


Speaking Volumes: Natural Opportunities to Promote the Use of Augmentative & Alternative Communication




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Augmentative and Alternative Communication (AAC) Defined

Definition – AAC systems are used as aids in producing speech, clarifiers for unintelligible speech, and/or representations for the absence of speech (Ganz et al., 2012)

Two types of AAC :


Unaided AAC

- Gestures
- Manual sign language

Aided AAC

- Pointing to a picture on a communication board
- Writing on paper
- Activating a speech-generating device (SGD)
- Exchanging a symbol

(American Speech-Language-Hearing Association [ASHA], 1997; Frost & Bondy, 1994, 2002; Ganz et al., 2012)




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Intro: AAC in Natural Settings

- AAC instruction often occurs only in structured settings
- Instruction needs to occur in multiple settings and contexts.
  - The use of AAC in natural contexts can promote generalized communication skills

(Calculator, 1999; Mechling & Cronin, 2006)




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**Intro: Incidental Teaching**

A structured form of naturalistic teaching with these main components:

- Instructor sets up the environment to be appealing to the target individual
- Child initiates interaction
- There is a consequence to a child's initiation of communication by elaborating on the child's interaction
- Communicative partner ends the exchange on a positive note

(Hart & Risley, 1978)




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**Preparing for Naturalistic Instruction:  
Selecting Goals and Vocabulary**

- Based on assessments, IEP goals, and family and self-identified needs
- Observe within the typical daily routine as a guide to potential communication opportunities, necessary communicative functions, & vocabulary
- If school-aged, include curriculum vocabulary
- Program new vocabulary into the AAC device, organized by context




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**Key Components of  
Naturalistic Instruction and AAC**

- Plan for generalization early:
  - Implemented in all settings in which communication would naturally be used
  - Natural communication partners implement the intervention
- Specific instructional strategies:
  - Strategy 1. Set up *communication temptations* & find teachable moments
  - Strategy 2: Implement developmental-based strategies:
  - Strategy 3. Implement direct instruction using behavioral strategies

(Oglethorpe, Davis, Hambrecht, & Phillips, 2012; Binger & Light, 2007; Reichle, Drager, & Davis, 2002; King & Fahsl, 2012)




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Planning for Generalization from the Start:  
Key Strategies

- Naturalistic instruction occurs in environments experienced in everyday life
- Use materials or situations that reinforce AAC communication
- Use of various communication partners

(Sevick, Romski, & Watkins, 1995)




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Generalization:  
Communication Partners

- Teachers, Therapists, Peers, Parents, and family can be natural communication partners
- Peers and Family members should be the focus of many naturalistic interventions for AAC
- Peers are often overlooked as communication partners
- Parents tend to be the primary teachers with younger individuals

(Fisher & Shogren, 2012; Simpson, Ganz, & Mason, 2012)




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**Generalization:  
Training Communication Partners**

- Training is crucial for parent and peer communication partners
- Educate communication partners on:
  - The technical aspect of the specific AAC device/system
  - The purpose for AAC use
  - How to engage with the individual using the AAC

(Beck & Fritz-Verticchio, 2003; King & Fahsl, 2012; Binger, Kent-Walsh, Brenes, Del Campo, & Rivera, 2008; Sainato, Goldstein, Strain, 1992)




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**Strategy 1: Communication Temptations & Arranging the Environment**

- Join the individual in a task or activity
- Interrupt the task or activity by manipulating reinforcing materials
- Have materials in sight, but unattainable
- Use books or magazines to promote communication

(Wetherby & Prutting, 1984)




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**Demonstration: Strategy 1.  
Communication Temptations & Arranging the Environment**




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**Strategy 2.**  
**Developmental Strategies**

- 2a. Modeling AAC use
- 2b. Expanding, scaffolding, and building on previously-acquired communication skills




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**Strategy 2a. Developmental Strategies:**  
**Modeling AAC Use and Verbalizations**

- Simultaneously speaking and selecting AAC symbols
- Expand on the individual's communication
- Talk about what he/she is doing

(Binger & Light, 2007)




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**Demonstration: Strategy 2a.**  
**Modeling AAC Use and Verbalizations**




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**Strategy 2b. Expanding, Scaffolding, and Building on Previously Acquired Skills**

6 components of *expanding*

The communication partner:

- Follows the lead of the individual
- Models new vocab and concepts
- Repeats the communication attempt made by the individual and then adds to that expression
- Acknowledges all communication attempts
- Promotes turn-taking
- Uses redirection if there are disruptive behaviors or loss of motivation to engage in an activity

(Hart & Risley, 1978, 1992; Speidel & Nelson, 1989)




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**Demonstration: Strategy 2b. Expanding, Scaffolding, and Building on Previously Acquired Skills**

*Follow the Communicator's Lead*




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**Demonstration: Strategy 2b. Expanding, Scaffolding, and Building on Previously Acquired Skills**

*Acknowledge Communication Attempts*




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**Demonstration: Strategy 2b.**  
**Expanding, Scaffolding, and Building**  
**on Previously Acquired Skills**  
*Turn-Taking*




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**Strategy 3.**  
**Implementation of Behavioral Techniques**

- The foundation of behavioral techniques is in applied behavior analysis
- Behavioral techniques include:
  - 3a. Prompts
  - 3b. Reinforcement
  - 3c. Time delay
  - 3d. Errorless learning




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**Strategy 3a.**  
**Behavioral Techniques: Prompts**

- Prompting is implemented when a behavior has not been acquired, performed, or the behavior occurs rarely
- To avoid prompt dependence by the individual, fade prompts as soon as possible:
  - Increasing the length of delay
  - Using less intrusive prompts gradually
  - Least-to-most promoting

(Macduff, Krantz, & McClinnahan, 2001; Durand, 1999; Cooper, 1987a; Johnston, Nelson, Evans, & Palazoloz, 2003)




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Demonstration: Strategy 3a.  
Behavioral Techniques: Prompts



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Strategy 3b. Behavioral  
Techniques: Reinforcement

- A consequence is presented that increases the rate of behavior that the individual exhibits
- In the natural environment, communication attempts should result in reinforcers that are typically available and appropriate to each situation

(Skinner, 1951; Cosebey & Jonston, 2006; Johnston et al., 2003)



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Demonstration: Strategy 3b.  
Behavioral Techniques: Reinforcement



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**Strategy 3c.**  
**Behavioral Techniques: Time Delay**

- Gives the individual a certain amount of time to respond to a given stimulus
  - Time delay is used when a behavior has been acquired, but not performed frequently or at the correct time
  - Time delay methods vary depending on individual differences

(Reichle, Drager, & Davis, 2002)




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**Demonstration: Strategy 3c.**  
**Behavioral Techniques: Time Delay**




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**Strategy 3d. Behavioral Techniques:**  
**Errorless Learning**

- To avoid an incorrect response, prompts are immediately implemented to result in a correct response
- Time delay and errorless learning can be used in tandem

(Fillingham, Hodgson, Sage, & Ralph, 2003; Cosby & Johnston, 2006; Reichle, Drager, & Davis, 2002)




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**Demonstration: Strategy 3d.  
Behavioral Techniques:  
Errorless Learning**




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## Thank you!

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