# How to Establish Communication and Cooperation (Participation) with Non-speaking Children in ALL Environment

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## Augmentative Communication/Autism Language Programs



Amanda O'Brien, SLP
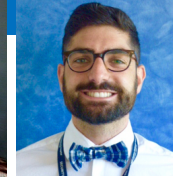
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# Augmentative Communication Programs

**Outpatient Augmentative Communication Program**

**Inpatient Augmentative Communication Program**

**Outpatient ALS Augmentative Communication Program**

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## To get 'cooperation and participation', you must first know:

- What is MOST motivating to him/her?

- Is s/he frustrated with communication breakdown?

**If you focus on the needs/motivations/frustrations of others (and not the child with communication difficulty) *you are doomed*!!!!**

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## What we have learned at Boston Children's in both the inpatient and outpatient programs:

Children learning to use AAC are most motivated to have:

- Control

- Expression of personality

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*A couple of points to start:*

- What is communicative competence?

- Communication POTENTIAL vs COMPETENCE

## Communicative Competence:
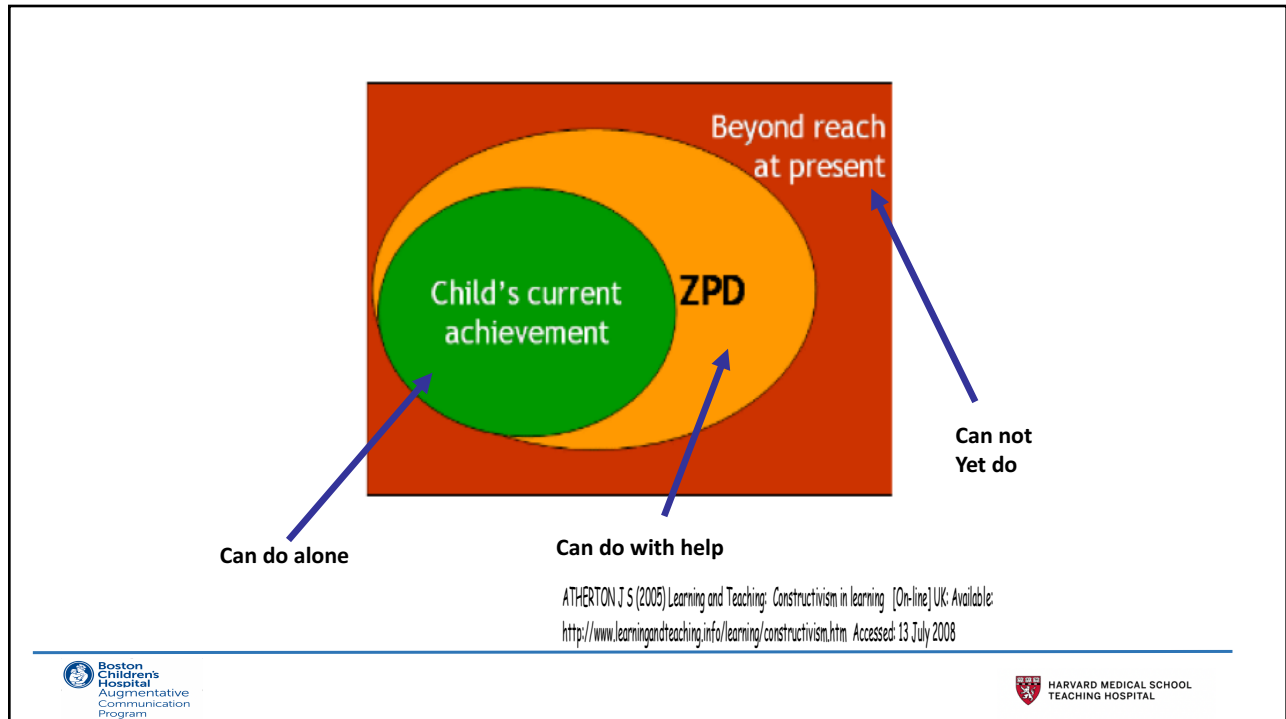### *Audience Participation*

- **Linguistic**
- **Operational**
- **Social**
- **Strategic**

*Toward A Definition of Communicative Competence*
Janice Light, 1989, AAC V5, #2

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# Presume Potential
# vs
# Presume Competence

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"thinking critically about presumed competence *does not mean that we aim to presume incompetence".*

- Travers and Ayers (2015) note that there is a "false dichotomy that failing to embrace [presumed competence] means non-subscribers must believe students are inherently and therefore eternally incompetent." **In fact, as clinicians, we should not be making any presumptions at all. Rather, we should provide opportunities and then let the data, the science, and the individual drive our clinical decision-making.**

**O'Neil and McCarthy, <u>ASHA Leader</u> *in press***

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Beyond reach at present

Child's current achievement    ZPD

Can not Yet do

Can do alone

Can do with help

ATHERTON J S (2005) Learning and Teaching: Constructivism in learning [On-line] UK: Available: http://www.learningandteaching.info/learning/constructivism.htm Accessed: 13 July 2008

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## Today: *Core Considerations* for how to establish successful communication and participation with AAC

- Evidence based feature match based assessment and trial
- Focus on what motivates and is most interesting to the child
- Be certain communication partners are familiar and trained
- Provided AIDED Language modeling and robust vocabulary
- Create opportunities to learn language
- Make communication available
- Engineer the environment with AAC available in all context

## How to establish successful communication?

1. Be certain there was a thoughtful and evidence based AAC feature-match evaluation and trial

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### Feature match considerations
**Shane and Costello, 1994**

| |
|---|
| Patient centered Domain |
| Historical Domain |
| Medical Domain |
| Sensory Domain |
| Motor Domain |
| Language Domain |
| Educational Domain |
| Cognitive Domain |
| Interpreted Domain |
| Behavior Domain |
| Family support/Advocacy Domain |
| Financial Domain |
| Cultural/Social Domain |

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## OT's specialized knowledge is in:

- Fine motor skills
- Postural stability
- Self-care skills
- Visual-perceptual skills
- Visual-motor skills
- Bilateral hand coordination
- Sensory processing skills
- Motor planning, praxis, and organizational issues
- Overall strength/tone

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## One up-front critical collaboration to supporting success:

Occupational therapy/physical access

And

Speech-Language Pathology/communication

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## OT in the AAC Assessment

Identification of a **reliable functional non-fatiguing** motor response for direct or indirect access for intentional communication represents one of the biggest challenges of AAC.

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## OT's specialized knowledge is in:

OTs specialize in knowledge of….
- Fine motor skills
- Postural stability
- Self-care skills
- Visual-perceptual skills
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- Bilateral hand coordination
- Sensory processing skills
- Motor planning, praxis, and organizational issues
- Overall strength/tone

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## How to establish successful communication?

2. Focus your intervention on what is of interest to the person using AAC NOT what you want that person to communicate

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## One more example of video/visual support to support speech production

Brenna, Practicing target speech sounds using an ACP video model idea

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## Simple voice output with a Step by Step

*Goals:*

- Control
- Encouraging engagement
- Social participation
- Learning about turn taking

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**SCRIPT BUILDER:**

ball

Student's Name: _____
Date: _____

**Persons Building Script:**
___student ___parent
___teacher ___peer
___therapist ___other (specify)

**Type of Script:**
_X_ Action ___ Class/Work Participation ___ Conversation

**Does This Script:**
___start with a greeting, "excuse me", or other hook to get the partner's attention?
___include a range of communicative functions (positive comment, negative comment, teasing, questioning, directing, etc.)?
___provide for multiple turns (ex: topic maintainers : "tell me more" or "wanna hear the rest"?)
___ensure that the user doesn't get "backed into a corner" (keep it open ended!)
___Use "real- language" appropriate for the age and setting?
___Use "person-matched language" appropriate to the personality of the individual?

**Communicative Sample Message Function:**
**(Put several on the tray or table in front of the scripter to encourage others to interact!**
**Modify names as appropriate)**

Attention Getter(s):   Hey everyone, let's play ball!

Starter(s)           Mommy, which one do you want?
                     Ms. B, pick a ball.
                     Joey, Come and get one.
                     I want one too!

Maintainers /        Now we're gonna have some fun.
Turn Transfers       Listen carefully!
                     Everyone, put the ball on your head!
                     You look silly.
                     Bounce the ball.
                     That's funny.
                     Roll it on your tummy!
                     Okay, let's count.  1, 2, 3- throw the ball!

Closer(s)            What a mess.
                     Time to clean up!  Bring them back to me.

Musselwhite, 2001 www.aacintervention.com

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## SCRIPT BUILDER:

Blow BUBBLES

**Student's Name:** _____
**Date:** _____

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___ensure that the user doesn't get "backed into a corner" (unexpected response stops exchange?)
___Use "real-kid language" appropriate for the student's age and setting?
___Use "person-matched language" appropriate to the personality of the individual?
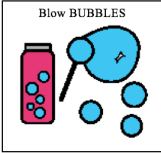
**Communicative Sample Message Function**

**Attention Getter(s):** Who wants to blow bubbles with me?

**Starter(s)**
Open the jar!
Are you ready?
When I count to THREE. you blow lots of bubbles.

**Maintainers / Turn Transfers**
1, 2, 3, Blow!
Yeah Bubbles! Pop, Pop, Pop!
Catch one so I can pop it.
EEeeww. Messy bubbles!
Clean up!

**Closer(s)**
I think its someone else's turn!

Musselwhite, 2001 www.aacintervention.com

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## SCRIPT BUILDER:

**Student's Name:** _____
**Date:** _____

**Persons Building Script:**
___student ___parent
___teacher ___peer
_x_ therapist ___other (specify)

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**Communicative Sample: Message Function**

**AttentionGetter(s)** Yeah! Time for a massage. Get the ladybug!

**Starter(s)**
Turn it on.

**Maintainers / Turn Transfers**
Move it on my leg
That feels good.
Shake it on my arm.
Move to my neck.
Shake, shake, shake!
Put it in my right hand.
Put it on my back.
Do you want to try it?

**Closer(s)**
Turn it off.
I like that.
Thanks. Let's do that again soon!

Musselwhite, 2001 www.aacintervention.com

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## Consider these rules:

- Message should not lead to a 'dead end'
- The recorded voice is *ideally* age and gender matched
- The recorded voice is *ideally* NOT someone in the environment
- For some people, the actual message does not have to be completely meaningful…but it does need to yield a completely meaningful response!

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## How to establish successful communication?

### 3. Be certain communication partners are familiar and trained



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# How to establish successful communication?

4.  Provide AIDED LANGUAGE STIMULATION  (aLS) and Modeling

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# Hand-held strategy

- Pull symbol off the facilitator's board and show it while saying the target word
- Children under the age of 12-13 months do not readily understand the meaning of a distal pointing gestures,
- This strategy is often  used with children developmentally 12 month and younger

Example, while singing the song "Five Little Ducks" the symbol for "Quack, Quack" is removed and prominently placed in the visual field of  the student while the corresponding word is spoken.



RESOURCE:  Engineering the Preschool Environment for Interactive, Symbolic Communication
by:  Carol Goossens', Sharon Sapp Crain and Pamela S. Elder

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## Facilitator Vest Model

- Speaker points to each target word attached to the vest as it is spoken
- This strategy takes advantage of the emerging joint attention skills in young children and supports social referencing {checking back and forth between the speaker and the item being shared by having the highlighted target and the communication partner together.
- This is a skill that children in the early 12 and 18 month range are typically developing.



RESOURCE: Engineering the Preschool Environment for Interactive, Symbolic Communication
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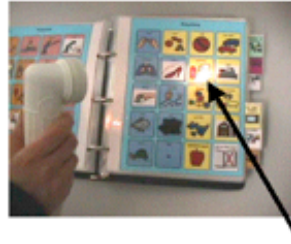
## Facilitator Board Strategy

- Speaker points to symbols on the board as s/he speaks
- This strategy requires the student to understand a distal index finger point (early-mid 12 – 18 month skill



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## Flashlight/highlight

- Points out symbols on the child's expressive communication system while speaking the target word(s).

Flashlight used to highlight the symbol while label is verbally spoken

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## How to establish successful communication?

5. Create **opportunity** to learn how language can be meaningful and reinforce all communication

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## Baby babble blanket

W. H. Freeman, (1975) has attributed
"learned helplessness," to an inability to
control the environment. Other
literature [*Use of microswitch technology
to facilitate social contingency awareness
as a basis for early communication skills.*
In: Augmentative and Alternative
Communication, 1989; 5 (3): 192-197] suggests
that even severely disabled infants can learn to
control their environment through the use of
micro-switch technology.

Using the Baby-Babble-Blanket for infants with motor
problems: an empirical study.

January 1994
DOI: 10.1145/191028.191049
Source · DBLP

Conference: Proceedings of the ACM Conference on Assistive Technologies, ASSETS 1994,
Marina Del Rey, California, USA, October 31 - November 3, 1994

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## How do Children Learn Language?

Children are immersed, from birth, in a rich environment of
language with users:

- Modeling the pragmatics, semantics, and syntax
- Speaking directly to the child
- Talking to others in the presence of the child
- They observe language use through media

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## For children with complex communication needs

Language that is naturally available in the environment is *not* easily accessible because of the vision, motor, and other sensory challenges

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Because of the lack of clear feedback or response from the child:

- Partners may edit their interactions
- Provide minimal language learning opportunities
- Fear that 'more is too much' and 'less is instructional'
- This minimizes the rich language learning environment

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## Think about interaction with typically developing children

WE attend to child's vocalization, eye gaze, facial expressions, attentiveness and see them as signals of
- -Understanding
- -Interest

Naturally _interpret_ and _expand_ these behaviors _using language_. (language stimulation)

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## What made me think of this strategy? - A two-year old on my street



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## Tools needed:

- A bunch of symbols/photos with velcro on back
- A Veltex board
- Eye gaze from for those unable to direct access
- A white board
- Color markers
- Toys/objects to match your symbols
- imagination

## Errorless Co-construction of language

- Pile of symbols provided
- Model 'writing' a story by selecting symbols
- The sillier the better
- After symbols combined, could draw the story OR put on a show
- Refer back to your 'written' script repeatedly
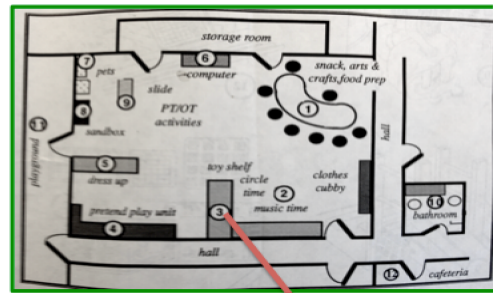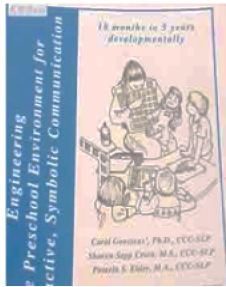- Include sight words and 'little words in the pile.

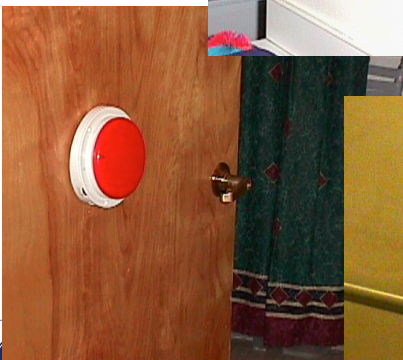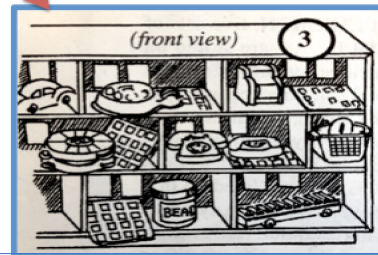## How to establish successful communication?

6. Communication must be available



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## How to establish successful communication?

7. Engineer the environment for success with communication tools available for all contexts

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Visuals from: Communication Displays for Engineered Preschool Environments Book II by Carol Goossens, Sharon Sapp Crain, and Pamela S. Elder, Augmentative Communication Specialists. 1994

# Questions/Discussions

## Thank you!

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