How to Create a Division-Wide Culture of Language Learning With AAC

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Learning Objectives

First Learning Objective
Create an action plan for how to implement training within a school system for communication partners of AAC users

Second Learning Objective
Identify an action plan for how to implement coaching within a school system for communication partners of AAC users

Third Learning Objective
Describe two strategies for measuring learner outcomes

Speaker Disclosures

Tammy
- Full time employee for Loudoun County Public Schools
- Has not received compensation for this presentation
- No additional financial disclosures

Speaker Disclosures

Chris co-hosts the Talking With Tech podcast which features discussions about AAC. He receives revenue from sponsors of the podcast.

Chris receives royalties for the sale of the book The New Assistive Tech: Make Learning Awesome For All and other authored works.

You can see all of Chris’s disclosures for SHAV (and any other endeavor) at http://bit.ly/tbdisclosures.

Free Weekly Podcast

- Interviews
- Discussions
- Q&A
- Research
- Practical strategies

Making Meaningful Contributions to the World
Our purpose is for all students to make meaningful contributions to the world.

- The way we do that is through authentic, challenging problems for deeper learning.
- We have many instructional and assessment approaches to get us to authentic and deeper learning including PL, PBL, PBA.
- We provide equitable learning opportunities that lead to deeper learning for all students using a multi-tiered system of supports.

Padlet Activity
What barriers or challenges exist for a person with complex communication needs in learning language using AAC?


AAC Barriers/Challenges

<table>
<thead>
<tr>
<th>Training</th>
<th>Coaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools</td>
<td>Mindset</td>
</tr>
</tbody>
</table>

Don’t Be The Lid
Four Components to Success

The Ultimate Language Goal
Say…
Whatever
Whenever
However
To whomever!

Extend Your Learning: [Link]

What’s the difference between communication and language?
Share with a partner and then share out to the group!

Language vs. Communication

What is communication?
- Functional communication skills are forms of behavior that express needs, wants, feelings, and preferences that others can understand. When individuals learn functional communication skills, they are able to express themselves without resorting to challenging behavior or experiencing communication breakdown.
- Varies in its expression and may include personalized movements, gestures, verbalizations, signs, pictures, words, and output from augmentative and alternative (AAC) systems.

Language vs. Communication

What Is Language?
According to the American Speech-Language-Hearing Association (ASHA) which certifies SLPs, language refers to the words we use and how we use them to share ideas and get what we want. Language includes:
- What words mean
- How to make new words
- How to put words together
- What we should say at different times

Who teaches language?

Who teaches communication?
A) SLP
B) Parent
C) Peers
D) Teacher
E) All of the above
TRADITIONAL/"PULL OUT" MODEL OF THERAPY

• In the past, related services and classroom teachers have functioned as “silos”.
• Our services and interventions were conducted separately from one another.

What do you notice about this picture?

ONE TEAM APPROACH = INTEGRATED THERAPY!!

BENEFITS OF INTEGRATED THERAPY

Use of Sensory Strategies
• Sensory interventions can be used to support goals such as transitions and attention to task.
• Sensory activities are directed by the OT, but need to be embedded into the classroom routine in order to be carried out by the teacher and teacher assistants.

Use of Communication Systems
• Communication systems may be low tech (paper based), mid tech (static VOD), or high tech (dynamic screen VOD).
• The communication system is not only used when the student is receiving his or her speech-language therapy.
• Regardless of the type of system, it should be used with the student throughout the day – IT IS HIS OR HER VOICE!!

How Do We Build A District-Wide Culture of Language Development Using Augmentative/Alternative Communication?
What We Knew

1. Tools were necessary to overcome perceived barriers (eg, “I don’t have the tools, therefore I can’t do it!”).
2. Providing tools would not be enough for most (“Quick! Here comes the SLP. Get the device out!”).
3. Training alone would not be enough (Needed job-embedded coaching).
4. We needed to start with just one skill!

The Plan

1. Decide on which skill to focus.
2. Decide who needed the training and coaching and in what order would that be provided.
3. Develop a team to train and coach communication partners to learn necessary skills following an evidence-based approach.
4. Provide the team with training and practice opportunities.

The Plan, continued

5. Decide upon and acquire tools to provide for aided language input.
6. Create a schedule for trainings and develop them!
7. Create a protocol for coaching sessions and corresponding documentation.
8. Develop a process for measuring success.
9. Create a website where educators can experiences multimodal resources.
10. Communicate all of this district-wide.

The Focus

Aided Language Stimulation
AKA
Partner Augmented Input
AKA
Modeling
AKA
Communication Partners Using The AAC

Benefits of Partner Augmented Input

- Slows down partner speech rate
- Shortens partner sentence length
- Forces emphasis of key words and ideas
- Emphasizes gaps in core vocabulary
- Shifts talking by teacher from question asking to commenting (and other pragmatic functions)
- Demonstrates more uses of language than requesting

Adapted from TatenHove, 2006
Strategy Description

Aided Language Stimulation (ALS) / Partner Augmented Input (PAI) =

Systematically using the same AAC system the student is using to communicate with the student.

Input vs. Output

“Often familiar and unfamiliar communication partners use an oral language system with an individual learning an AAC-based language. In a sense, this dichotomy requires the AAC user to ‘code switch’ between a verbally symbolic language system and a visually symbolic language system.” (Dodd & Gorey, 2014)

Users of AAC hear spoken words but are expected to respond in visual symbols.

What is Partner-Augmented Input?

Partner-augmented input (PAI), also referred to as natural aided language, aided language modeling, or aided language stimulation, is a strategy for teaching children and adults to use AAC. “Augmented input can be broadly defined as an umbrella term for systematic modeling input from two or more modalities, one of which must include the learner’s AAC system” (Allen, Schlosser, Brock, & Shane, 2017, p.157).

Is PAI Evidence-Based?

“The results of the review indicated that AAC modeling intervention packages led to meaningful linguistic gains across four areas including (a) pragmatics, marked by increases in communication turns; (b) semantics, marked by receptive and expressive vocabulary increases; (c) syntax, marked by multi-symbol turn increases; and (d) morphology, marked by increases in target morphology structures.” (Sennott, Light & McNaughton, 2016)

“Augmented language modeling met all of the criteria to be considered evidence-based” [practice]. This lends support to clinicians in advocating for augmented input across communication settings” (Lynch, McCleary & Smith, 2016)

Research Indicates that PAI = Success!

★ Increased symbol comprehension and production for preschoolers with autism (Drager et. al., 2006) and moderate cognitive impairment (Harris & Reichle, 2004)
★ Increased amount of words/symbols used at a time (Bruno & Trembath, 2006), (Binger & Light, 2007)
★ Increased responsiveness and use of AAC for adults with developmental disabilities and complex communication needs (Beck et. al., 2009)
How is Partner-Augmented Input Provided?
Communication partners (staff, parents, peers, siblings, etc.) model language by pointing to the symbols on a student’s AAC while simultaneously talking.

What do you think PAI looks like?

In other words, YOU use the AAC!
Response not required!
Inspire, don’t require!

To Do List:
Model...
People have been asked to model without providing a purposeful plan for how to learn the skill of how to model...

It’s not natural!

Strategy Description
S - Slow Rate
Mo - Model (Parallel Talk & Self Talk)
R - Respect & Reflect
R - Repeat
E - Expand
S - Stop (Provide Wait Time)

Decide who needed the training and coaching and in what order would that be provided.

<table>
<thead>
<tr>
<th>Title</th>
<th>Event</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech Language Pathologists</td>
<td>Three Days of Training</td>
<td>Quarter 1</td>
</tr>
<tr>
<td>Early Childhood Special Educators</td>
<td>Three Days of Training</td>
<td>Quarters 2 - 4</td>
</tr>
<tr>
<td>Autism Teachers</td>
<td>Three Days of Training</td>
<td>Quarters 2 - 4</td>
</tr>
<tr>
<td>ID Teachers</td>
<td>Three Days of Training (All)</td>
<td>Quarters 3 - 4</td>
</tr>
<tr>
<td>Occupational Therapists &amp; Physical Therapists</td>
<td>Two Days of Training</td>
<td>Quarter 2</td>
</tr>
<tr>
<td>Adapted Physical Education Teachers</td>
<td>One Half Day of Training</td>
<td>Quarter 3</td>
</tr>
<tr>
<td>Administrators</td>
<td>One Half Day of Training</td>
<td>Quarters 3 - 4</td>
</tr>
</tbody>
</table>
What about the paraprofessionals?

Logistically, we couldn't invite paraprofessionals to the trainings or coaching. Staff were encouraged to provide paraprofessionals with their own training and to observe coaching sessions.

What about families?

In the 2019 - 2020 school year we planned for 20 (10 in the Fall & 10 in the Spring) two hour parent trainings offered through Parent Resource Services.

Who?

- 3 Administrators (Related Services Supervisor, Speech-Language Specialist, and Assistive Technology Specialist)
- 9 Specialized Instructional Facilitators - Assistive Technology
- 2 Speech Language Pathologists with reduced caseloads
- 2 Early Childhood Special Education Teachers

What?

- IMPAACT Model

Develop a team to train and coach communication partners to learn necessary skills following an evidence-based approach.

The 8 Steps of the IMPAACT Program

1. Pretest and solicit the partner's commitment to learning the targeted strategy.
2. Describe the strategy (ex. SMoRRES).
3. Demonstrate use of the strategy.
4. Provide verbal practice of the strategy steps.
5. Practice implementing the strategy in controlled contexts (ex. role playing)
6. Practice implementing the strategy in natural contexts (ex. reading book with the children).
7. Complete posttest and solicit the partner's commitment to long-term implementation of the strategy.
8. Demonstrate generalized use of the strategy.

Kent-Walsh and McNaughton (2005)

Provide team with training and practice opportunities.
Jill Senner & Matt Baud

Two days of training with LLWAAC Coaches on Partner Augmented Input, SMORRES, and Coaching.

Let's Talk About The iPad
- The purpose is to provide partner augmented input.
- If an educator leaves LCPS, we need it back.
- Collecting devices over the summer.
- LAMP:WFL comes pre-installed. This saved Information Technology time with initial set-up.
- LAMP:WFL is but one possible tool. Just because it came pre-installed, doesn't mean there was an expectation that it is the right tool for every student.

Create a schedule for trainings and develop them!

Day 1 -
- Presuming Potential
- Partner Augmented Input
- Motor Planning
- LAMP Approach & LAMP:WFL
- SMORRES Practice

Day 2 -
- Using Symbols / Iconicity
- Core Vocabulary
- Descriptive Teaching
- Least To Most Prompting

Day 3 -
- Planning for Language All Day Long
- Literacy Instruction
- Predictable Chart Writing
- Implementation ideas

Initial Steps
- Commitment to Training - Done at Day One Training
- Pre-Initiative Survey - Done at Day One Training
- Video Baseline - Done during First Coaching Session
Strategy Demonstration

S - Slow Rate
Mo - Model (Parallel Talk & Self Talk)
R - Respect & Reflect
R - Repeat
E - Expand
S - Stop (Provide Wait Time)

Verbal Practice (Let’s say these aloud)

S - Slow Rate
Mo - Model (Parallel Talk & Self Talk)
R - Respect & Reflect
R - Repeat
E - Expand
S - Stop (Provide Wait Time)

Verbal Practice, continued

S -
Mo -
R -
R -
E -
S -

Quick Controlled Practice Activity! Slow Rate Phrases

1. Using slow, clearly articulated speech, model the phrase “I like that” on the AAC.
2. Using slow, clearly articulated speech, model the phrase “It goes” on the AAC.
3. Using slow, clearly articulated speech, model the question “Where is mom?” on the AAC.

Quick Controlled Practice Activity! Model: Self Talk

1. You bite a cookie. What could you say and model on the AAC?
2. You are playing Uno. It is your turn. What could you say and model on the AAC?
3. You are blowing bubbles. You have the wand in your hand, poised to blow. What could you say and model on the AAC?

Quick Controlled Practice Activity! Model: Parallel Talk

1. A student picks up a puzzle piece. What could you say and model on the AAC?
2. A student takes his shoe off. What could you say and model on the AAC?
3. The student takes the top off of a marker. What could you say and model on the AAC?
Quick Controlled Practice Activity! Respect & Reflect

1. A student verbalizes “ma” for more while playing with a toy car. What could you say and model on the AAC?
2. A student pushes you away while playing a game. What could you say and model on the AAC?
3. The student goes under a desk during a lesson. What could you say and model on the AAC?

Quick Controlled Practice Activity! Repeat

1. Model a phrase with the word “go” twice using AAC. Then rephrase for a third model using AAC, still using “go”.
2. Model a phrase with the word “sad” twice using AAC. Then rephrase for a third model using AAC, still using “sad”.
3. Model a phrase with the word “help” twice using AAC. Then rephrase for a third model using AAC, still using “help”.

Quick Controlled Practice Activity! Expand

1. The student says, “more” using AAC. Respond using 1 - 2 more words using AAC.
2. The student says, “open it”. Respond using 1 - 2 more words using AAC.
3. The student says, “not want” using AAC. Respond using 1 - 2 more words using AAC.

Quick Controlled Practice Activity! STOP

1. Before blowing up a balloon, you use AAC to say, “I blow it up”. Let the balloon go and wait 10 seconds. What happens next?
2. You give the student a cup while holding a pitcher. Using AAC, you say, “Put it in.” Wait 10 seconds. What happens next?
3. A student points to a video app on a tablet. You say, “play” and wait 10 seconds. What happens next?

Advanced Practice

Do it live with a student.

Post-Assessment, Record Follow-up Video, and Analyze Results
Generalization
Use the strategy multiple times in multiple environments with multiple students.

Create a protocol for coaching sessions and corresponding documentation.

Training
- Three days to learn concepts and practice skills.

Tools
- iPad preloaded with LAMP: WFL (other AAC apps available on request)

Coaching
- Week 1 & 2 — Observation/Pre-Survey, Feedback from Observation
- Week 3 & 4 — Demo of Strategy, Practice, and Feedback
- Week 5 & 6 — Post-Survey, Follow-Up

Coaching.
- Sessions 1 & 2 - The coach meets with the staff member at each school to record and then review a video to establish baseline of modeling skills.
- Sessions 3 & 4 - This can be coaching of each other, where coach and staff member take turns observing each other and reflect together on implementation of the strategy.
- Sessions 5 & 6 - The coach meets with the staff member at each school to record and then review a video to compare with baseline and assess increase of modeling skills.
- Pair has 9 weeks to complete 6 coaching events.

Develop a process for measuring success.

Tracking Growth of Partner Augmented Input
Coaches recorded the number of Models, Repeats, and Expansions used by the communication partner on the AAC versus how many words were spoken verbally in a sample of 50 verbal utterances during the 1st and 5th coaching sessions.
Results were then analyzed and reported.
How Do We Measure Student Performance?

- SLP and teacher meet to review the Continuum of Language Expression for 1 student per SLP for the year during Quarter 1.
- SLP and teacher meet to review the Continuum of Language Expression for 1 student per SLP for the year during Quarter 4.
- For this one student, SLP obtains a language sample at the beginning of the year and end of the year.
- Coaches and other educators can be invited to participate in the COLE review.

Create a website where educators can experiences multimodal resources.

Visit the website for resources, research, materials and more!

LANGUAGE LEARNING WITH AAC

Your information for better augmentative input.

Communicate all of this district-wide.

Feedback and Results

Feedback from Coaching Sessions!

Working with my coach was a good learning experience. Her modeling for me in a real session was very helpful. Having someone to ask questions and brainstorm ideas with about AAC was extremely helpful.

I loved having another “AAC” brain to give me feedback. It’s nice to have someone who sees you from the outside and can give constructive input. It was also great being involved in the same process as the teachers we work with, as it didn’t feel as if the SLPs were directing our process. Great support for us.

This has been a wonderful way to really focus on areas of improvement in the area of AAC. I loved being able to collaborate with my coach and have her participate in a few sessions with me. I always considered this as an area of weakness for me, but I think I’ve grown significantly.

It was helpful to think about the components of successful modeling (SMoRRES) and be more cognizant of utilizing strategies. I am very thankful for the provided iPad for modeling. That has been invaluable when working with my AAC users, not just for modeling, but for when their devices come to school not charged or when the student has erased icons, etc. My coach has been fantastic. I have really appreciated her support, guidance, and flexibility!

SLPs have shown a 14% growth in their use of modeling on AAC!
More Feedback from Coaching Sessions!

Changes I noted in myself include...

- My use of the device to model rather than rely on verbal expansions/models.
- Using devices more. Encouraging teachers and assistants to utilize devices more consistently.
- I am better able to articulate students with AAC's needs and abilities.

I'm more confident and comfortable in my treatment. It was nice to receive affirmation that I'm on the right track, as it can be isolating being the only SLP in the building.

- Slowing my rate and wait time was key for me.
- Slowly learning where icons are located.
- I thought I was doing more device expansion models than I actually was.

Even More Feedback from Coaching Sessions!

Changes I noted in the student(s) include...

My student went from being essentially nonverbal and lacking of communicative intent at the beginning of the year, to using verbal and nonverbal communication for multiple language purposes. He is now an active participant in his classroom activities.

- Increased attention, engagement, communicative intents, verbalizations, etc.
- MUCH more language noted across environments. It was SO significant giving the teachers the training as well, they have much more confidence and the students are using their devices throughout the day during all activities.

Students are using devices across different settings and not just in the speech room.

Prior to these sessions, the student was isolated in his communication intents, he is now waiting, scanning his board.

- Using more oral speech.
- Huge huge huge growth in their active engagement; we were able to FADE supports out, lots more independence with kids who have been "stuck" or prompt dependent for SO LONG!

Results (so far)

Using pre- and post-survey data, the percentage of educators who rated themselves as familiar or very familiar with the AAC systems used by their students...

- Familiar went from 33.8% to 37.5%.
- Very familiar went from 11% to 62.5%.

Using pre- and post-survey data, the percentage of educators who rated themselves as comfortable or very comfortable modeling on the AAC systems used by their students...

- Comfortable went from 27.9% to 82.4%.
- Very comfortable went from 14.7% to 17.6%.

At the time of this reporting there were 18 people who had completed training and coaching, all of which were SLPs.