

AAC in the Wild: Exploring and Charting Authentic Social Interactions

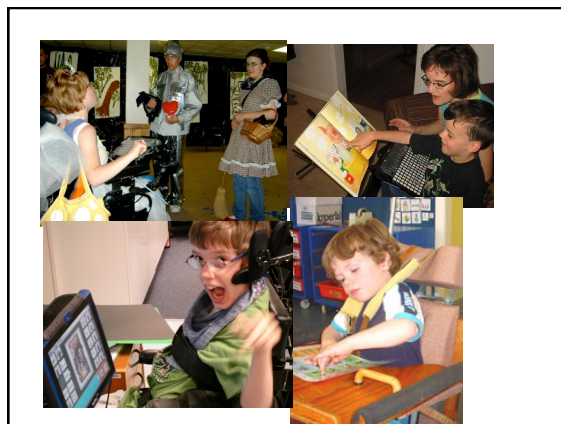
D. Jeffrey Higginbotham, Ph.D., University of Buffalo
 Sarah W. Blackstone, Ph.D., Augmentative Communication Inc.
 Mary Hunt Berg, Ph.D., The Bridge School



Sarah (about 20 minutes)...this slide not shown

- Brief overview of session: Goals interventions that involve augmentative and alternative communication (AAC) is for individuals with complex communication needs (CCN) to engage in successful social interactions whenever, wherever, and with whomever they choose. Introduction to a new interaction model of communication and present case studies to illustrate its basic concepts and applications to research and clinical practice. Learning objectives:
- 1. what do we mean...in the AAC in the wild and authentic interactions/ communication ?
- 2. Principles of AAC: Highlight Theoretical constructs underlying research, development and clinical practice:
- 3. Interaction Model based on relevant theoretical constructs re: Language and Communication, and constructs related to utterances, joint attention, pragmatics, and more

AAC in the Wild



Exploring and charting authentic social interaction

- 'Authentic social interaction'** **What do we mean?**
- Say It Naturally Level 1: Verbal Strategies for Authentic Communication for Advanced Beginner to Intermediate ESL Students (Second Edition)* by Allie Patricia Wall
 - Simmons-Mackie, N. & Damico, J. (1996). Accounting for handicaps in aphasia: communicative assessment from an authentic social perspective, *Disability & Rehabilitation*, 18, 11, 540-549
 - Saying What's Real: 7 keys to Authentic Communication and Relationship Success* by Susan Campbell
 - Leading Out Loud: Inspiring Change Through Authentic Communicators*, New and Revised by Terry Pearce
 - Authentic Conversations: Moving from Manipulation to Truth and Commitment* by Janice Showkeir, Maren Showkeir, and Margaret J Wheatley
 - Just Be Honest: Authentic Communication Strategies That Get Results and Last a Lifetime* by Steven Gaffney
- Authenticity means being real and genuine when you communicate.
 - Interactions between individuals who use AAC and partners too often violate characteristics of authentic communication
 - Clinical practice, research and AAC tools should foster authentic communication

Charting the path Using an Interaction Model

1. Make the case for a theoretically grounded interaction model.
2. Discuss relevant constructs (e.g., 'Language', 'Communication', 'Attention,' 'Utterances')
3. Discuss and Illustrate with case examples.

Principles help us guide and evaluate our work in AAC

Principles Reflect Basic Assumptions

- Communication is a complex, dynamic, transactional process
- AAC seeks to enhance communication across the broad spectrum of communication options
- Successful AAC interventions result in outcomes that benefit, and are valued by those for whom they are targeted
- The who, what, why, where, when and how of communication has changed over past few years

Blackstone, S., Williams, M.B., Wilkins, D.P. (2007). Key principles underlying research and practice in AAC. AAC, 23, 191-203

Example of Principles AAC-RERC

1. People who rely on AAC participate actively in AAC-related activities.	2. Widely accepted theoretical constructs are underpinnings to research, development and instructional strategies in AAC.	3. AAC technologies & instructional strategies support and foster abilities, preferences and priorities of individuals with CCN
4. AAC technologies and instructional strategies designed in ways that recognize unique roles communication partners play during interactions.	5. AAC technologies & instructional strategies enable individuals with CCN to expand and strengthen existing social networks & relationships and fulfill societal roles.	6. AAC-RERC outcomes realized in practical forms. Social validity determined by individuals with CCN, family members and the broader community.

Blackstone, S., Williams, M.B., Wilkins, D.P. (2007)

Principle #2

Widely accepted theoretical constructs are underpinnings to AAC programs, research, development, intervention strategies and products.

This principle is reflected in

- Mission statements (ALL)
- What and how we do research
- How, where & with whom we conduct AAC assessments
- How, when, where, with whom we plan, implement and measure impact of AAC interventions
- How (etc.) we design, develop and deploy AAC tools, technologies, techniques & strategies

www.aac-rerc.com

“Widely accepted theoretical constructs”?

<ol style="list-style-type: none"> 1. Grounded in peer-reviewed evidence 2. Generalizations formed from particulars 3. Subject to debate 4. Change over time 	<p>Important AAC-related constructs</p> <ul style="list-style-type: none"> ■ Language ■ Communication ■ Authentic social interaction ■ Rate, utterances, joint attention ■ Social networks ■ Inclusion ■ ICF model of disability ■ Ergonomics ■ Knowledge translation, etc.
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Theoretical constructs come from other fields to enlighten our work

Theoretical Constructs have emerged/ been strengthened from within our field and enlighten others

- Language
- Communication
- Contextual determination of mode selection
- Utterances
- Co-construction of meaning
- Attention levels
- Aided language / augmented input
- Communicative competence Participation model
- Social Networks, etc.

Multi-modal man



“When we meet a fact which contradicts a prevailing theory, we must accept that fact and abandon the theory even when the theory is supported by great names and generally accepted.”

Dr. Claude Bernard (1865). *An Introduction to the Study of Experimental Medicine*
as recently cited by Jonathan Edlow, M.D. (2009).
The Deadly Dinner Party: and Other Medical Detective Stories

‘LANGUAGE’ (narrowly defined)

Focus on linguistic elements (e.g., code/structure)

Code with four elements

- Semantics
- Syntax
- Phonology
- Pragmatics

(e.g., Chomsky, 1975; WHO should be here. I won't get into nativist, etc. just mention. Is there anything I should say that you can use later? Also, what about a bibliography)

Doesn't work for us

- Based on written samples
- Not derived from language in face-to-face interactions
- Largely ignored how language is used in context
- Too narrowly defines pragmatics
- Utterances? Considered with regard to linguistic elements only

‘LANGUAGE’ (Currently accepted definition)

Semantic-pragmatic, multimodal view – meaning and social relations determine form
(Based on interaction studies, multiple languages, across age groups)

- Language is a multimodal, social, semantically and pragmatically based construct. (Bates & Dick, 2002; Slobin, 2003, etc.)
 - An utterance is NOT just comprised of linguistic elements alone (Clark; 2009; Higginbotham, 2009;)
 - Gestures critical to both linguistic and cognitive development (Goldin-Meadows, 2003; Volterra, Caselli, Capirci & Pizzuto, 2004)
 - Studies of language acquisition (Bowerman, Bates, Snow, Tomasello, etc.)

Language and AAC

- Use of language by individuals who use AAC is strategic.
- Use of language reflects partners, contexts, activities, intents/goals, available tools, as well as the linguistic and communicative competencies of interactants.
- Jeff → utterances, selection of modes, etc.; adult
- Mary → levels of attention, gestures, etc.; children

How SLPs view ‘LANGUAGE’ affects what we do!

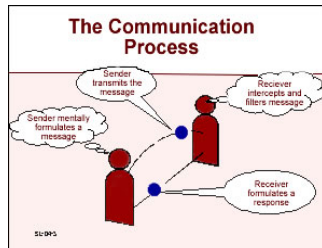
- What we target → what takes priority
- What we assess and treat
- Who and what we include or don't include in our recommendations/ goals/ treatment plans /definitions of success
- What we choose to measure/document along the way (from referral through outcomes)
- How we design and deploy AAC tools and strategies?
- What we teach in our courses, workshops, classes?

Need the whole story about language and its use

COMMUNICATION' (sender-receiver model)

Shannon and Weaver 1949

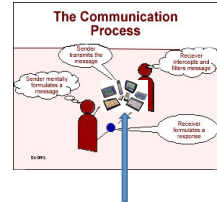
- Exchange of information/ideas usually via a common system of symbols
- Focus on code, emphasis on transmission (words, images, sounds, touch or smells)



Sender – Receiver model (Semiotics, Engineering)

DOESN'T work for us

Does NOT account for



- Key contextual factors
- Use of multi-modalities
- Co-construction of meaning
- Use of AAC tools
- Role(s) of key communication partners
- Issues related to communication parity and symmetry

'COMMUNICATION' (CURRENT DEFINITION)

(Sociolinguistics, Psycholinguistics, Cognitive Science)

- Human communication is the **joint establishment of meaning** using a "socially distributed ecology of public sign systems."



Wilkins, 2006; Wilkins & Higginbotham, 2005; Goodwin, 2003

At core of all human communication
is the creation of shared meaning
between interactants

Clark, 1996; Gudykunst & Kim, 2003;
Grove, Clibbens, Barnett & Loncke, F. (1998).

An Interaction



Observations

- Limited use of language
- Shows the power of speech and language
- What else?

Meaning NOT established but...

Baby

- Clear goal
- Multi-modal ->Nonlinguistic modes
- Motivated!
- Joint attention good
- Uses context brilliantly
- Socially/culturally mediated
- Emotional components

Partner (who?)

- Recognizes
 - baby wants something
 - conventional gestures (point)
- Motivated!
- Joint attention good
- Lacked shared knowledge??
- Doesn't infer... from the context or baby's utterances
- Underestimates skills/abilities

Communication is

- Purposeful
- Jointly constructed utterances
- Contextually informed
- Attentionally grounded
- Socially mediated
- Culturally framed
- Emotionally influenced

Communication



Is The Joint Establishment Of Meaning

Communication



Is The Joint Establishment Of Meaning

Communication and AAC

- Interactions are often co-constructed (Jeff/ Mary)
- Interactants use context, multi-modalities to construct meaning (Jeff/Mary)
- Attentional issues are key to success (Jeff/ Mary)
- Social-emotional factors are always present (may not be acknowledged)

Reframing our perspective

“We must shift our focus from the specific deficits of an individual. It is conversations that are impaired, not the interactants.”



Wilkins, 2004; Blackstone, Williams & Wilkins, 2008

Introduce Jeff – 30 minutes. Slide not shown. Is this at all what you are going to do?

- Talk about interaction model through case examples using video clips - nature of an utterance, language use, constructing meaning using multiple modes.
- Focus: Interactions with adults who have strong linguistic and communication competencies...show need for interaction model that reflects current language/communication theoretical constructs.
- AAC interactions inform and exemplify communication as joint establishment of meaning and language as a multimodal, social, semantically and pragmatically based construct. And more!

jeff

Children with CCN and their development of competencies

- Shift focus: Talk about kids with multiple challenges who benefit from AAC and how interaction model needs to guide AAC research, clinical practice and design/development of tools and strategies.
- Development of language and communication affects acquisition of competencies across all domains

Video clip

- Katy, I would make quick points about competencies in language (narratives/utterances/multimodal); communication use of context/joint construction/role of partner) that Mary/Jeff can refer to later
- Clip would also serve to tie more competent AAC user to early development of relevant skills.

Children with CCN

- Good interactions are achievable.
- Children who can't move, see, hear, talk, understand have limited access to context, language models, information, feedback, etc.
- Nature of interactions are different
 - Quantity and quality of interactions
 - Authenticity
 - Role of partners
 - Timing
- More onus on partners.
 - Partners need to value all modes, establish shared attention, use past experiences, get "meta,"
 - Scaffolding
- Need tools to access language and communicate successfully.
 - Tools can "get in the way"

Language Development

- Usage based theory of language acquisition (Tomasello, 2003).
- Language develops in a social milieu.
 - Should be reflected in clinical practice
 - Limitations of Brown's stages-
 - Tomasello, Bates, Slobin, Bowerman
- Pragmatics



What do we mean by CONTEXT

- Place, people, social, cultural, emotional as well as utterance-related elements .
- **Relevant context defined by joint attention/ activity/goals.**

Michael B. Williams *Alternatively Speaking v. 10 #2*

What first pops into your mind when you hear the phrase augmentative and alternative communication? For many people, and I include myself in this category, AAC conjures up high-tech speech generating devices and low-tech word and alphabet boards, not to mention the strategies and methodologies associated with the field.

What's wrong with this picture? There are no people in it.

When I moved to Berkeley, California forty years ago, I fell into a group of people with disabilities who refused to believe they were part of the "medical model" of disability. They viewed themselves as people who were not ill and should not be viewed as such. They believed disability to be a social construct and demanded the right to participate in the daily activities of their community. What a concept!

Communication Development

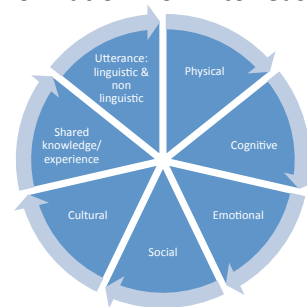
- Interactants construct meaning using utterances in and through an **attentionally-framed context**.
 - Fill in missing information based on past experiences (shared or not).
- AAC equipment/strategies can profoundly influence interactions
- Meaning is constructed using pragmatics

Defining Pragmatics in AAC

Reasoning processes used in a purposeful, goal-oriented activity that happens in and through the use of an attentionally-framed context and experience.

Wilkins, 2009

Sources from which our pragmatics draw information from...to reason with



Construct of pragmatics needs to

- Acknowledge that interactants use information from a variety of sources to interpret and guide action.
- Recognize that ALL utterances are constructed and influenced by skills of interactants, emotion, shared reference/ experience, as well as AAC technologies, tools and strategies

Interaction Model based on relevant theoretical constructs re: Language and Communication, Utterances, Joint attention, Pragmatics...

Introduc Mary

- Importance of establishing and maintaining joint attention
- Examples of how program, assessment, intervention strategies and tools reflect current theoretical constructs AND can impact outcomes for children with significant communication challenges.

Jeff Wraps Up

- What are main points?
- How does what we've said apply "in the wild" to research, practice, development of tools/ strategies?
- How does what we've said apply to goals of "authentic social interactions"

Discarded slides

Stepping Beyond Traditional Definitions

- Formal code (language) only one element
- Meanings are not retrievable through decoding alone and may need to be negotiated.
- Communication involves a trade-off between effort expended and information gained.
 - Certain AAC systems may require more effort...This may explain why systems that are being taught are not always used.
 - Some systems impose heavy loads on working memory and affect selective attention.

(Relevance Theory: Grove, Clibbens, Barnett & Loncke, 1998)

Language, Communication, Pragmatics and AAC

- DEVELOPMENT of language and communication for children with CCN.
 - Should be grounded in widely accepted theoretical constructs.
- Determines
 - What's important
 - Who and what we include / don't include in our recommendations/ goals/ treatment plans /definition of success
 - What we choose to measure/document (from assessment through outcomes)
 - How we design tools and strategies?
 - What we teach others in our courses, workshops, classes?
 - And so on

Need to examine our theoretical constructs in light of evidence

- Constructs underlie how we operate, are applied in our work and help us evaluate our outcomes.
- Too often we see work that reflects unexamined / undefined / outdated theoretical constructs



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