rejecting, teasing, and so forth (beyond wants & needs)
• Provide different types of vocabulary (i.e. verbs, adjectives, pronouns, prepositions)
• Vocabulary collection should be on-going
Vocabulary

• Helpful Hints:
  − Choose your vocabulary wisely
    ▪ Complete activity-based inventories
    ▪ Make the vocabulary accessible (place it where the students can reach it)
    ▪ Listen to other children to help select vocabulary

− Help from Dr. John D. Barge, State School Superintendent
  "Making Education Work for All Georgians"
  www.gadoe.org
Vocabulary

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.
Develop a Classroom Core Vocabulary Inventory for 2 to 3 of your classroom activities on the provided template.
Tips for Success
Tips for Success

• Train staff in use of aided language stimulation, engineering the environment, and assistive technology
• Encourage and expect everyone working with your students to supplement their spoken language with pictures as much as possible
• Monitor use of aided language stimulation and students’ communication system and make changes as needed
• Plan for communication opportunities throughout the day
Tips for Success

• Have fun! Make it your second language!
• Be animated and expressive while using pictures.
• Be patient with your students. Learning takes time. Think of all the months it takes for a newborn to say that first real word.
• Point to pictures and supplement your spoken language as much as possible – model. They ARE watching you!
Tips for Success

• Use language that creates communication opportunities, such as “what do you want?” versus “do you want a cookie?”

• Be consistent in vocabulary selection and use across activities.

• Be willing to start with a few symbols. Because of the sheer nature of AAC, it is highly unlikely you will have all the vocabulary you could have or should have for an activity.
Tips for Success

• If picture/object symbols are not organized and convenient for the student to access and use, they will not be used by your students
• Displays should be stored in a format that allows for quick access and quick set-up
• Take initial engineering in small bite size pieces
• It is often beneficial for the teacher to have a “master board” for each activity and students to have a duplicate of that “master board” within reach
Tips for Success

• Let students communicate (expect it), even when you already know what they want (move beyond anticipating needs and care-taking).
• Sabotage the environment and activities in order to create communication opportunities by placing objects out of reach, leaving materials out of an activity, or just being silly!
It often helps when peers and siblings use the same system that the AAC user is using.

If a peer or sibling is actually using the same AAC device, it may assist the AAC user in feeling that the system in question is more natural and less stigmatizing.

Taken from the website for Augmentative and Alternative Communication Connecting Young Kids (YAACK) ([online] http://aac.unl.edu/yaack/index.html)
Tips for Success

Teach in natural settings. Choose places in which the child is familiar, feels at ease and is motivated.

This strategy is also easier to accomplish when teaching is integrated into daily activities. Teaching is often most effective when it is integrated into daily activities and routines, including play time.

Taken from the website for Augmentative and Alternative Communication Connecting Young Kids (YAACK) [online]
http://aac.unl.edu/yaack/index.html
Language Stealers Video

https://www.youtube.com/watch?v=iOVm8q0mCYA
Closing Thoughts
Closing Thoughts

• WOW! Once it’s done it’s done!
• Believe that all children can benefit from augmentative and alternative communication.
• Understand that there are no prerequisites for a young child to be introduced to AAC. The earlier, the better. That is what early intervention is ALL about!
• Understand the importance of modeling. Many of our students are not going to learn AAC skills incidentally or intuitively. Strive to provide ample demonstration and modeling.
Closing Thoughts

• If you’re not a “chatty” or “talkative” person, work at it. Your kids need you to talk about everything you are doing. They are trying to learn symbolic communication and need to hear you talking and see you pointing to those pictures as you talk. There’s no such thing as too much language exposure! Talk about everything! SLP’s are great resources if this is not your strength. Also, be repetitive. Kids learn through repetition.
Encourage your kids. Especially when they start randomly pointing and they miss the pictures all together or they point to a picture that has nothing to do with the activity at hand! They ARE making progress. Acknowledge what they pointed to and model what you think they were going for or comment on what they pointed to. Keep it positive! Keep communication lines open! Don’t be a communication barrier!
• Trust your instincts! If you need to reduce the number of pictures....reduce. If you need to increase...increase. If you feel it’s time to try a device....try a device.
• Your students progress will be your driving force.
• Believe in what you are doing.
Lilly Gets New Words

http://www.youtube.com/watch?v=tmVs8dUFxPY
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Georgia Project for Assistive Technology
www.gpat.org