AAC and Early Intervention:
Building Foundations for Success
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- Evaluations and Diagnostic Therapy
  - Clinical Supervision
  - Trainings and Outreach

Learner Outcomes & Session Goals
- Identify and clarify practice issues & misconceptions about AAC with very young children
- Use a feature-match approach to identify AAC tools and strategies for young children
- Learn techniques for incorporating AAC to support participation, learning & communication

Who is At Risk?
Individualized
- Heterogeneous group
  - No single disability or combination can define a need for early AAC intervention
- Individualized assessment
  - Communication behaviors
  - Physical Needs
  - Sensory Status
  - Medical Needs
  - Family Stressors
What do we mean by Early Intervention? IFSP

- Individual Family Service Plan
  - Public Law 99-457; extended IFSP to children 3-5 yrs.
  - Section 619 Part H; mandated services to infants and toddlers (B-3)
- Family Centered Practice:
  - The child within the context of the family
  - Maximize the development of the child
  - Optimize the family’s ability to address the child’s needs
- SLP role:
  - Team effort in planning and service delivery
  - Provide direct service
  - Make referrals

Continuum of AAC

Early Behaviors to Symbolic Communication

- Body Movements and Expressions
- Vocalizations
- Words and approximations
- Gestures and Signs
- Communication displays
- Technology

At Risk:

Earliest behaviors may not fit the expectation

- The Partner: Stressors, miss or misread, ? how to
- The Child: Responses are
  - subtle, delayed, inconsistent or absent

Because of these barriers

Interactions cannot be maintained, and initiations decrease because they are seldom successful
Communicative Interactions: 4 Primary Goals

- Express Needs and Wants
- Develop Social Closeness
- Exchange Information
- Fulfill Social Etiquette routines

TOTAL COMMUNICATION

- Continued work on speech, while providing alternative methods for successful communication
- Decrease reliance on one communication method
- Enable child to adjust communication method based on own ability as well as on the requirements of different partners & contexts

Why Implement AAC?

Maximize LANGUAGE learning
Increase PARTICIPATION
Develop SOCIAL INTERACTIONS
Encourage TURN TAKING
Express a RANGE of communication functions
Guide family & others for SUCCESS
Create EXPECTATIONS
**Make me WANT to be Assessed!**

(Costello, Gosnell, Berg, Abramson –Asha 2010)

- Engaging, Sustained Social Interactions that are FUN!
- Embedded in Meaningful and Familiar Routines
- Occur with High Frequency
  - For repeated opportunities to practice
- Incorporate Motivating Content
  - Familiar People or Characters
  - Sound Effects
- Highly Interactive
  - Music and songs
  - Play based (Topic Displays)

**AAC CAN help!**

However, many children transition to preschool with underdeveloped, limited communication repertoires yet have restricted access to AAC modes

(Cress & Marvin, 2003)

**WHEN…**

- Avoidance of social interactions
- Dependence on others to ‘interpret’ increases
- Communication breakdowns occur
- Successful interactions with others change
  - Frustration is evident
  - Learned Helplessness

Early intervention is critical – avoid playing “catch-up”

*P.S. It’s never too late to start!*

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So, Why Not AAC?

Common challenges

- Wait and See - By 3 years old, a child typically ...
  - 900-1000 words
  - 3-4 word sentences
  - ~75% intelligible
- Prereqs - a child must demonstrate specific competencies before introducing AAC
- Fear - that AAC may interfere with speech development or using AAC means giving up on speech.
- Too Overwhelming - using too many (?) pictures or words
- Access to tools and resources - Time, money, equipment
- Making it work - difficulty implementing AAC in daily routines

Myth Busters!

Myth Buster # 1...
A child must exhibit pre-requisite skills before starting AAC

True or False?

- It is necessary for the child to understand specific concepts/vocabulary that can be used for communication.
- Before participating in low-tech or high-tech AAC Assessment, an infant/young toddler must be able to follow directions.
- Voice output is not appropriate for infants and young toddlers

FALSE!

6 months old

Clinical Assessment goal:
- Turn-taking, social connectedness, anticipation
- Switch use and access (on / off - wait)

Clinical tools:
- Little Step-by-Step recorded with a single message "Peek-a-boo"
- Introduction to low tech eye gaze for symbols
High Tech “Infants”  
Age 14 months

**Clinical Assessment goal:** Use of an Eye Tracking System

**Clinical Tool:** (Tobii P10 with custom SDPro displays)

- Step 1: Calibration and interaction with the device
- Step 2: Navigation of Dynamic* page sets to intentionally engage

*Displays with page links, 4 main targets + go back

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### Device Calibration  
14 months old

How to get a 14 month old to calibrate?

- Calibration task
  - Look, hold gaze, and track multiple targets

- Be clinically creative and imaginative with set up

- Remember, he does not need to understand the task to complete it!

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**Myth Buster #2…**

*The use of AAC will interfere with a child’s vocal development*
**Myth Buster #2…**

- Research results indicate using AAC does **NOT** stop children from learning to talk.

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**AAC Intervention CAN:**

- Expand Vocabulary (Aided Language Stimulation)
  - Provide Input (Visual Supports)
  - Provide a means of Expression
- Support and clarify verbal speech attempts
  - Increase participation

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**Making it work:**

*Effective Strategies*

- Model speech and use of AAC in context
- WAIT! Allow time to communicate
- Scaffold for success
- Provide multiple opportunities to be engaged and interact
- Position yourself and tools appropriately to reduce demands (attention and access)
Step 1: Identify meaningful contexts for communication with your child
Step 2: Provide effective means for your child to communicate
Step 3: Select appropriate vocabulary for your child
Step 4: Set up the environment to support your child’s communication
Step 5: Use appropriate interaction strategies to support communication

Engineering the Environment
Tips for eliciting communication

- Create a visually enhanced, language rich environment
- Put materials within the child’s reach
- Create communication temptations (sabotage, interrupt routines, toys with many pieces)
- Have expectations

Tools and Strategies
No Tech, Low Tech, and High Tech
Key differences between communication using natural speech and communication using AAC?

- There are frequently restrictions in what a person is able to communicate at any given time.
- Individuals (and others!) must often plan ahead for communications.
- AAC is often most effective in situations where the interactions are predictable.

Speech

- Verbal Speech Production
  - Touch Cues
  - Co-Active Movement
  - Expectant Pauses
  - Turn-Taking
  - Multi-Media

No Tech

Sign Language

- Signing Time video series
- Online learning for families
  - http://www.aslpro.com/
- Custom Sign Language Dictionary
Low Tech
Control of the environment

- Purpose
- Switch type
- Switch Placement
- Reinforcement

Low Tech
Symbolic Representations

- Objects
  - Ofull, partial

- Photographs
  - OCut out, Flat, Visual Scenes

- Line drawings (PCS)
  - OTopic Displays, Communication Notebook

Computer Interactions:
A tool for language learning

- Establish **Cause/Effect**
- Virtual Play
- Vocabulary Building and Literacy
  - Independent Access
  - Visual Attention
  - Communication

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Computer Interactions:
Software selection and Access
● Goals and Developmental Level
● Direct Access
  ○ Touchscreen (cause/effect, targeting)
● Indirect access
  ○ Switch (single, two-switch) with USB Interface box
● Literacy Supports
  ○ Adapted Stories

Early Learning Activity Websites
● Priory Woods School – Touchscreen/ Switch
● helpkidzlearn.com - Switch
● SenSwitcher (northern grid)- Switch
● Starfall.com - Touchscreen
● Kneebouncers.com – Switch

Apple Apps for engagement and exposure
cause/effect (not for communication)
● Alphababy
● Baby Piano
● Peekaboo Bar
● Songs from Duck Duck Moose
Low Tech: Single and Sequential Messages

- **Goals:** Initiation, participation and turn-taking
- **Single target**
- **Record a single message**
  - Use an age and gender matched voice when possible
  - Record in "first person"; the child is saying the message!
- **Social Sequenced Scripts:** A series of recorded messages
  - LITTLE Step-by-Step, Sequencer, Big Talk Triple Play
- **Co-planning for messages**
- **Interface options for access- add a switch**

Low Tech: Talking Photo Album

- Fits 4x6 photographs or symbols
- Remnants (tickets, drawings, etc)
- ~10 seconds of recording per page
- Story telling, jokes, reading
- Access considerations

On-going Needs

- AAC evaluation is an on-going process!
- Develop many modes for functional participation
- Provide opportunities for meaningful interactions.
- Bridge the gap
- Reduce frustrations
- Independence
- Expand language
- Develop early literacy

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Remember!

**Total Communication**

- Honor and value all attempts
- Model use of a strategy and language expansion
- Encourage and expand speech whenever possible
- Don’t be afraid to try something

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**What Else is Needed to Make a Communication System Work?**

- Teams and families must meet regularly to coordinate any needed assistance for customizing, using, maintaining and carrying over use of the communication system.
- A transition plan must be in place to assure that needed assistance, equipment and support is provided as they enter preschool.

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**Funding:**

- Insurance
- Local Loaner Libraries (Lacy Equipment Lab, ORCP-Regional Consultation Program, Easter Seals)
- Company Loans
- Local Charities
- Gifts
For More Information...

- ASHA:  http://www.asha.org/public/speech/disorders/AAC.htm
- AAC Intervention:  www.aacintervention.com
- Creative Communicating:  http://www.creativecommunicating.com
- Simplified Technology:  www.lindaburkhart.com
- AAC-RERC:  http://aac-rerc.psu.edu/
- Creative AAC and EI Resources:  http://aac-unl.edu/early.html

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IT’S NEVER TOO EARLY TO START AAC!

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