




## AAC in the Wild: Exploring and Charting Authentic Social Interactions


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## AAC in the Wild



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## Exploring and charting authentic social interaction

### 'AUTHENTIC SOCIAL INTERACTION'

- *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, 549-549
- *Saying What's Real: 7 Keys to Authentic Communication and Relationship Success* by Susan Campbell
- *Leading Out Loud: Inspiring Change Through Authentic Communications*, New and Revised by Terry Pearce
- *Authentic Conversations: Moving from Manipulation to Truth and Commitment* by Jamie Showkies, Maren Showkies, and Margaret J. Wheslley
- *Just Be Honest: Authentic Communication Strategies That Get Results and Last a Lifetime* by Steven Gaffney

### WHAT DO WE MEAN?

- 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

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## 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. Illustrate with case examples.

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## Principles help us guide and evaluate our work in AAC

**Seven Principles for Early Action**

The PCEP researchers did the following, principles for attention in helping us early when program to include speechless people into our AAC team:

1. Agree on outcomes.
2. Develop a good program plan.
3. Learning activities. Can help and support outcomes.
4. Focus on why the principles are important in practice efforts.
5. Accountability for the program.
6. Compatibility with other diverse program strategies.
7. Assessment and feedback.

**Our Principles**

- 1. Build self-esteem in young players.
- 2. Understand the game of football.
- 3. Learn the fundamentals and have fun.
- 4. Lead through authorization and action, not words.
- 5. Discipline and integrity.
- 6. Operate as a team.
- 7. Gain an appreciation for the process.
- 8. Partnership leads to class, dignity and respect.

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## 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*

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## 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 & 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)*

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## Principle #2

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

- 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

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## "Widely accepted theoretical constructs" in AAC come from other fields and enlighten our work

Grounded in peer-reviewed evidence

Generalizations formed from particulars

Subject to debate

Change over time

- 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 also emerge and are strengthened from within our field

- Contextual determination of mode selection
- Utterances
- Co-construction of meaning
- Levels of attention
- Aided language/augmented input
- Communicative competence
- Participation model
- Social Networks

**MULTI-MODAL MAN**

Michael B. Williams (2004). *The multimodal man*

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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*

**"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."**

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## 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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## 'LANGUAGE' (narrowly defined)

Focus on linguistic elements (e.g., morphology)

CODE WITH FOUR ELEMENTS      DOESN'T WORK FOR US

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>Semantics</li> <li>Syntax</li> <li>Phonology</li> <li>Pragmatics</li> </ul> <p>(e.g., Chomsky, 1957, 1975; Brown, 1973)</p> | <ul style="list-style-type: none"> <li>Based on written samples</li> <li>Not derived from language in face-to-face interactions</li> <li>Largely ignored how language is used in context</li> <li>Too narrowly defines pragmatics</li> <li>Utterances? Considered with regard to linguistic elements only</li> </ul> |
|--|--|

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## '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.) support this view of language

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## 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, timing, etc.; adult
- Mary -> levels of attention, school news, etc.; children

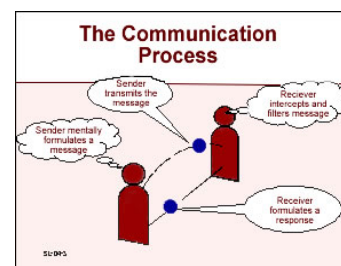
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## COMMUNICATION' (sender-receiver model)

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

Shannon and Weaver 1949



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## 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

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## '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



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## 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).

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## Observations

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

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## 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

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## Communication is

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

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## How SLPs view 'LANGUAGE' and 'COMMUNICATION' 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 to use current constructs!

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## Communication

Is The Joint Establishment Of Meaning

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## Communication

Is The Joint Establishment Of Meaning

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## Communication and AAC

- Interactions are often co-constructed
- Interactants use context, multi-modalities to construct meaning
- Attentional issues are key to success
- Social-emotional factors are always present, but may not be acknowledged (see handout re: Development of emotional competencies and AAC.)

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## 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, 2007

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## Jeff

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## Children with CCN and their development of competencies

- Interaction model needs to apply to children and account for developmental issues.
- Access to language and communication affects acquisition of competencies across all domains.
- Key role of early intervention and AAC.

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## Children with CCN

- Good interactions are achievable.
- Nature of have certain characteristics
  - Quantity and quality of interactions
  - Authenticity
  - Role of partners
  - Timing
- Children who can't move, see, hear, talk, understand have limited access to context, language models, information, feedback, etc.
- 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"

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## Video clip of Katy

- 11 yo girl with C.P. attending the Bridge School.
- Communication system
  - Uses SGD: Access using head switches
  - Communication displays: Access using color coding
  - Gestures
  - Signs
  - Eye gaze
  - Vocalizations
- Interacting with teacher who knows her well and is a very competent communication partner.
- Teacher has an agenda, but Katy does also!
- Watch as the narrative unfolds.

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## Pragmatics: Sources from which we draw information to engage in successful interactions

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## Katie and Aileen

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## The Interactants

<p><b>KATIE</b></p> <ul style="list-style-type: none"> <li>■ Has messages she wants to convey. Sets topic. Make believe.</li> <li>• Uses signs, gestures, low-tech (encoded), high tech, facial expressions, body position.</li> <li>■ Clear preference for modes (and activities)</li> <li>■ Has many strategies.</li> <li>■ Deals well with breakdowns/misinterpretations</li> </ul>	<p><b>AILEEN</b></p> <ul style="list-style-type: none"> <li>■ Skilled teacher.</li> <li>■ Goal: Taping; what want for Xmas,</li> <li>■ Competent, vigilant, determined</li> <li>■ Get's attention and frames the context.</li> <li>■ Respectful, <i>e.g., confirms</i> (closed fist)</li> <li>■ Follows Katie's lead, <i>e.g., her story</i></li> <li>■ Knows Katie's tools and strategies                     <ul style="list-style-type: none"> <li>• Respects choices</li> <li>• Misses some signs</li> </ul> </li> </ul>
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## Thinking about 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, 2003ab; Bates & Dick, 2002; Slobin, 2003; Bowerman, 2000

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## 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.

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

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## 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.**

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## What do we mean by PRAGMATICS?

- 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 competencies, shared reference/ experience, as well as AAC technologies, tools and strategies
- Too much emphasis in AAC on tools and technologies!!

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## Defining Pragmatics in AAC

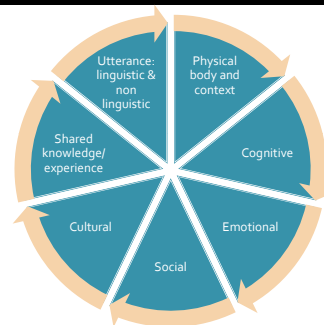
Reasoning processes used in a purposeful, goal-oriented activity that happens in and through the use of an attentionally-framed context and experience.

Wilkins, 2009

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



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## Thinking about Communication Development

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

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## Language, Communication, Pragmatics and Interactions in 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

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## Mary

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## Interaction Model

Uses relevant theoretical constructs re:  
Language, Authentic Communication  
Development of Competencies;  
Utterances, Joint attention, Deploying  
Pragmatics to create  
AUTHENTIC COMMUNICATION...  
IN THE WILD

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