Implementing Behavioral Strategies To Facilitate Successful AAC Use

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What is AAC?

- Supplementing the effectiveness with which individuals communicate through their *existing methods of communication* (Romski & Sevcik, 1996)

- AAC system may serve an alternative function in that it becomes the primary and *perhaps only means of communication*. (Beukelman & Mirenda, 1998a)

- Multimodal Communication. AAC does not refer to any one specific method of communication...AAC system composed of different modes of communication used in combination by individuals to meet daily communication demands and participate optimally in their communities (Beukelman & Mirenda, 1998a; Glennen & DeCoste, 1997)

Language Development and Language Disorders

Language Development Model

Bloom & Lahey

Language Development Model

Use

Form

Content

Intentionality Model of Language Acquisition

Lois Bloom & Erin Tinker(2001)

“Essential Tension”
“Where To Start”

Child’s Current Skills Level:

— Cognitive
— Social
— Physical
— Receptive Language
— Expressive Language

Measurement Tools

• Observation of cognitive and communication skills
• Determine gross/fine motor capabilities for ACCESS
• Determine visual and auditory capabilities

Who Needs AAC?

• Discrepancy between receptive and expressive language
• Age of the individual
• Unsure, then a trial with AAC is indicated

Determine The Child’s Level of Communication Function

• Begin where the child is functioning
• Know what behaviors you need to observe or trying to elicit.

Spontaneous Communication

• The goal is to facilitate the child’s ability to communicate in all environments.

• Do we start here?

Choosing the “Right” Method

“There are many philosophical differences about the superiority of one communication option over another. The bottom line is this – the best communication option for your child is the one that caregivers are willing and able to use comfortably and consistently and that meets the communication development needs of your child.”

“Low Tech Options for AAC for Young Children” - Christine Derse, SLP-CCC
AAC Factors To Consider
Joy S. McGowan, MS, CCC-SLP

- Caregiver Support: Easy for the family and educational team to program the device and easily locate vocabulary to provide modeling and encourage device use.
- Vocabulary Considerations: Provide an opportunity to request and comment on what the user wants and motivate them to use her device.
- Access: Are they able to accurately point and visually attend to the picture or device template with minimal effort? Multiple taps?
- Audience: How easily is the communication partner able to understand and respond to the AAC user’s message?
- Portability: Can the AAC system be transported independently?

Criteria for Selection

- Caregiver Support / Knowledge of System
- Vocabulary
- Physical Ability / Access
- Audience/Communication Partner
- Portability

Caregiver Support

“No specific method will result in successful learning outcomes if caregivers and family members do not surround and immerse the child in whatever communication features comprise the method.

In contrast not every communication option will produce a successful developmental outcome, even if all caregivers are highly committed to its consistent use.”

“Low Tech Options for AAC For Young Children” - Christine Derse, SLP-CCC

Vocabulary Considerations

- Motivating (Individualized)
- Likely to occur in multiple environments
- Highly iconic (not a criteria in early PECS)
- Developmentally appropriate to child’s comprehension
- Culturally appropriate

“Core Vocabulary”

- Children with complex communication disorders do not follow typical language development patterns
- The concept of core vocabulary assumes a child has intact social communication (“it” “that,” “the,” “here”)
- If there is a lack of response to contextual cues, then how will teaching the “core vocabulary” be meaningful or reinforcing
Teaching Core Vocabulary

(Center for Literacy and Disability Studies, University of North Carolina at Chapel Hill)

• Limited set of highly useful words
• Words apply across settings
• Vocabulary is primarily pronouns, verbs, descriptors, and prepositions
• Very few nouns are included in a core vocabulary
• Consistent location of vocabulary

Vocabulary

• Include a range of concepts:
  – People
  – Actions
  – Objects
  – Places
  – Social words
  – Questions

Light, et. al., 2005

Core Words are not picture producers

Gail Van Tathanove

Criteria for Selection

• Caregiver Support / Knowledge of System
• Vocabulary
• Physical Ability/Access
• Audience
• Portability

Communicative Partner

(Gestures, Signs, PECS, Language Boards)

• Targets a specific communication partner
• Physical connection with the communication partner
• Requires confirmation or feedback from the listener
Communicative Partner (Speech Generating Device)

- Not dependent on the communicative partner being in the immediate vicinity
- No direct physical connection to the communicative partner
- Does not require feedback or message confirmation from the communication partner

Message Feedback

- **Digitized Speech**: The computer reproduces messages that have been recorded and stored in digital format (Beukelman & Mirenda, 1998)
- **Synthesized Speech**: (Text-to-speech output) Speech produced when a computer translates the letter of the text into sounds, using a complex set of pronunciation rules (Beukelman & Mirenda, 1998)
- **Visual output**: Output for the communication partner that is seen rather than heard; e.g. visual display or printout

Criteria for Selection

- Caregiver Support / Knowledge of System
- Vocabulary
- Physical Ability / Access
- Audience/Communication Partner
- Portability

Portability

- Important consideration for family
- Should not become a barrier for communication
- Include other applications on the device

Consider the Size and Weight...
**The one aspect of communication which often presents the greatest challenge for our AAC users is....**

**Initiating Communication**
- With unfamiliar listeners
- In new environments
- With peers
- Lack of initiation is the source of the AAC users perceived "passivity"

**Picture Exchange Communication System (PECS)**
Andrew S. Bondy, Ph.D. & Lori Frost, M.S., CCC/SLP
- PECS is an approach that teaches early communication skills using pictures
- Students are taught to exchange pictures for something they want
- Critical in early teaching is NOT to pre-empt, but wait for students to hand over the picture first, so they initiate the communication

**Advantages of PECS**
- Requires interaction with other people
- Individual initiates communication rather than responding to a prompt
- Starts with requesting, not labeling or commenting
- Is based on Skinner’s analysis of verbal behavior

**Common Misconceptions**
- *If we're using pictures of any kind, we're using PECS.*
- *We're using a visual schedule, so we're using PECS*

**Fitzgerald Key**
- People = Yellow
- Verbs = Green
- Descriptions = Blue
- Nouns = Orange
- Place = Purple
- Little Words = Pink
Language Board/Static Display SGD
Main Board-Beginning

Language Board/Static Display SGD
Beginning Training

Vocabulary

Vocabulary

Speech Generating Device
(Dynamic Display)

It’s All About The App?
No!
What does Positive Behavior Intervention & Support (PBIS) have to do with Augmentative and Alternative Communication (AAC)?

- Problem identified: Challenging behavior often interferes with successful implementation of ACC. We were seeing increasing behavior referrals being submitted after SLP/Speech consults.
- Solution: Equip staff with the tools to implement Positive Behavior Supports with fidelity to prevent and decrease overall instances of challenging behavior and therefore aid in successful implementation of AAC.
What is Behavior?

• Anything a person “does” is behavior!
• Our behavior is influenced by our environment and others responses to our behavior.

What “Challenging Behavior?”

Challenging behavior defined:

A behavior that interferes with the learning of the learner or their peer(s).

Challenging Behavior Communicates

• Communicates a message when a child does not have language.
• Used instead of language by a child who has limited social skills or has learned that challenging behavior will result in meeting his or her needs.

Challenging Behavior Works

• Children engage in challenging behavior because “it works” for them.
• Challenging behavior results in the child gaining access to something or someone (i.e., obtain/request) or avoiding something or someone (i.e., escape/protest).

ABC’s of Challenging Behavior

**Antecedent:** Events, actions, or circumstances (environment/setting) that happen before the challenging behavior

**Behavior:** Anything a person “does.” Any Form of challenging behavior

**Consequence:** Immediate action or response that a learner receives from others and/or the environment immediately after the challenging behavior
**Reaction vs. Reinforcement**

Reinforcement: When a consequence strengthens the behavior that it follows. Whatever is reinforced will happen more often in the future.

- Our *reactions* can *reinforce* challenging behavior!

Example: Joseph is hungry. He starts to yell. His teacher brings him a snack.

Q: If snack is reinforcement, what will Joseph do next time he is hungry?

**FOCUS ON REPLACEMENT BEHAVIORS**

- Understanding Function

*It’s all fun and games until someone figures out the function of your behavior.*

**Major Functions of Behavior**

The four common functions of behavior:
- “Everybody E.A.T.S.”
- Escape, Attention, Tangible, Sensory

**Competing Behavior Equation**

- *Antecedent*
  - Child sits in circle and participates
  - Teacher asks child to join circle
  - Teacher lets child out of activity

- *Behavior (s)*
  - Child sits in circle and participates
  - Child asks to join circle
  - Child gestures: “All done.”

- *Consequence*
  - Teacher provides attention/praise
  - Teacher gives child a snack
  - Teacher lets child out of activity

*Function: Escape*
What is PBIS?

P  Positive

B  Behavior

I  Intervention

S  Supports

Pyramid Model

Individualized Behavior Supports
(Tier 3): Some Learners

Social Skills Instruction
(Tier 2): Most Learners

Universal Supports
(Tier 1): All Learners

The Goal of the Pyramid is to Promote Children’s Success By:

• Creating an environment where EVERY child feels good about coming to school.
• Designing an environment that promotes child engagement.
• Focusing on teaching children what TO DO!
• Teach expectations and routines.
• Teach skills that children can use in place of challenging behaviors.

Module 1: Building Relationships

Why is it important?

• The relationships that we build with children, families, and colleagues are at the foundation of everything we do. It is important to build these relationships early on rather than waiting until there is a problem.
• Children learn and develop in the context of relationships that are responsive, consistent, and nurturing.

Building Relationships using the 5:1 Ratio

How do we “make deposits” everyday?

• Verbal praise
• Physical touch (high five, pat on the back, etc.)
• Encouragement: “you can do it!”
• Attention
• Playing/engagement
"The goal of Positive Behavior Support is not "perfect children." Rather the goal should be creating the perfect environment for enhancing their growth."
-Randy Sprick

High Quality Supportive Environments
• Encouraging Engagement
• Using a Universal Design for Learning
• Making Accommodations and Providing Ongoing Support

Classroom Arrangement and Design
• Consider how the environment can be arranged to prevent problem behavior
• Minimize large open spaces
• Minimize obstacles and other hazards
• Consider the needs of learners with physical and sensory disabilities
• Use visual and environmental cues to help children know what to do

Visuals-Why they Work!
• Children with Autism and other developmental disabilities have a difficult time processing auditory information, by seeing it visually they can make more sense of it.
• By using visuals you can cue one student without disrupting the learning of the whole group.
• Visual prompts are easier to fade than verbal prompts. When you use visuals children are more independent and less prompt depended.
• By using visuals it is not about us placing another demand, but rather about what the visual expectation is saying/communicating.

What research tells us...
• “Children are less likely to engage in problem behavior when they know what to do, how to do it, and what is expected.”


Schedules and Routines
• Teach the schedule
• Establish a routine and follow it consistently
• Teach the expectations of each routine
• When changes are necessary, prepare children ahead of time
• Provide individualized support for those who have difficulty with following the schedule
Teach with Visual Schedules

Individual Schedules

Photograph Visual Schedule

Real Object Activity Schedule

Head Start Center for Inclusion:
http://depts.washington.edu/hscenter/modules-curriculum-modifications

First/Then Boards

Other Classroom Visual Supports

- Environmental Cues
- Turn Taking Visuals
- Activity/ADL sequences
Visual Supports vs. Communication Systems

- Visual supports are not a replacement for a communication (AAC) system

- Schedule pictures and communication pictures should be kept separate.