Augmentative Alternative Communication (AAC): The Power of Communication

Expression Connection

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Down Syndrome Connection of the Bay Area
Empower - Inspire - Support

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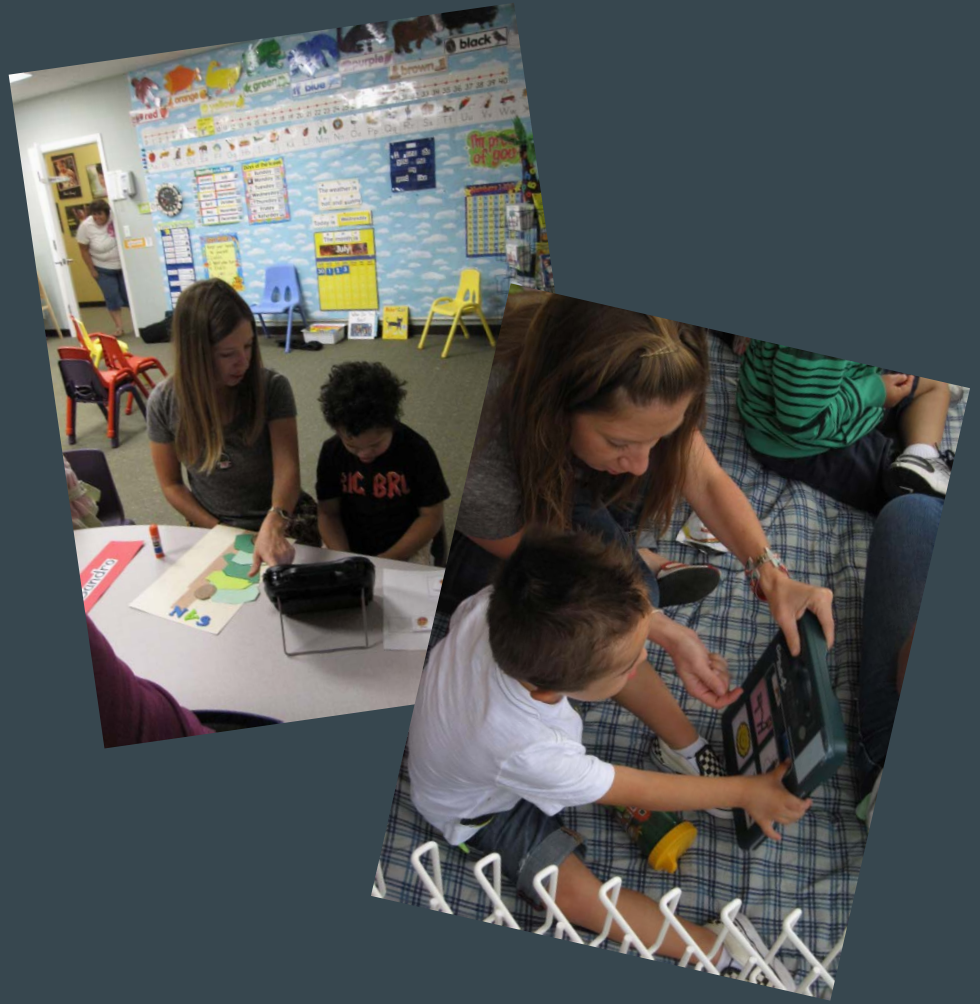


Webinar Logistics

Time: 10:00-11:00 AM PST

Participation: please chat in with any questions or comments

The recorded webinar will be sent to you via email and posted to our website.

Webinar Objectives

Gain an understanding of::

- Expression Connection
- AAC Basics (brief overviews)
  - candidates
  - assessment
  - intervention
- Research regarding AAC and DS
- AAC myths and facts
- Practical applications of AAC

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.”

Expression Connection Offers

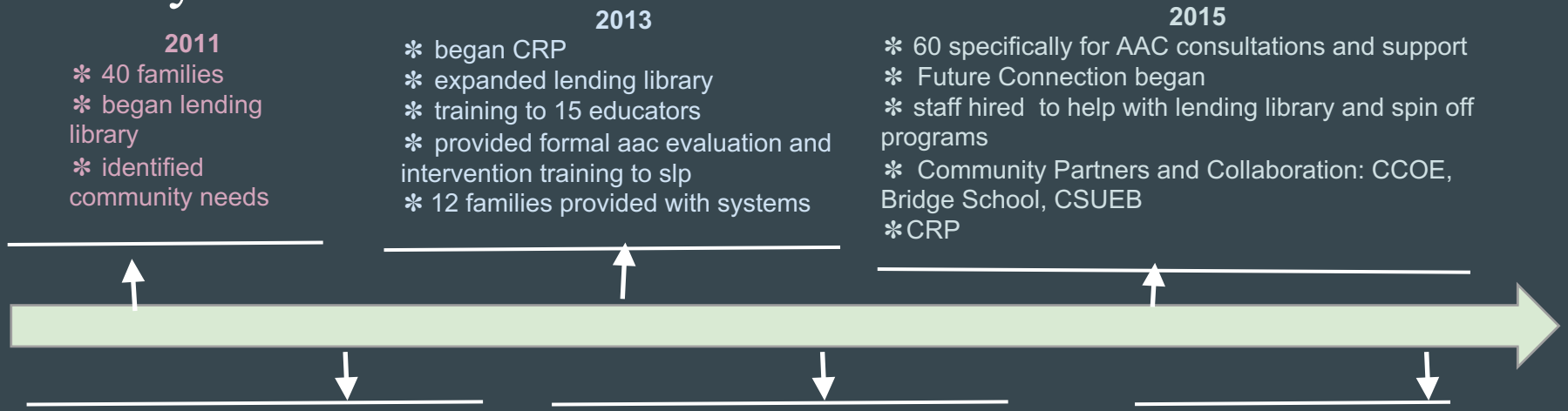
Consultation

- Home
- School
- Community
- Workplace

AAC Lending Library

- High-tech
- Mid-tech
- Light-tech

Expression Connection: AAC Consultation and Lending Library



Declan

Age: 3

System(s): GoTalk One

Environment/Task: Free play

Teaching Tools:
role play

visual supports

Communicative Environment:
providing opportunities

motivating activities

engineering the environment

AAC Overview

A Quick AAC Overview

Cinncinatti Children's Hospital: https://www.youtube.com/watch?v=r3m8_YmTDDM

Who is a candidate for AAC?

Moderate-Severe expressive speech/language disorder(s)

- Articulation/Phonological Disorder
- Apraxia of Speech
- Severe Language Disorder

Expressive/Receptive Gap: understanding more than you can say

Frustration

Limited speech improvement with therapy

Frequent communication breakdowns

Low speech intelligibility

What is speech intelligibility?

Understandability of speech

- In context
- Out of context
- Familiar Partners
- Unfamiliar Partners

Factors that may impact intelligibility

- Speech disorder
- Levels of anxiety
- Hearing

Intelligibility Measures

- Word Identification
- Listener Rating

Age	Intelligibility Level
19-24 Months	25% to 50%
2-3 years	50% to 75%
4-5 years	75% to 90%
5+ years	90% to 100% (a few articulation errors may persist)

Pena-Brooks, Adriana, & Hedge, M.N. (2007). Assessment and treatment of articulation and phonological disorders in children (2nd Edition). Austin, TX: PRO-ED.

Sandro

Age: 5

System(s): Springboard Lite

Environment/Task: Book reading, literacy skills

Partner Strategies:

expectant delay

visual and verbal prompting

modeling

Teaching Tools:

1:1 support

visual supports

behavioral reinforcement

What the research says...AAC and DS

AAC and Down Syndrome: Research

Effects of Early Intervention for Children with Down Syndrome by Janice Light & Kathryn Drager

- Use of AAC did not inhibit speech production
- Intervention is an art and science
- Increased social interactions

http://aac-rerc.psu.edu/_userfiles/file/Light%20ASHA%202010%20%20AAC%20and%20children%20with%20Down%20Syndrome.pdf

AAC and Down Syndrome: Research cont.

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

- Discusses the importance of trialing and providing access to a multitude of AAC systems to facilitate successful communication in infants and young children with Down syndrome.

- Limit communicative failures to encourage the use of communication

http://www.down-syndrome.org/reports/71/

Casey

Age: 7

System(s): Step-by-Step Communicator; low-tech icons; Go-Talk 9

Environment/Task: Morning meeting at summer camp (CRP)

Partner Strategies:
- positive reinforcement & environment
- visual prompts and supports
- access to device

Teaching Tools:
- errorless participation and learning

Communicative Environment:
- providing opportunities
- establishing routines

AAC Myths, Facts & Solutions

Myth #1

Myth	Facts	Application
Speech should always be used even if there is very little. (Silverman, 1980)	Individuals with frequent communication breakdowns are at risk for additional challenges (social, academic, behavioral, etc) Successful AAC intervention can warrant improvements in many areas (social, academic, self help, social, etc) (*Romski & Sevcik, 1989; Silverman, 1980; VanTatehhove, 1987)*	A multi-modal approach for communication should be utilized and facilitated.

Myth #2

Myth	Facts	Application
AAC should be used only as a last option.	No one can tell the future, include speech development. Traditional speech therapy does not guarantee a successful communication system. *(Berry, 1987; Silverman, 1980)*	Traditional speech therapy and AAC can occur together. Collaboration is best practice and ensures the team is working together for the individual. *(Beukelman & Mirenda, 1992)*

Myth #3

Myth	Facts	Application
AAC will decrease motivation to speak. *(Buekelman & Mirenda, 1992; Silverman, 1980; VanTatehhove, 1987)*	AAC correlates with the improvement of natural speech *(Berry, 1997; Daniels, 1994; Romski & Sevcik, 1993; Konstantareas, 1984; Silverman, 1980)* Access to sign and speech during infancy appear to begin to communicate (initially with signs and then speech) at a younger age than would otherwise have been expected *(Holmes & Holmes, 1980)*	*The co-occurrence of AAC and speech is advantageous for language acquisition and speech production.* *(Buekelman & Mirenda, 1992)*

Myth #4

Myth	Facts	Application
A young child is not ready for AAC. *(Buekelman & Mirenda, 1992; Silverman, 1980; VanTatehhove, 1987)*	There are no known prerequisite skills for use of AAC. *(Kangas & Lloyd, 1998)* Prelinguistic communication of infants is essential for the development of linguisic communication. *(Reichle, York, & Sigafoos, 1991)*	AAC intervention must be individualized for each individual based on their strengths, needs, and abilities Intervention for young children target basic communication through play-based therapy. *(Buekelman & Mirenda, 1992)*

Myth #5

Myth	Facts	Application
A child with severe cognitive deficits cannot learn to use an AAC system. *(Kangas & Lloyd, 1998)*	Children with severe cognitive deficits are capable of learning and benefiting from AAC. *(Buekelman & Mirenda, 1992; Romski & Sevcik, 1989; Silverman, 1980; Kangas & Lloyd, 1988)* It is impossible to accurately predict a child's ability to learn AAC. *(Buekelman & Mirenda, 1992; Bodine & Bukelman, 1991)*	Individual AAC intervention must meet the individual at their ability level. Intervention may focus on teaching intentional communication. *(Buekelman & Mirenda, 1992; Reichle, 1997)* All individuals have the right to be given the opportunity to communicate. *(Buekelman & Mirenda, 1992; Reichle, Yoyk, & Sigafoos, 1980)*

Myth #6

Myth	Facts	Application
AAC makes a child look abnormal. *(Kangas & Lloyd, 1998)*	*Increased acceptance of AAC occurred in inclusive environments.* *(Beck & Dennis, 1996, Blockberger, Armstrong, O'Conner, & Freeman, 1993)* *An individual is at higher risk of non-acceptance when unable to express themselves. AAC helps reducing the discrepancy between perceived and actual social and cognitive abilities.* *(Rice, 1993)*	Inclusion and mainstreaming advocacy for users of AAC. Inform staff, peers, and teachers regarding the communication impairment and cognitive/linguistic abilities. Keep vocabulary up to date to user of AAC can interact appropriately with peers.

Andre

Age: 6

System(s): Accent 700

Environment/Task: Social interaction at school

Partner Strategies:
- open-ended questions

Teaching Tools:
- visual and verbal prompts
- hiding buttons

Communicative Environment:
- providing opportunities
- positive environment
- motivating topics

A Brief Look: Assessment

Assessment begins with The Collaborative Team

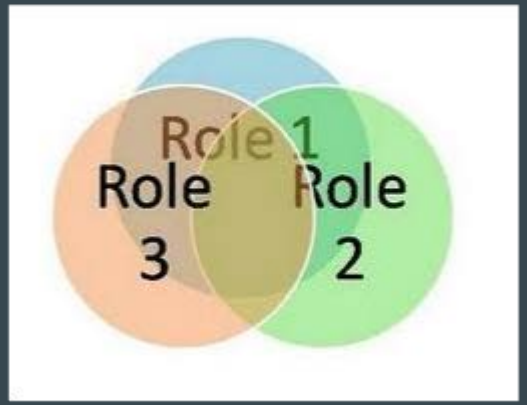
Essential for AAC success

Includes team meetings and open communication

Members

- User
- Family Members
- Teacher
- AAC Specialist
- SLP
- OT
- And more…

Role Delineation and Overlap



Adapted from Beukelman, D. R., & Mirenda, P. (2005) & Soto, G., Muller, E., Hunt, P., & Goetz, L. (2001).

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)

Ainsley

Age: 7

System(s): iPad with TapSpeak

Environment/Task: Class presentation

Partner Strategies:
- preparation
- peer involvement
- visual supports

Teaching Tools:
- pre-teaching
- visual supports

Communicative Environment:
- providing opportunities
- motivating activities

A Brief Look: Intervention

Intervention Essentials

Based on:

- User Ability
  - *emergent, context-dependent, context-independent, literate*
- AAC Competencies/Goals
  - *social, linguistic, operational, strategic*
- Communicative Needs
  - *environment, partners, etc.*

Intervention must be:

- Motivating
- Functional
- Implemented across environments and partners

Dowden, Ph.D. (2004). (n.d.) Retrieved from http://depts.washington.edu/augcomm/index.htm

Intervention: Tools of the trade

Create a supportive and positive communication environment

Multi-Modal/Total Communication

Respond to and encourage all forms of communication

Partner Augmented Input (Goosens', Crain, & Elder, 1992)

Point to pictures and use SGDs (speech generating device)when talking to the AAC user to model and encourage AAC use

Participation Plans (Blackstone and others)

Documents created to engineer the user's day around various aided and unaided communication systems.

Intervention: Creating a Communicative Environment

Engineer the environment

Establish routines

Use motivating materials & activities

Provide opportunities

RAST Resources, (2015)

Intervention: Partner Strategies

A communication partner implements strategies to support communicative success and active participation of AAC users

Sabotage

Expectant delay (wait and pause)

Use prompts (least-to-most, most-to-least)

Direct modeling

Forced choice

RAST Resources, (2015)

More AAC in ACTION!

Joseph

Age: 13

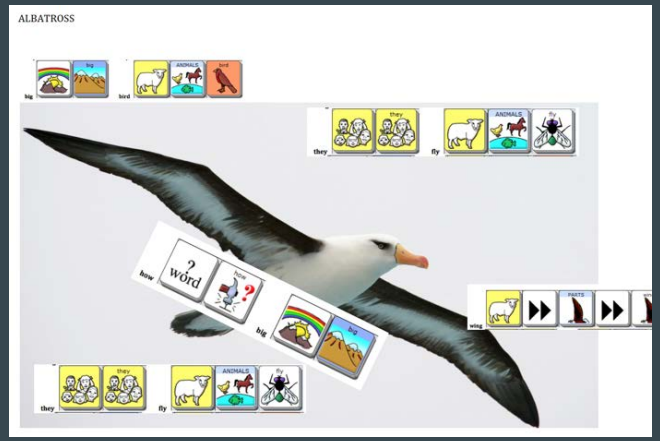
System(s): Accent 800

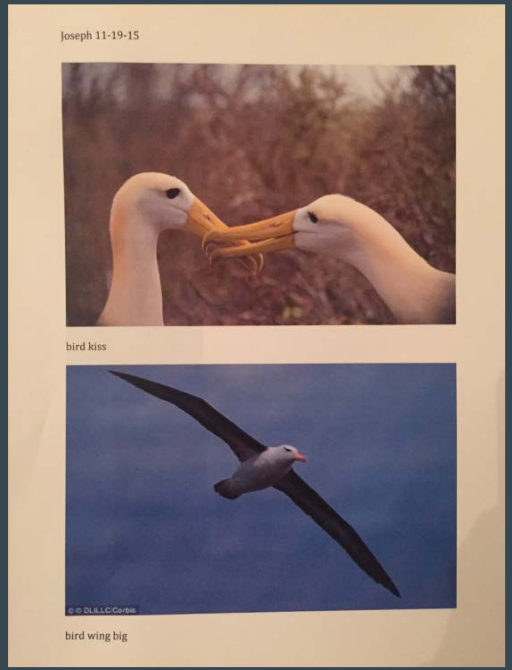
Environment/Task: Science class and writing assignment

Partner Strategies:
- preparation
- equipment set up

Teaching Tools:
- pre-teaching
- visual supports: smart charts

Communicative Environment:
- providing opportunities
- motivating activities (writing)





Tatiana

Age: 19

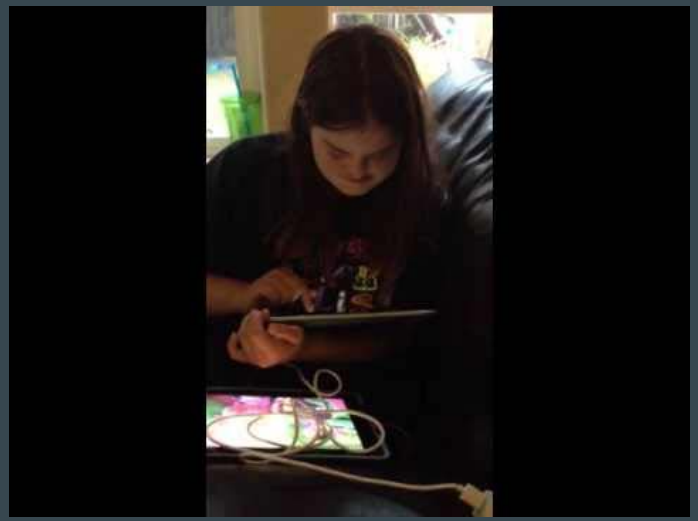
System(s): iPad with TouchChat (customized MultiChat 15)

Environment: home and community

Partner Strategies: open ended questions, personalized vocabulary, expectant delay

Teaching Tools: exposure, access, and use in all environments

Strategies: motivating activities, providing opportunities



Amanda Pharis, M.A., Ed.S

Berkeley Unified School District

“...using AAC devices makes an amazing difference in the school day for our students. We have multiple students who use AAC devices.”

“(Student) uses his AAC device to answer questions which allow him access to participate in games with his peers, and allow greater access to the school curriculum.”

“Even more amazing is how other General Education students in their classes are able to use the device to communicate with our students, creating an incredibly understanding, patient and inclusive community.”

Recommended Websites

ACTS: http://acts-at.com/resources.php

Expression Connection:
http://www.dsconnection.org/augmentative-alternative-communication.php

PrAACticle:
http://praacticalaac.org/

Resources for AAC Strategies & Tools (RAST)
http://rastresources.com/

Technology Resource Center of Marin:
http://trcmarin.org/

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