Low Tech AAC Solutions for People with Severe Disabilities

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July 28, 2008
Overview

• What is AAC? What is Low Tech AAC?
• Who needs AAC? Who needs low tech AAC?
• How do I know a client is ready for AAC?
• What kinds of low tech AAC solutions are available?
• Where do I start?
• What can go wrong, and what can I do?
• How do I create opportunities for using AAC?
  – Partner Instruction/Changing Environments
What is AAC?

- AAC = Augmentative and Alternative Communication
  - Augment = to supplement
  - Alternative = to replace
  - AAC = Using ANYTHING other than speech to communicate
    - Facial expressions
    - Gestures
    - Manual signs
    - Objects (whole or partial)
    - Miniature objects
    - Remnants
    - Graphic symbols (line drawings, photos)
    - Electronic devices (high end and low end)
AAC as a Tool

• **AAC** is about **COMMUNICATION**
  – Using AAC is never an outcome in and of itself
    • Only helpful if it improves FUNCTIONAL COMMUNICATION
  – Devices cannot accomplish anything in and of themselves
    • Nothing magical about using AAC
  – Think of devices as a TOOL to get the client to exactly the same places as clients who rely on speech; for ex,
    • Increase/improve
      – Participation
      – Academic/employment outcomes
      – Social skills
      – Language skills
– MUST know what the purpose of using that tool is to be successful
– Goals/objectives are not, for the most part, much different for clients who use AAC
  • Examples of communication goals for your clients?
– Therefore, we will discuss AAC devices within the context of communication
  • NOT the features of each device in isolation
  • INSTEAD
    – How do those features fit your client within a context for improved functional outcomes?
What is Low Tech AAC?

- A type of aided AAC
  - Using something other than the body to communicate
- May be electronic or non-electronic
- Static displays
  - Symbols are placed on paper
  - Do not have electronic screens where you can change the screen at the press of a button/mouse (i.e., dynamic displays, like your computer)
• Typically used for clients who:
  – Cannot put more than 1 or 2 words together
    • But they may understand more than that (simple full sentences)
  – Supplementary devices for people with higher cognitive functioning
    • Emergency messages (ALS client in ABQ)
  – Use symbols to support comprehension/organization
    • Visual schedules
Low Tech Systems: Non-Electronic

- Individual Graphic Symbols
• Visual Scene Displays
• Eye-Com Board
• Simple grids
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<thead>
<tr>
<th>more</th>
<th>girl</th>
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<td>alldone</td>
<td>bunny</td>
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<td>no</td>
<td>pig</td>
<td>chase</td>
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Cathy, Robert, want
• More complex grids
  – (Available at www.cathybinger.com)
• Remnants
• Social Scripts
Low Tech Systems: Electronic

- Object Symbol Electronic Devices
• Single/Dual Message Electronic Devices
• Multi-Message Devices
• Talking Frames/Photo Albums
  – Stories
  – Scripts
  – Travels
  – Show & Tell
  – Etc.
Who Needs AAC?

• Anyone whose communication needs are not met with their speech
Who Needs Low Tech AAC?

• Demonstrate *intentional communication*; e.g.,
  – Lead person around to show/tell them something
  – Vocalize to request/comment
  – Point/reach/gesture toward people/objects
  – Reach to grab desired item
  – Request/comment with gaze
  – Ask for help in any way (not just general crying/whining)
  – Other examples? Clients on your caseloads?

• → May be READY to start using symbolic communication
• Demonstrate (emerging) symbolic communication
  – Indicate yes or no (head nod/shake, thumbs up/down, facial expression of pleasure/displeasure, etc.)
  – Use any manual signs
  – Use any words (even if not pronounced precisely)
  – Use any photographs or line drawings to communicate in any way
  – Use objects to communicate in a non-literal way
    • E.g., plastic apple to request real apple, empty cup to indicate thirst
  – (Engage in symbolic play
    • Cradling a baby, pretending to be a pirate, stirring an empty bowl with a spoon)
• Are ALREADY using symbolic communication
• Have a receptive vocabulary/language age of 1 year or higher
  – May not be using symbols EXPRESSIVELY, but are ready to start
  – Often see individuals with receptive vocabulary/language scores of 2, 3, or even 4 or 5 years who simply lack ACCESS to good ways to communicate
• If the client is using ~50 symbols or more, he/she is probably ready for, at a minimum, higher level low tech
  – May be ready for mid-to-high tech solutions
How do I know a client is ready for AAC?

- If someone is
  - Demonstrating intentional communication, or
  - Demonstrating emerging symbolism, or
  - Demonstrating consistent use of symbols

- He/she is ready to begin working with AAC solutions
• If someone is NOT communicating intentionally
  – Need to focus on establishing intentionality first
    • Using gaze/gestures/facial expressions/vocalizations to demonstrate communicative intent
    • See “Pre-symbolic Communication” section on AAC Resources handout
What kinds of low tech AAC solutions are available?

• For list of device that you can borrow from WATR (for free!), go to:
  – https://www.wy.at4all.com/welcome.aspx

• With AT4ALL, you can now borrow devices from other partner states (2nd website above)
  – Also free!
Where do I start?

• Key Question 1
  – In what ways is this client currently communicating?
  – We need to have some idea of where they are so we know where to go next
    • Vocalizing
    • Gestures
      – Pointing, reaching, pushing items away, etc.
    • Gaze
    • Challenging behaviors
      – Yelling, kicking, screaming, biting, throwing, etc.
    • Other idiosyncratic behaviors
      – Dropping head to indicate boredom
• Key Question 2
  – What is the client trying to communicate?
    • It’s easiest to start by shaping current communicative behaviors (rather than teaching brand new ones)
    • For ex:
      – Rejecting undesired objects/events/transitions
      – Requesting desired objects/people/activities
      – Commenting on events
        » E.g., something surprising happens and the student looks at you to see if you noticed it too
• May want to make a list of how these things match up
  – See next slide
<table>
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<tr>
<th>Commu. Act</th>
<th>Modes of Communication</th>
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<td>Request food item for snack</td>
<td>Vocalization/ speech</td>
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<td>Request drink for snack</td>
<td>X</td>
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<td>Rejects food</td>
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<td>Requests participation with peers for floor play time</td>
<td>X (whines)</td>
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<td>Comments on sound of school bell indicating it’s time to change classes</td>
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<td>Etc.</td>
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</table>
• Key Question 3
  – Are these methods of communication
    • Appropriate?
    • Efficient?
    • Effective?
  – Any communicative attempts that do not meet these 3 criteria are an excellent place to start
    • For ex, hitting a button that says, “I don’t want that” instead of throwing things
  – Let’s discuss examples of your clients
    • Focus on cases of folks who are leaving at lunchtime
What Can Go Wrong, and What Can I Do? (aka Troubleshooting)

• The client
  – Isn’t interested in communicating
  – Isn’t making progress
  – Is inconsistent
    • With each communication partner
    • Within each situation
    • From one day to the next
  – Is still demonstrating challenging behaviors
  – Other challenges you’ve faced?
Lack of Interest in Communication

• Possible reasons
  – Lack of access to via communication modes
  – Not provided with communication opportunities
  – Boredom
  – Active dislike for activity
    • Opportunity to work on teaching socially appropriate ways to reject!
  – Not ‘taught’ a variety of interests
  – (Meds may interfere)

• Your clients & some possible solutions
Lack of Progress

• May be aiming too high
  – How can I make this task easier?
• May be aiming too low
  – Bored to death
  – Vocabulary is inappropriate/uninteresting
• May not be appropriate for this client
  – For ex, motorically unable to access device
• Should NOT have the SAME goals/objectives year after year
  – Must write attainable goals, however minor the progress may seem
  – Much better to document SOME progress on a modest goal than no progress on a more ambitious goal
• Your clients & some possible solutions
Inconsistent Performance

• Look for PATTERNS of when client does and does not perform behavior
  – Are there differences in
    • Location of device?
    • Other issues with device
      – Programming/symbol changes
    • Nature of the task?
      – Varies depending on communication context
        – E.g., rejecting object vs. person

• Any of these possible for your clients?

• Also: Change can vary with partner, setting, day, time of day
  • See next slide
Variable Performance across Partners, Settings, & Days

- **Partners**
  - Clients may simply like some partners better than others

- **Settings/Tasks**
  - May vary because of like/dislike for certain settings/tasks
  - Demands may be different across settings/tasks

- **Days**
  - We all have good days and bad days!
• If client has variable performance with the same partner in the same setting on the same day
  – May be bored
    • E.g., doesn’t WANT to request that you play music again
  – May be tired
  – May need to offer more choices for communication
  – May need to offer fewer choices
• Your clients and some possible solutions
Ongoing Challenging Behaviors

• ABC approach
  – Antecedent
  – Behavior
  – Consequence
• May have mis-identified the antecedent
• May not have a valued consequence
• Must provide a way to express the intent of the challenging behavior that is equally
  – EFFECTIVE &
  – EFFICIENT
• Your clients and some possible solutions
Providing Opportunities for Communication

- Many classrooms are very teacher-directed
- Many adult setting are very directive
  - Easier to deal with passive people
- Many activities provide few opportunities for communication
- Example videos on next slides
Passive vs Active Communicator (same child)

• What are the differences between the two videos?
  – Changes can all be attributed to
    • new techniques that the EA is using
    • Note: EVERYTHING else is the same for the 2 videos
  – Putting appropriate vocabulary on device is a prerequisite → necessary but not sufficient
    • Child had appropriate AAC device and vocabulary on first video
  – Note how dramatically outcomes can change within the same activity
Active Communicator w/ Limited Expressive Language

• Might think that we should start with pretty basic, low-level AAC

• BUT, he has good receptive language (average to above average)
  – Understands what is going on around him
  – Understands lots of different linguistic structures
  – Don’t want to aim too low
Active Communicator with Additional Expressive Language

• What are the differences between the two videos?
  – Changes can be attributed to use of “aided AAC modeling”
  – We must model and model and model and model and model with the device……..otherwise, why would we expect them to use it?
Active Communicator with More Sophisticated Expressive Language

• Can go far, fast with some clients
  – Access to appropriate communication modes
  – Provide appropriate opportunities for communication
  – Model model model...
Child with Autism
Without and With Visual Schedules & AAC Device

• What are the differences between the two videos?
• Your clients who could benefit from visual schedules?
  – Need help w/ how to create them?
• Can post/keep them ALL OVER classroom/home/etc.
  – Between task schedules
  – Within task schedules
    • What are the steps involved in activities within your settings?
    • Create a few examples
Devices Devices Devices!

• Look at what we have
• Find some that you think might be a good fit for particular clients
  – Use ‘cheat sheets’ to help you get started
• Consider single-symbol systems too
  – PECS
  – Engineering classrooms
• Discuss exactly how you will use these devices with your clients
  – Specific activities
  – Vocabulary you can program
  – How to ensure communication opportunities
• Discuss/problem-solve as a group
Selecting Vocabulary/Messages

• How do you determine what to put on a device? Two great methods:
  – Environmental inventory
    • Observe and document what peers are saying in that activity
  – Modeling
    • When you model using the device, you will quickly figure out what vocabulary is missing

• Need to determine
  – When to use whole messages
  – When to use single concepts

• Preschool Examples on devices
  – Circle time
  – Science centers (ant farm board next slide)
  – Free play w/ vehicles
  – Barbie board (2nd slide)
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