Communicating with AAC: Increasing Success and Dispelling Myths

tinyurl.com/SCSHA-AAC-Myths

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Your Presenters

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- M.A. in speech-language pathology
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- Speech-language pathologist for almost 30 years
- 23 years providing behavioral, academic, AAC, and AT support to students with autism in inclusive settings
- Assistive technology specialist providing AT evaluations and consultations in multiple school districts
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Hannah Genzink, M.A., CCC-SLP

- M.A. in speech-language pathology from Calvin University in Grand Rapids, MI
- Speech-language pathologist for lower elementary-aged students
- Experience implementing AAC with children with Autism, Developmental Delays, and Down Syndrome

Meet the Audience

Session Outcomes

Participants will be able to:

1. Identify five core features of aided language input and describe how the features assist AAC users to acquire language and communication skills.
2. Explain strategies to address three challenging behaviors students may demonstrate when initially learning to use AAC devices.
3. Address four common myths of AAC implementation and offer solutions to overcome them.

Agenda

- What is AAC?
- Developing Language with AAC
- AAC myths and truths

What is AAC?

Augmentative and Alternative Communication (AAC)

- The American Speech-Language Hearing Association (ASHA) defines AAC as "all the ways that someone communicates besides talking."

What is AAC?

- AAC includes low-tech (writing) all the way to high-tech (using an app on an iPad).

https://www.assistiveware.com/learn-aac/what-is-aac

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Goal of AAC

Provide an alternative form of communication

sending
(expressive language)

receiving
(receptive language)

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Challenges with AAC in the School Setting

- Survey of over 4,000 teachers
- Findings:
  - Most students using AAC are not communicating proficiently.
  - Most students using AAC demonstrate off-task or challenging behaviors.
  - Poor understanding of how to teach students to use AAC is one of the major causes for the poor student outcomes.

Andzik et al. (2018)

Developing Language with AAC

Developing Language with AAC: Consider Language Development

What do babies normally do to develop language?

Language is Developmental

- Listening
- Babbling
- One word
- 10 words
- 50 words/ 2-word phrases

Language is Used for A Variety of Purposes

Stage 1 Communicative Intents
Attention-seeking
Requesting objects, action or information
Rejecting or protesting
Greeting
Naming

Stage 2 Communicative Intents
Comment
Express feelings
Assert independence

How can we mirror normal language development with AAC?

Aided Language Input (ALI)

AKA: Aided Language Modeling
AKA: Aided Language Stimulation

ALI is a method to teach individuals to use AAC by modeling:

- How to use a variety of symbols (words)
- Express a variety of communicative intents
- What to say when
- Grammar
- How to navigate the device
- Mistakes and repair strategies

Aided Language Input Defined

With ALI, users model how graphic symbols can be used to communicate by:

- modeling how to select graphic symbols to communicate

and

- pairing speech with AAC.

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Pair Symbols with Speech

- Verbalize what you are communicating when tapping the symbols
- Talk as you navigate AAC
- Describe what you are thinking

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Use ALI at the Child's Language Level

- Use about 1 more symbol than the child is using spontaneously
- Do not press every button for each word you are saying
- Verbally say a complete thought

Benefits of Aided Language Modeling

- Adresses "input-output asymmetry"
  - "[Children] should be provided language models in the modes they are expected to produce expressively" (p. 443)
- Leads to efficient language mapping
  - "Build connections between spoken words, graphic symbols, and their referents" (p. 444)

Biggs et al. (2018)

Strategies to support Aided Language Modeling

- Expectant delay
- Asking open-ended questions
- Response time delay with prompting
- Contingent reinforcement
- Being responsive to child's communicative attempts

Biggs et al. (2018)

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AAC Myths

Myth

Students will stop talking if they have an AAC device.

Truth

- Research indicates that users verbal expression increases or stays the same.
- Read more at AAC Myths Revealed

Research Findings

Review of current research suggests AAC may facilitate verbal communication by...

1. Increasing interactions
2. Developing language skills
3. Providing voice output model for speech

Cress & Marvin (2013)

Myth

My students aren't ready for AAC.

Truth

Students need modeling and time to learn how to talk with an alternative form of communication.

- If you are not modeling, how are you teaching an alternative to verbal communication?
- Have you given the student time to learn AAC? Be patient. Learning language takes time. All users develop language at different rates. Babies babble before they talk. Students need time to babble with AAC.
- Presume competence.

AAC services in Early Intervention

- Early access to AAC is ESSENTIAL for children with complex communication needs.
- AAC related skills are addressed via service delivery- lack of these skills should not be seen as a barrier to qualifying for AAC
- "Misconceptions or perceived limitations may lead practitioners to judge that a child is not ready for AAC" (p. 255)
- Common misperceptions:
  - Postponing AAC until there is a consistent delay in verbal communication overtime
  - Presuming that AAC is "giving up" on some forms of communication
  - Assuming young children can't develop skills demonstrated by older persons with complex communication needs

Cress & Marvin (2013)

Additional Considerations

- Have you trialed a variety of types of AAC?
- Consider what is important to the user. Are your instructional activities meaningful to the student?
- Establish joint attention. Communicating with AAC is easier when the child is already interested in what you are communicating about.
- Take turns. Communication involves turn taking. If necessary, use a wait and signal strategy so the user knows it's their turn to communicate.
- Teach students how and WHEN to communicate.

Myth

Students who stim instead of talk with their AAC device are not ready for AAC.

Truth

- Stimming on AAC often indicates that a student does not know HOW to use their device for functional communication in the given situation.
- Use ALI to teach students HOW to use their device functionally.

Instructional Strategies for Teaching AAC

- Provide structured, successful practice opportunities.
- Use program settings to delay or prevent repeated button presses, etc.
- Use printed screenshots of AAC pages as alternatives.

Myth

Users learn AAC by being told what to push or by drilling vocabulary.

Truth

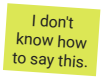
- AAC is communication. It is not work. Don't make using AAC work!
- We learn communication by communicating in real experiences- not through drill of vocabulary.

Myth

I shouldn't use the device unless I am proficient.

Truth

- Don’t worry about making mistakes.
  - Model what to do if you make a mistake or don't know how to say something with AAC.
  - Talk aloud how you fix your mistakes.
- Start with a navigation map, if necessary.
- Create a "cheat sheet" of how to navigate for target activities.



Word	Location
ACTIONS FOLDER	home> ACTIONS (4, 5)
all done	home> all done (9, 2)
CHAT FOLDER	home> chat (1, 4)
get	home> get (4, 2)
go	home> go (4, 3)
help	home> help (4, 4)
I	home> I (1, 1)

Myth

Students only use their AAC device during designated talking times (examples: speech therapy and snack).

Truth

- The ability to communicate effectively is one of the most important skills we can teach a user.
- We communicate ALL DAY LONG.We use language all day long, every day. Even our thoughts involve language. Try to model AAC a little bit all day long rather than a lot at one time.
- We need to teach communication in every environment.

Behavior is communication.

Students Should Have Access to AAC

- Students with complex communication needs were in close proximity to their AAC system 40% of the time (Chung et al., 2012).
- Tips for Ensuring Student Access to AAC Device (Chung et al., 2012)
  - Make sure the student's AAC device is charged and available.
  - Always have device with student; if student is mobile, use a strap so student can wear AAC device.
  - Ensure student can request device without the device, such as a communication card at their desk.
  - Use a replica of board in concerning locations (i.e., gym).
  - Use a checklist for staff to confirm device access before tasks or lessons.
  - Use a communication target matrix indicating when targets are addressed throughout the day for social and academic tasks.
  - Teach peers to facilitate AAC throughout the school day.
  - Track data on the student's use and peers' modeling throughout the school day.

Modeling in Naturalistic Environments

- Naturalistic environment:
  - Engaging for the child
  - Interactive
  - Allows for back and forth exchanges
  - Incorporates natural events from the child's day

Sennott et. al (2016)

Myth

Limit vocabulary on the AAC device to the vocabulary (words) you are teaching.

Truth

- Students learn language by being exposed to their language system. (You wouldn't learn the Greek language if you weren't exposed to the Greek language.)
- You don't learn language one word (or four words) at a time.
- Different words are needed in different settings and different communication situations.
- You don't know what vocabulary may catch the student's attention!

Myth

I will just change the layout when I need to add another word.

Truth

- AAC navigation is learned through muscle memory.
- Start with a larger grid size and hide vocabulary rather than making grid sizes larger when you add vocabulary.

Myth

Program the device with communication directed at the student (telling the student what to do).

Truth

- Select the vocabulary with the user in mind.
  - What does the user want to say?
  - What language do other students his age use?
  - What routines/daily events make up the child's day?
  - Who are the child's communication partners?
- Avoid programming the device with only nouns, directives aimed at the student, or what others want the student to say.
- Use core words.
- Consider all communicative functions.

Frick Semmler & Bean (2023)

Vocabulary Selection

- Methods for identifying vocabulary
  - Conduct observations of the student in their environment
  - Complete communication diaries
  - Review core vocabulary lists
  - Consult familiar adults
  - Words aligned with child's preferences/areas of interest
  - Consider words that support a range of communicative functions

Frick Semmler & Bean (2023)

What Do I Say?

Core Vocabulary	Fringe Vocabulary
Words used across many contexts	Words that are usually context specific
Frequently used; approximately 80% of the words we use each day	Used occasionally; approximately 20% of words we use each day
Primarily function words	More concrete, content words
Used consistently within environments and between individuals	Highly individual; reflects individuals own activities, interests, environments, and style

van Tilborg, A., & Deckers, S. R. (2016). Vocabulary selection in AAC: Application of core vocabulary in atypical populations. *Perspectives of the ASHA Special Interest Groups, 1*(12), 125-138.

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Myth

Tap a button for every word you say in the sentence.

Truth

- Learning to use AAC mirrors normal language development. Start by using 1 button to communicate a thought. When the user masters 1 button, move on to modeling 2 button sequences.
- Don't program whole sentences into buttons. Use Aided Language Input and increase the number of buttons to communicate phrases and sentences as the user's language grows.

Myth

Don't give a user what they want unless they use their device to request the item.

Truth

- Teach all of the communicative intents; avoid only teaching requests.
- Communicative intents include gaining attention (Look), requesting assistance (Help), and commenting (Like).

Communicative Intents

- Requesting object, action or event
- Sharing attention
- Turn taking
- Requesting repetition
- Labeling as a comment
- Labeling as a request
- Protesting
- Social greetings
- Directing actions of others
- Calling attention to self-achievement
- Using please and thank you

Myth

Hand-over-hand prompting is an effective strategy for teaching all students to use AAC.

Truth

- Students do not develop muscle memory with hand-over-hand prompting.
- Use the least amount of prompting.

Prompting

- Least to Most Prompting Hierarchy
- Avoiding stimulus dependency

Common types of prompts

- Pause
- Indirect nonverbal prompt
- Indirect verbal prompt
- Verbal prompts
- Pictorial/ visual prompts
- Gestural prompts
- Model prompts
- Partial physical prompts
- Full physical prompts

Myth

The pace of communication is similar with AAC to verbal communication.

Truth

- Slow down your communication exchanges. The pace of communicating is slower with AAC.
- Wait up to 20 seconds before redirecting the user. (You may need to count in your head.)
- **Use Wait Time (intermittent pauses to allow children time to process what we are saying)**
- Use an expectant pause to indicate appropriate times to communicate. Model thinking time.

Wait Time

Myth

The AAC device is the individual's voice. Only the student should access/ touch the AAC buttons.

Truth

- Model, model, model! We need to repeatedly model expected communication behaviors before expecting to see those behaviors from the user.
- Users will not know how to use the device without direct modeling and instruction.
- We don't learn a language without seeing/hearing others use the same language.
- Encourage others to model too, including caregivers, siblings, family members, and friends.

Use Peer Support

- Peer support defined- Students without disabilities are trained to provide academic and social support to students with disabilities
- Peer support with ALI resulted in students with complex communication needs increasing their use with AAC device (Biggs et al., 2018)

References

Andzik, N. R., Schaefer, J. M., Nichols, R. T., & Chung, Y. C. (2018). National survey describing and quantifying students with communication needs. *Developmental Neurorehabilitation*, *21*(1), 40-47. https://doi.org/10.1080/17518423.2017.1339133

Biggs, E. E., Carter, E. W., Mazur, E., Barnes, K., & Bumble, J. L. (2018a). Embedding peer implemented aided AAC modeling within a peer network intervention for students with complex communication needs. *Exceptional Children*, *85*, 66–85. https://doi.org/10.1177/0014402918792899

Biggs, E. E., Carter, E. W., & Gilson, C. B. (2018). Systematic review of interventions involving aided AAC modeling for children with complex communication needs. *American Journal on Intellectual and Developmental Disabilities*, *123*(5), 443–473. https://doi.org/10.1352/1944-7558-123.5.443

Binger, C., Berens, J., Kent-Walsh, J., & Taylor, S. (2008). The effects of aided AAC interventions on AAC use, speech, and symbolic gestures. *Seminars in Speech and Language*, *29*(02), 101–111. https://doi.org/10.1055/s-2008-1079124

Chung, Y., Carter, E., & Sisco, L. (2012). Social interaction of students with disabilities who use augmentative an alternative communication in inclusive classrooms. *American Journal of Intellectual and Developmental Disabilities*, 117, 349–367. https://doi.org/10.1352/1944-7558-117.5.349

References

Cress, C. J., & Marvin, C. A. (2003). Common questions about AAC services in early intervention. *Augmentative and Alternative Communication*, *19*(4), 254-272. https://digitalcommons.unl.edu/specedfacpub/88

Frick Semmler, B. J., & Bean, A. (2023). Vocabulary selection and implementation in vocabulary interventions for speech-generating devices: A scoping review. *Perspectives of the ASHA Special Interest Groups*, *8*(6), 1469–1484. https://doi.org/10.1044/2023_persp-23-00034

Hartman, A. (2015). Do's and don'ts of AAC - modeling. https://www.assistiveware.com/blog/dos-and-donts-aac-modeling

Sennott, S. C., Light, J. C., & McNaughton, D. (2016). AAC modeling intervention research review. *Research and Practice for Persons with Severe Disabilities*, *41*(2), 101-115. https://doi.org/10.1177/1540796916638822

van Tilborg, A., & Deckers, S. R. (2016). Vocabulary selection in AAC: Application of core vocabulary in atypical populations. *Perspectives of the ASHA Special Interest Groups*, *1*(12), 125-138. https://doi.org/10.1044/persp1.SIG12.125