I. Overview & Issues

A. What is formal AAC?

- Formal AAC tends to refer to devices, object or picture symbols, signs and other aids, and is only one subset of AAC.
- AAC incorporates a wide variety of multimodal communication strategies.
- Anything that supports communication when traditional methods are insufficient is AAC.
- AAC can start at birth, with support of partner recognition and response to signals.

B. Gesture and Behavior as part of Multimodal AAC

- Behaviors are the earliest forms of AAC, including spontaneous and intentional behaviors, posture & body shifts, voice, & partner responses.
- There is a continuum of AAC from behaviors to symbolic behaviors. Behaviors & gestures support later AAC. Even symbolic AAC users will still use gestures for some purposes.
- Intervention with gestural strategies still counts as AAC even if the intervention doesn’t include other aids, boards, or devices.

C. When should we start introducing formal AAC into a child’s communication?

- When they’re awake
- Introducing formal AAC shouldn’t wait for any prerequisites
- Children with very basic skills can use formal AAC for simple goals
- For children with motor and/or cognitive limitations,
symbol or device can be a means to discover new ways of affecting the world around them

D. Why do we need transitions - can’t we just teach the formal AAC?
- For some children we can, if they can connect the formal AAC to what it means
- Many children need help connecting their behavior to the message and outcomes
- Our goal isn’t to teach the switch or symbol, but ways to convey a message
- If the child initiates the message, they’re also more likely to initiate the formal AAC

E. Possible roles of formal AAC in early communication skills
- Spontaneous communication (reflexive):
  - accessible way to affect the world
- Intentional Behavior (cause/effect):
  - visible connection of action & response
- Intentional Communication (gestures):
  - ways to represent gestured ideas
- Symbolic Communication
  - ways to practice and visually represent different concepts

F. How many “hard things” are already involved in early communication?
- Spontaneous communication (reflexive)
  – Using my behavior (1 hard thing/tool)
- Intentional Behavior (cause/effect)
  – My behavior + person/object (2 tools)
- Intentional Communication
  – Behavior + message + person + object (3-4 tools)
- Symbolic Communication
  – Behavior + message + person + language + object (5 or more tools)

G. How many new “hard things” can formal AAC add?
- External Device - turning to something that represents the
child’s message
• Language - concepts into words
• Visual Representation - picture or other visual symbol of the same language
• Voice Output - sound conveys the same message, not just interesting in itself

H. Ways to add formal AAC tools in very early communication
• AAC can be an object (even at 2 tools)
  – Learn AAC is interesting as external device
• AAC can be input from us about language
  – Learn how language fits with communication
• Voice output can be way to practice words
  – Learn to play with language independently
• Symbols can be reminders of what to say
  – Learn picture symbols represent ideas

II. Strategies for early formal AAC

A. It’s never too early for VOCAs
• AAC can be an accessible means to affect the world in recognizable ways
• VOCAs can be programmed as simple cause/effect toys with reinforcing output
• Recording a parent’s voice can be a way to provide control over a favorite voice
• Even at this early point, children can learn that VOCAs or symbols are worth the effort to use an external device for a purpose

B. Extending Existing Behaviors
• Symbols and VOCAs can be a way to make current behaviors more salient
• It’s important to build on the message the child is already conveying in formal AAC
• As intentional behavior, we need to keep the formal AAC part of the interaction
• Turning away from interactions for formal AAC can be a reason for refusal to use it

C. Building on the behavior “trigger”
• Until a child initiates a behavior they already understand, we don’t know what they’re thinking or will associate with AAC
• Asking a child to first push the switch or touch a symbol is backwards for most kids
• If we expand the formal AAC for the child on top of their behavior it’s little extra work
• Only add one aspect of formal AAC at a time to their current behavior

Hey wait a minute...Don’t you have to know the child understands the symbol first?
• We can teach new concepts by using them
• Waiting until a child demonstrates understanding tends to promote passive action & interaction.
• Our most powerful strategy for helping children learn that their behaviors have an impact on the environment is by adapting our responses to their spontaneous behaviors, at these earliest stages
• It’s OK to make formal AAC “too easy” at first - we do it all the time with typically developing children to embed models of language behavior

D. Adding Formal AAC into Routines
• Give the child (and partner) reasons for needing extra info provided by formal AAC
  • Symbolic information adds specificity to activities controlled more generally by behavior
    - e.g. choices, distant objects
  • Start with function and use of communication rather than form – any mode is acceptable
  • If children have low communication output of behaviors, you may first need to adapt the environment, activities, or partner responses
• Most early communicators have very context-dependent communication, and we need to embed our intervention and use of devices into a realistic communicative context

E. Augmented Input
• Slipping a formal AAC strategy into a routine to expand the child’s message or model the strategy in a new way
• Receptive - We use the child’s symbol, device or sign to express our own ideas
• Expressive - We “feed the child a line” to expand their message right when they need it and show them a more specific way to express that idea

F. Expanding Ways of Using Symbols

Becoming symbolic isn’t one simple step!
• Referential
  – symbols get/do SOMETHING...
• Differential
  – symbols are different, e.g. like/not like
• Representational
  – symbols mean a specific idea, 1-1 correspondence of symbol and concept

Take-home Points
• One hard thing at a time
• Follow the child’s lead and intent
• Function over form - the message matters
• Add the formal AAC onto child’s behavior
• Show that formal AAC gets results early
• Don’t wait for a child to be ready for AAC
• We can always work on “emergent AAC”

Contact Information

Cynthia J. Cress, Ph.D.
Associate Professor, Communication Disorders
University of Nebraska-Lincoln
202G Barkley Memorial Center
Lincoln, NE 68583-0732

Email: ccress1@unl.edu
Website: www.unl.edu/barkley/faculty/ccress.shtml