AAC Systems and Strategies for Individuals Diagnosed With DS/ASD
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Webinar Objectives

Gain an understanding of:

- AAC terms
- When AAC is needed
- Evaluation Process
- AAC systems
- AAC teaching strategies
- AAC programs at the DSCBA
- A parent’s perspective
Expression Connection Core Beliefs

“Just because I don’t talk does not mean I don’t have anything to say.”

“Everyone deserves a voice”

“Voices can be different things for different people.”

“It’s our job to listen and learn.”
AAC Overview
Terms

**Assistive Technology (AT):** any tool and/or system implemented to improve and/or maintain the capabilities of an individual with a disability

- Writing
- Reading
- Computer Access
- Communication
- Play
- More...

**Alternative/Augmentative Communication (AAC):** a subset of AT; AAC involves the study of, and when necessary compensations put in place for individuals with severe speech and language disorders (ASHA, 2005)

**Speech Generating Device (SGD):** systems that enable individuals with severe speech impairments to verbally communicate their wants, needs, emotions, thoughts, etc.
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<thead>
<tr>
<th><strong>No Tech</strong></th>
<th><strong>Low Tech</strong></th>
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<tr>
<td>Systems an individual uses with no additional tools or technology (motor, vocalization, sign, proxemics, gestures, etc)</td>
<td><img src="image" alt="Low Tech example" /></td>
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<th><strong>Light Tech</strong></th>
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Why do you use AAC?

- Moderate-Severe expressive speech/language disorder(s)
  - Limited speech output
  - Poor speech clarity
  - Language Disorder
- Expressive/Receptive Gap: understanding more than you can say
- Frustration
- Limited speech improvement with therapy
- Frequent communication breakdowns
DS/ASD
Profile & Communication

It’s complicated
Many moving parts

● Multiple areas of impact
  ○ Cognitive
  ○ Linguistic
  ○ Sensory
  ○ Motor
  ○ Behavior

● Competing strengths and challenges
● Learning styles
A Parent Perspective

Nick age 27, dual diagnosis of DS-ASD and Verbal Apraxia
Nick’s AAC Journey

- The power of pictures
- AAC evaluation age 5, Livermore, CA
- Pairing pictures with PECS icons
- Proper training in usage of Picture Exchange System (PECS)
- Re-evaluation AAC age 13, Chicago, IL
- Re-visiting AAC with the IEP team
AAC Evaluation Overview

Tools

- Portable
- Usability or wrist strap
- Durable
- Waterproof
- Long enough for all users (8-12 buttons/page)
- Ability to add vocabulary
- Keyboard-sized keys
- Combination of single words and phrases larger
- Easy to program
- Ability to program on the fly
- No replaceable batteries
- 7-8" screen size
- "Surety" cost (money-proof)
- Quick and consistent response from AAC
- Category-based
- 2-3 hits to communicate message
- Online tech support
- Cloud or USB backup

Warranty
- Cost
When to explore an AAC eval

- Documented evidence of:
  - Moderate-Severe expressive speech/language disorder(s)
  - Expressive/Receptive Gap: understanding more than you can say
  - Limited speech improvement with therapy
  - Frustration

Who provides an AAC eval

- Medicare National Coverage Guideline (2001)
  - Licensed Speech Language Pathologist (SLP)
- Internal Funding with School Districts
  - AT Specialist
  - Licensed SLP
Assessment Components

Background Information

Comprehensive Assessment
  Motor: ambulation, access
  Sensory: vision, hearing, tactile
  Cognition
  Behavioral

Communication
  Speech
  Receptive & Expressive Language
  Unaided & Aided Communication

Communication Needs

Needed Features

System/Device Trials

Recommendation(s)
The Collaborative Team

- **Essential** for AAC success
- **Team meetings and open communication**
- **Includes:**
  - User
  - Family Members
  - Teacher
  - AAC Specialist
  - SLP
  - OT
  - And more…

- **Role Delineation and Overlap**
  (transdisciplinary)
  - Roles are assumed by various team members
  - These roles are shared with team members (i.e. OT shares access with team)
  - Team members implement roles to ensure success (e.g. SLP implements access with SGD)
System/Device Trials = Diagnostic Intervention

● What is diagnostic intervention?
  ○ trying various systems as you are teaching communication
  ○ when one system is not working, trying another
  ○ data collection
  ○ may be a recommendation of the AAC evaluation
  ○ may be a long(er) process

● Why diagnostic intervention?
  ○ importance of trialing and providing access to a multitude of AAC systems to facilitate successful communication (Foreman & Crews)
  ○ Limit communicative failures to encourage the use of communication (Foreman & Crews)
  ○ Intervention is an art and science (Drager & Light)
A Parent Perspective

**SETT** is an acronym for **Student**, **Environment**, **Task** and **Tools**. The team gathers to ask key questions and get information that will help to pinpoint what AAC technologies would best suit the student.

- **S** = **Student** (abilities, learning styles, concerns)
- **E** = **Environment** (What places will the talker be used and how)
- **T** = **Tasks** (What type of work and learning will the student be doing?)
- **T** = **Tools** (What tools are needed on the device to make it a success for Nick?)
AAC in Action
Low Tech
Light Tech
High Tech
A Parent Perspective

Nick’s AAC Systems

• Proloquo to Go with low tech PECS
• Go Talk with low tech PECS
Strategies
Tie it all together

Use strategies we know work for the ASD/DS Profile

- TEACCH framework
- Structure
- Visual aides
  - Limit verbal input
Our favorite strategies

Create a supportive and positive communication environment

Multi-Modal/Total Communication (:54)
- Respond to and encourage all forms of communication

Partner Augmented Input (Goosens’, Crain, & Elder, 1992)
- Point to pictures and use communication tools when talking to the AAC user to model and encourage AAC use
- Getting other children involved!!

Scripting
Tips for successful interactions

Interactions must be:

• Open ended questions ensure success

• Motivating

• Functional

• Implemented across environments and partners

• Accessible- easy to get to
A Parent Perspective: Tips & Strategies

- Diagnostic Intervention, trial and error, observation to hone in on the most effective AAC for the child
- Start early, be consistent and readily available using AAC across all environments
- Communication should be an interaction with no right or wrong answer or feeling of failure
- Give choices/options= A sense of control over their environment
- Model, Model, Model
- Find their motivation, most desired items and activities-Control access
- Reinforce immediately with lots of praise
- Find opportunities to use AAC in your day (What you like/ don’t like, More/ all done, What do you see when reading books, watching movies, at the park, zoo, What color are you wearing, etc.)
-Pause 10 seconds before prompting. Resist the urge to do it for them.
-What action item will you take away from today and try at home?
A Parent Perspective: Tips & Strategies

- Visuals are key
Our offerings

Down Syndrome Connection of the Bay Area
Empower - Inspire - Support
Welcome to our LTL (low tech library)
Expression Connection

Consultation

- Home
- School
- Community
- Workplace

AAC Lending Library

- High-tech
- Low-tech
- Light-tech

Linguistic supports

Referrals
For more information about navigating DS-ASD, consultations, book and blog at www.teresaunnerstall.com Follow us on FB and IG @ Down Syndrome with a Slice of Autism
For More Information visit The Down Syndrome Connection of the Bay Area at:

www.dscba.org
References


Cincinnati Children’s Hospital: https://www.youtube.com/watch?v=r3m8_YmTDDM


Foreman P, Crews G. Using augmentative communication with infants and young children with Down syndrome. Down Syndrome Research and Practice. 1998;5(1);16-25.Completed by a SLP with AAC training


