AAC Case Studies: Challenges and Solutions
Krista R. Davidson, M.S., CCC-SLP
Abigail Denque, B.A.
Mallory Park, B.A.
Emily Phalen, B.A.

Learner outcomes

- Identify three myths associated with AAC.
- Describe two therapeutic strategies that benefit clients who use AAC.
- Identify a challenging situation with a client who uses AAC and summarize one way to approach a solution.

What is AAC?
“Augmentative and Alternative Communication includes all the ways we share our ideas and feelings without talking. We all use forms of AAC every day” – ASHA

AAC systems

- No-tech/Unaided
  - Gestures
  - Manual signs
  - Facial expressions
- Low-tech/Aided
  - Communication symbols
  - Communication boards
  - Communication binders
- High-tech/Aided
  - PRC
  - Saltillo
  - Tobii-DynaVox
  - Apps on iPads

Who uses AAC?

- Individuals who have severe expressive communication disorders
- May have impairments in speech, language, reading, and writing
- May be for permanent or temporary use
- May supplement or replace speech

Why use AAC?

- To increase communication
- To increase receptive language
- To increase speech production
- To improve behavior
- To increase participation
- To improve literacy skills
- To demonstrate knowledge
• To increase social closeness
  (Beukelman & Light, 2020)

Balanced Language Approach

What is Core Vocabulary?
• Core vocabulary is a relatively small set of words with the highest frequency of use both in conversation and in written text (Witkowski & Baker, 2012)
• 78-80% of the words we use daily come from a set of fewer than 350-400 words (Van Tatenhove, 2013)
• Core words don’t change across environments or between individuals (Banajee, DiCarlo, & Stricklin, 2003)

What is Fringe Vocabulary?
• The words we use for the part of communication not covered by our core vocabulary (ASHA).
• Fringe vocabulary are used in a continuum of low frequency to lower frequency situations (e.g., ‘mountain,’ ‘glacier,’ ‘crevasse’). Personal vocabulary can also be included under fringe vocabulary and would relate to personal words someone might need for their individual needs, interests, work, school, or community (Parker, 2013).

What is the role of Spelling and Pre-stored Messages?
Spelling
• Unlimited message potential
Pre-stored
• Emergencies
• Partner instructions
• Discourse functions
• Questions
• Predictable routines
(Zangari, April 2013)

Philosophical perspective
• Presuming potential (Donnellan, 1984)
• Communication not compliance (Parker, 2013)
• Teaching not testing (Musselwhite, n.d.)
• Buy-in (Thiessen et al., 2011)

Philosophical perspective
• AAC is language therapy
• SNUG (ASHA - Hill)
• Motor planning (Thistle et al., 2018)
• You'll find a way or an excuse
• Have fun!
AAC Implementation Strategies
• Robust vocabulary (Ahern, 2016; Zangari, 2014)
• Aided language input (O’Neill et al., 2018)
• Modeling
• Descriptive teaching (Van Tatenhove, 2008)

AAC Implementation Strategies
• Creating the context/Engineering the environment (Goossens’ et al., 1999)
• Environmental manipulation/sabotage (Avaz, 2021)
• Indirect language stimulation techniques (Jarzynski, 2014)
• Verbal referencing (Theodorsen, 2015)

AAC Myths
• There are prerequisites that must be met before using AAC (Candidacy Model)
• AAC is a last resort
• AAC is only for clients with no oral speech
• AAC will prevent oral speech (Romski & Sevcik, 2005)

Approaching a challenge
• Step back from the situation
• Analyze possible causes - The Why
• Analyze possible solutions
• Consider communicative competencies and communicative functions
• Consider the end goal or functional outcome
• Trial and error/progress not perfection
• Ease into change

Case Examples

KN
• Background
  o Preschool-aged
  o Childhood Apraxia of Speech
  o NovaChat with WordPower 60 Basic
• Challenges
  o In-Person
    ▪ Engagement during sessions
    ▪ Unintelligible speech
    ▪ Dysregulated
  o Teletherapy
    ▪ Engagement during sessions
- Unintelligible Speech
- Device carry-over

**Solutions**
- **In-Person**
  - Provide options and keep sessions fast paced
  - Incorporate motivating/preferred activities
  - Sabotage for communication breakdowns
  - Model vocabulary on device
- **Teletherapy**
  - Incorporate exciting animations and games
  - Parent coaching during sessions
  - Giving “homework”
  - Data logging to help promote buy-in

**GE**
- **Background**
  - School-age
  - Mixed receptive-expressive language disorder and ASD
  - NovaChat 8 with WordPower 80
- **Challenges**
  - Low motivation for social communication
  - Negative behaviors during therapy
  - Inconsistent performance
  - Resistance to repetition
- **Solutions**
  - Changes in stimuli
  - Behavioral management strategies
  - Providing clear expectations
  - Changing the structure

**AS**
- **Background**
  - Young adult man
  - ASD and moderate ID
  - TouchChat and echolalia
  - Speech fast and difficult to understand
- **Challenges**
  - Imperfect communication environment
  - Finding engaging, age-appropriate activities
  - Inconsistent data
• Solutions
  o Team Approach
  o Education
  o Plan for flexibility
  o Using what you know

Solution Themes
• Design with environment in mind
• Collaborate with the team
• Practice flexibility
• Increase motivation and autonomy

References
Augmentative and alternative communication decisions, (n.d.) Retrieved from https://www.asha.org/public/speech/disorders/communicationdecisions/
O'Neill, T., Light, J., & Pope, L. (2018). Effects of interventions that include aided


