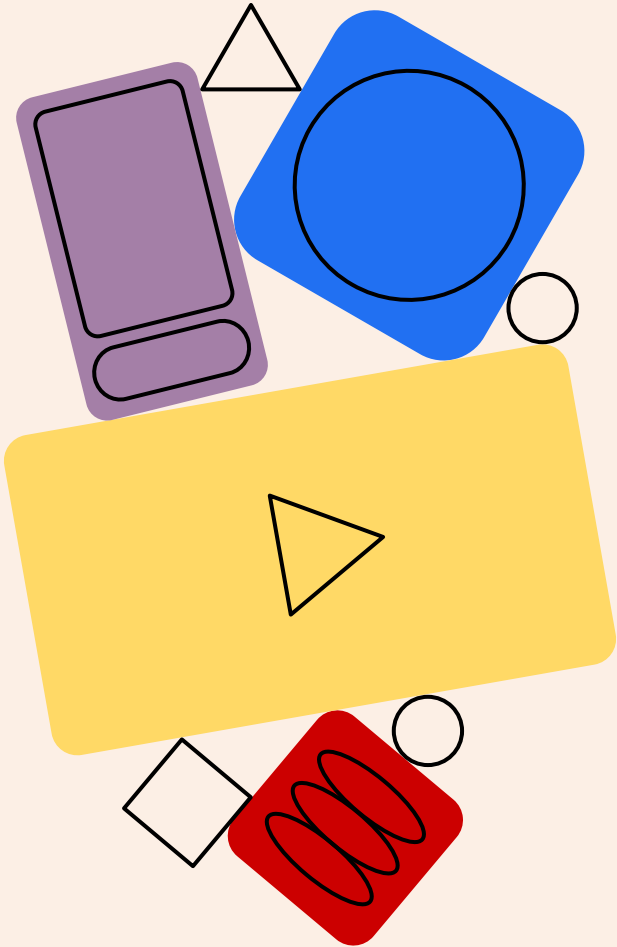


AAC Candidacy for DHH Students



Quinn Kelly MS., CCC-SLP, TSSLD

Who am I?

- Bilingual (ASL-fluent) speech-language pathologist
- Worked at a school for the Deaf for five years conducting bilingual AAC evaluations (ages 3-21)
- Works for a private practice in northern NJ, The Way You Say LLC
- Is a content expert for Language First
- Has conducted research at the national and international level in concerns to AAC
- Member of NJSHA's AAC Committee

Learner outcome #1 : Identify when a d/Deaf or Hard of Hearing (DHH) student is and is not a candidate for AAC.

Learner outcome : State 3 factors that should be considered when determining candidacy for AAC devices.

Learner outcome #3 : List 4 potential high-tech AAC programs that have Deaf-friendly features that may support communication for Deaf or hard of hearing individuals.

SPEAKER DISCLOSURES:

Financial disclosures: Quinn is not receiving an honorarium for presenting.

Nonfinancial disclosures: The presenter has no relevant non financial disclosures.

Content disclosure: The presenter will be referencing **free** Language First resources in this presentation.

WHAT IS AAC...

Types of AAC

UNAIDED

the person is only using their body to communicate, with no means of outside tools

NO TECH

- GESTURES
- FACIAL EXPRESSIONS
- BODY LANGUAGE



AIDED

the person requires external support to communicate

Low Tech

- PECS
- PEN/PAPER
- PICTURE SCHEDULE



High Tech

- ONLINE PICTURE BOOK
- EYE GAZE
- TABLET



The American Speech and Hearing Association (ASHA) has updated their webpages to include more accurate statements about Augmentative and Alternative Communication (AAC).

There are a lot of different types of AAC. **No-tech** and **low-tech** options include things like

- gestures and facial expressions,
- writing,
- drawing,
- spelling words by pointing to letters, and
- pointing to photos, pictures, or written words.

They removed American Sign Language (ASL) from their list of no-tech and low-tech AAC options.



And, they updated their list of AAC techniques and tools to state *manual signs* instead of ASL.

AAC uses a variety of techniques and tools to help the individual express thoughts, wants and needs, feelings, and ideas, including the following:

- manual signs
- gestures
- finger spelling
- tangible objects
- line drawings
- picture communication boards and letter boards
- speech-generating devices

This is an important distinction because ASL is a language, however, it is possible that some hearing children use manual signs (perhaps not from a signed language) to supplement their communication.



LANGUAGE **FIRST**

Why is this important?

The American Speech and Hearing Association is an organization that many turn to to find information about a child's language, speech, and hearing development. Their website is often cited as a reference to back up someone's claim about ASL being a form of AAC.

These small changes in wording on their webpages really help shift mindsets and move the field forward in a positive way.



LANGUAGE **FIRST**

What AAC is **NOT**



Activity Specific – always be available

Reward– something given if you behave

Teacher– a tool that requires partners to make it possible

Toy– used for entertainment

Quick Fix– takes time and work to see growth + success

Menu– yes, use during meals, but don't stop there!

Self-Explanatory– training and support are necessary

Optional– for those who need it, it's a must

Limitation– opens communication opportunities

Do deaf people need AAC?

- An AAC device is NOT for a deaf person who does not present with a language disorder
 - E.g., a child who signs fluently and has literacy skills
- Access to American Sign Language (ASL) allows 100% access to language at all times
 - Being deaf does not automatically mean that the person requires an AAC device to communicate

Who needs AAC?



Candidacy



Cognition

Fine Motor Challenges

Gross Motor Challenges

Deaf Plus

Language Disorder

–Could be in ASL or English= possibility for candidacy

Reasons for AAC

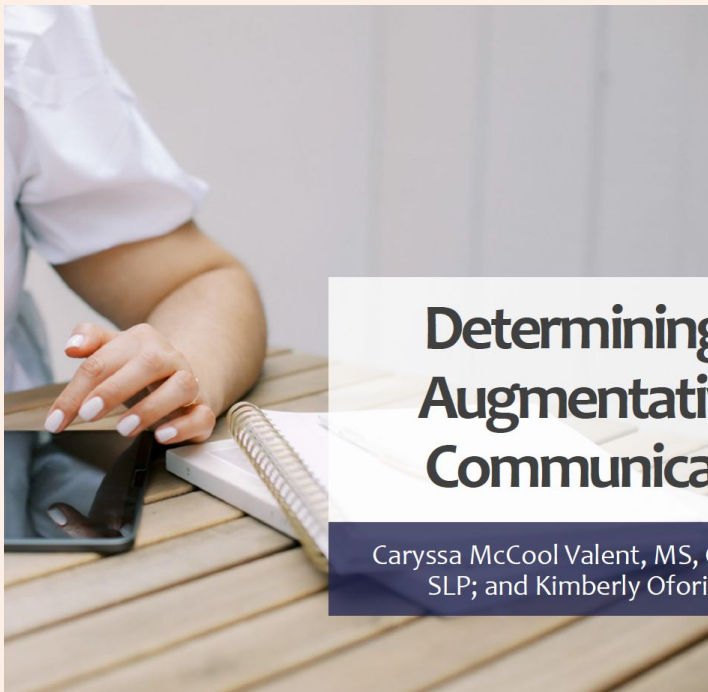


Community Partners

Expanding Utterances

Communication Repair

Communication Autonomy



Determining Candidacy for an Augmentative and Alternative Communication (AAC) Device

Caryssa McCool Valent, MS, CCC-SLP; Quinn Kelly, MS, CCC-SLP; and Kimberly Ofori-Sanzo, SLPD, CCC-SLP, BCS-CL



- Created by three ASL-fluent speech-language pathologists (SLPs) with extensive experience working at schools for the Deaf.
- Screening tool to help broadly determine whether a signing Deaf child is a candidate for an Augmentative and Alternative Communication (AAC) device.
- Many Deaf children who speak American Sign Language (ASL) are encouraged to use AAC devices when they are not candidates and likely would not benefit from them.

Determining Candidacy for an Augmentative and Alternative Communication (AAC) Device

7 questions in yes/no and multiple choice format

- Based on your response will direct you to the most appropriate next question

3 different varied outcomes

- May be a candidate
- Is likely not a candidate
- Is not a candidate

Based on your response choice, different resources and continuing education courses are provided to support the outcome

receptive

YES

expressive

NO

mixed

Question 1 of 7

Does the child demonstrate difficulty with fluency in ASL?

Keeping in mind:

From an acquisition standpoint, do they have deficits in expressive or receptive language ? Do they struggle communicating in ASL and will heavily rely on gestures, drawing, and pointing for communication?

Question 2 of 7

Does the child demonstrate difficulty with the motor movements required to produce signs?

Keeping in mind:

It can be fine or gross motor movements that can affect their overall intelligibility in ASL

Question 3 of 7

What is the child's intelligibility in ASL?

Keeping in mind:

Whether fine or gross motor is impacting their signing, what percent of the time as they understood by general audiences?

Question 4 of 7

Does the child have another diagnosis that may impact language fluency (e.g., Autism)?

Keeping in mind:

If the individual has another diagnosis that may affect communication, it is good to keep in mind as that diagnosis may impact language development.

Ex: Individuals with Autism may exhibit repetitive or rigid language, topic perseveration, difficulty with social cues, pragmatic situations ect...

Question 5 of 7

Does the child demonstrate difficulty in ASL due to a language disorder **OR** due to lack of exposure to an accessible language?

Keeping in mind:

Is it that with consistent access to language they receptively or expressively show difficulty with learning, understanding, and using language **OR** due to their decreased exposure to ASL that they showing difficulty with communication.

Question 6 of 7

Has the child been immersed in an ASL environment with explicit language instruction for at least one year with **little to no progress?**

Keeping in mind:

Have they been taught ASL by a professional, communicated using ASL consistently, been immersed in an ASL environment with no progress in their language skills for at least a year?

Question 7 of 7

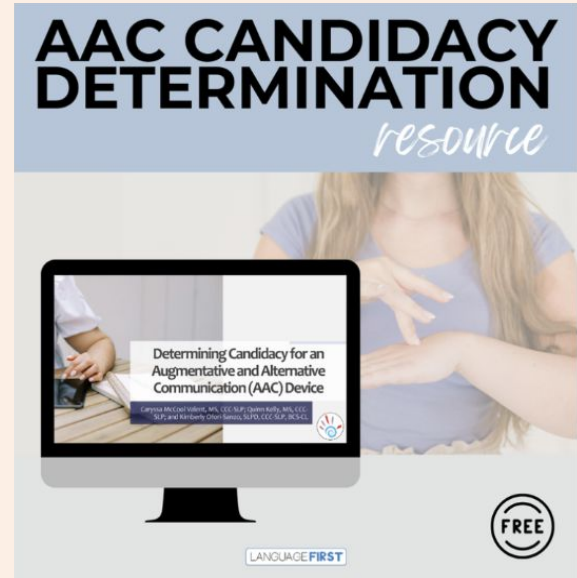
Is it a receptive or expressive language disorder?

Keeping in mind:

They've had consistent ASL exposure and immersion, yet continue to struggle communicating expressively and/or receptively.

What can do with this ?

- Add free resource to your drive to allow staff access
- Implement the tool within your screening process
 - Can be your indicator as a need for trialing or evaluation
- The results of the screener can be used in a team meeting to help indicate and educate staff on next steps



#1



Are they a candidate?

Diagnosis

- Bilateral mild/moderate sloping to profound sensorineural hearing loss
- Inconsistently wears hearing aids
- 5yo female

Communication History

- ASL interpreter at school, no TOD services
- Verbally will say 'hi', 'bye', and approximates some vocabulary (animals and colors)
- Difficulty understanding palm orientation
- Beginning to sign "open", "help", and colors; recently signed "tree" and then used it appropriately as a classifier to show that the tree was leaning over

Potential Obstacles

- Self directed
- Requires constant redirection
- Highly distractible
- Has minor fine motor concerns that are addressed in OT services
- Visual processing concerns

#2



**Are they a
candidate?**

Diagnosis

- bilateral severe sensorineural hearing loss, and wears bilateral hearing aids
- 16 yo male
- CHARGE Syndrome

Communication History

- Understand short utterances in spoken English with familiar background knowledge
- Strong receptive sign skills
- Expressive signing skills need prompts to expand
 - Produces 1-2 echolalia phrases/signs as average utterance
 - Approximates speech→ intelligibility is rated as “poor” when context is known

Potential Obstacles

- First language is spoken English
- Partial auditory feedback
- Severe fine motor concern

#3



**Are they a
candidate?**

- **Diagnosis:**
 - Auditory neuropathy/dyssynchrony spectrum disorder (ANSD) and profound sensorineural hearing loss bilaterally (right-side implanted)
 - 21yo male
 - Autism Spectrum Disorder
- **Communication History:**
 - Family speaks Spanish
 - Has been exposed to ASL for 8 years at school for the Deaf
 - Mean Length of Utterance (MLU) in ASL is about 1-2 signs
 - New concepts benefit from ASL and auditory exposure
- **Potential Obstacles**
 - Student has a shy disposition and underdeveloped self-advocacy skills
 - Fine and Gross Motor Concern

What's next ?



Feature Matching

- This feature matching resource was created to determine which AAC applications might be most appropriate for Deaf students after it has been determined that they are an AAC candidate.
- Please note, **we do not recommend** that AAC be utilized as a first intervention for Deaf students; we recommend that a natural signed language such as American Sign Language (ASL) be implemented first.
- The authors created this chart after many years of clinical practice in which their Deaf students were provided with AAC applications that were inappropriate for them.



Why is this important?

- ✓ AAC apps are often auditory-focused or use auditory output as the primary feedback method
- ✓ AAC apps don't always include ASL images on their buttons, or the ASL images are inaccurate
- ✓ AAC apps may not allow for changes to the visual landscape needed for Deaf or DeafBlind students
- ✓ AAC apps may not allow for changes needed for Deaf Plus students with motor difficulties
- ✓ AAC apps may have limited accessibility options needed for Deaf Plus students

You can choose the applications to own/assess with that have more features that can support the intended communicators

Have options.

Features of AAC to Consider for Deaf Individuals

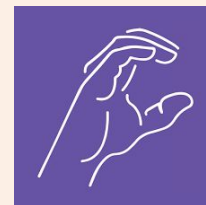
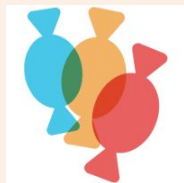
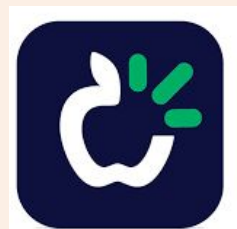


- Folder/ Motor Plan
- Navigation to Icon
- Pre-stored Messages
- Visual Scene Display
- Head Tracking or Eye Gaze
- Accessibility Options
- Grid Size
- High Contrast
- Iconicity
- Trial Period
- Trilingual









Deaf-Friendly features within various AAC apps






WeaveChat



Free Resource

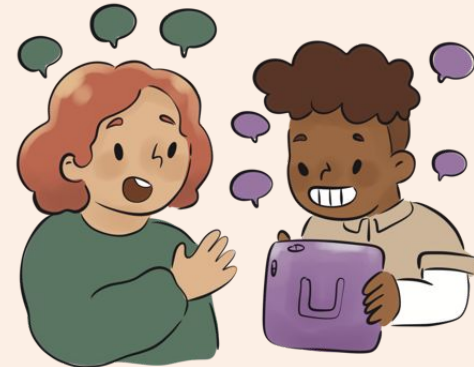
FEATURE	Avaz	CoughDrop	GoTalkNow Pro	Grid for iPad	CBoard	TD Snap	Proloquo2 Go	Touch Chat with Word Power
								
AVAILABILITY								
Compatibility	Google, Apple	any platform	iPad only	iPad only	Android, iOS, Amazon Fire, Windows	iPad, Windows	Remote editing, cloud backup,	iOS only
Free trial or lite version	2-week trial; email and include details about your role and organization	2-month trial	Free lite version	30-day free trial	Free version available	Non-speech available free	No	30-day free trial
Free trial for SLPs	1-time 2-week trial	Free modeling account & evaluation account - \$25 (settings deleted between evals)	If you need more pages, please email with your reasons. Include info about the population you serve and why you'd benefit from full version	Complete the form on website	*	Non-speech available free; 60-day free trial with voice	Provides a free version of the app to SLPs who conduct AAC evaluations on a case-by-case basis, email to find out more	Free access after completing a course
SYMBOLS								
Symbols ^{##}	SymbolStix	LessonPix, SymbolStix & BoardMaker	GoTalk Image Library & SymbolStix	Widgit, PCS, SymbolStix	Open Symbols (ARASAAC, Mulberry, Global Symbols)	PCS symbols or METACOM	SymbolStix	SymbolStix
High contrast symbols [#]	Yes	PCS symbols as add-on	Yes	Yes	Can add own pictures	Yes	No, but can adjust color settings	PCS symbols as add-on
Skin tone options	Yes	Yes	Yes	*	Yes	Yes	Yes	Yes
Import photos from camera ^{##}	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Trilingual Spanish Apps

- Proloquo2Go 
 - Can switch easily between Spanish and English pagesets that supports true code-switching
 - Mix the two languages mid-sentence
 - Various dialects available
- TD Snap 
 - Core First pageset are included and they have premade English-Spanish page-sets that supports code-switching
- TouchChat with WP 
 - Spanish vocab files are included with purchase
 - You need to create the bilingual support via setting up profiles and creating a button in each vocab to toggle back and forth.

Remember - AAC Devices were not designed for DHH people

- We can consider the best features for DHH children, but the devices *will* need to be modified to be appropriate for the person
- Consider which devices have the most appropriate modifications for each person
- One size does not fit all.



AAC AND DEAF STUDENTS

AAC stands for
Augmentative and
Alternative
Communication.

Strategies for Using ASL and AAC

Sandwiching: Connect concepts by repeating one modality

EX: Picture – sign – picture

Chaining: Expose student to multiple modalities sequentially

EX: Sign + written + AAC + oral word + picture

[Click here for a free lesson plan.](#)

CANDIDACY

Remember, a signed language like ASL allows deaf students 100% access to language. An AAC device is NOT for a deaf child who does not present with a language disorder (e.g., someone who signs fluently and has age-appropriate literacy skills).

Potential considerations for candidacy include:

- ✓ Cognitive challenges
- ✓ Fine or gross motor challenges
- ✓ DeafDisabled
- ✓ Language difficulties that are not improving with explicit instruction in ASL

[Click here for a free candidacy determination resource.](#)

Reasons for AAC:

- ✓ Communication partners
- ✓ Expanding utterances
- ✓ Communication repair
- ✓ Communication autonomy

Language input and output will vary by person!

Person 1: Signs
Person 2: Responds using AAC

Person 1: Signs and models AAC

Person 1: Signs
Person 2: Signs and/or uses AAC

Person 1: Signs and/or uses AAC

You can translanguage between ASL and AAC!

Explicit

This is when we provide the learner with specific information about the task.

EX: Teaching the student the different meanings of multiple meaning words.

Implicit

This is when we do not provide specific guidance.

EX: Model and provide examples, instances, illustrations, or visualizations without a direct statement on what is to be learned.

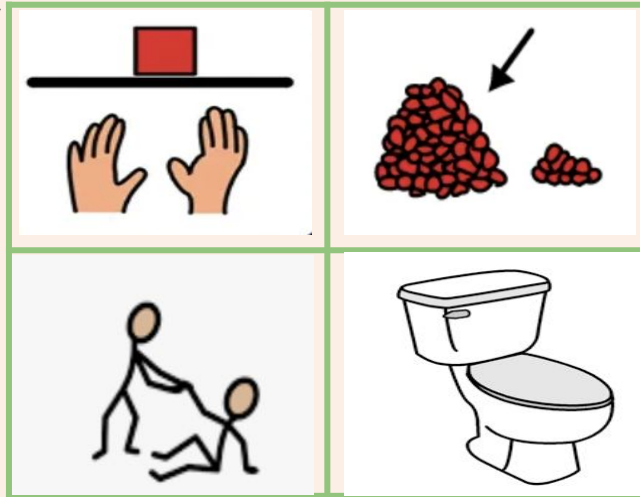
Strategies...



Translanguaging

“Presentation of content in one language and expecting the production in another where input and output are different languages”

-Dr Bobbie Jo Kite, Gallaudet University



What will communication look like...

Communication is going to look different and **that is okay!**

Input and Output of language will vary per person

- | | |
|----------------------------------|---------------------------------|
| ■ Person 1: signs | Person 1: signs and models AAC |
| ■ Person 2: replies using device | Person 2: signs and/or uses AAC |
| ■ Person 1: signs | Person 1: signs and/or uses AAC |

*Model back what they communicated or clarify using the other modality (ASL or AAC)

- Ex: “ball”.. “ball what?” .. “blue ball”.. “want ball blue?”

Strategies for ASL and AAC Communication

- **Explicit** → Provides the learner with specific information or directions about what is to be learned from the task
 - occurs in an instructional task.
- **Implicit** → Do not provide specific guidance on what is to be learned from the task
 - provide examples, uses, instances, illustrations, or visualizations without a direct statement (or rule) that specifically directs the learner on what is to be learned.

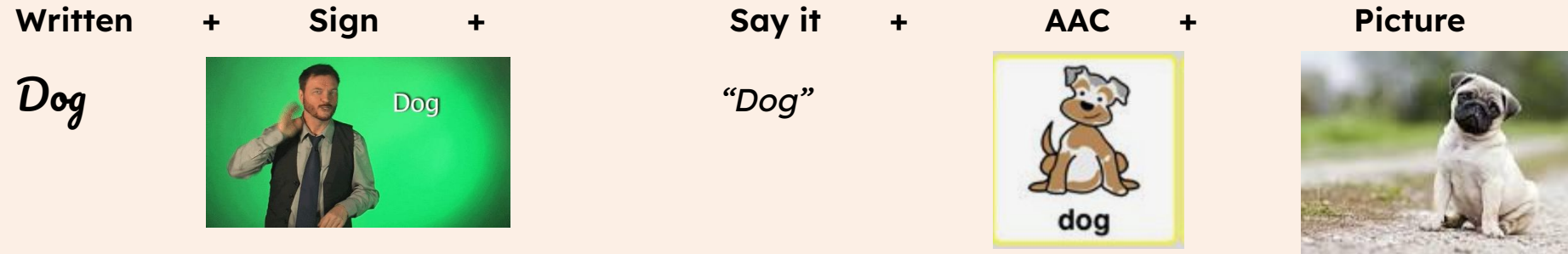


Strategies for ASL and AAC Communication

Language Sandwich → connecting linguistic concepts



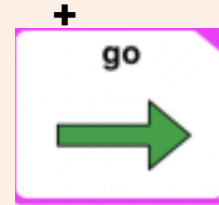
Chaining → all exposures together



Applying ASL Strategies to AAC

Aided Language Stimulation (Modeling)

- A communication partner teaches the symbol meaning and models language by combining output with the selection on the AAC
 - Sign + Model



MODEL WITHOUT EXPECTATION

Things NOT to do with an AAC user



Find the...

Now say it on your device

That's not right...

Say....

Hit the button

Now sign it/say it

Touch the...



Language is not just modeling...

- **Commenting “ I + Like”**
- **Questions “Go+ When”**
- **Sharing “ That+**
- **Narrating “ I + See”**

“Communicative competence is about people. It is not about computer technology, or AAC systems. Technology is just the tool, it is the people and the interactions between them that must be our main focus.”

Janice Light

Participation Plans

Activity	Word	Pathway	Sign
Lunch time (commentin g on food)		Home page	

What vocabulary do I start with...

Core Words in ASL

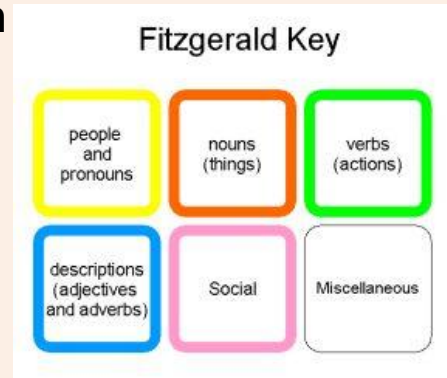
- Core= 80% → more generic and can be used across a wide range of environments (want, do, go)
- Fringe= 20% → specific vocabulary to a topic, environment, or individual (food, people, places)
- Some core words are not appropriate
- Lesson Planning...
 - Highly motivating to start
 - Compilation of Core in a variety of contexts
 - “On” → one button → many ASL meanings

CONNECTION > Compliance when working with AAC



Core Words in ASL

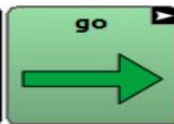
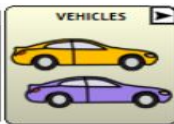
- Go as robust as possible
 - Get out of YOUR comfort zone... it's not about you.
- Add specific fringe words related to Deaf/HH community
 - American Sign Language, cochlear implant, Deaf, interpreter...
- Teach and program sign name
- Many Deaf children struggle with vocab retrieval and storing information
 - vocab in organizational patterns
 - verbs=green



Pathway Practice



Planes go fast.



help



stop



have



go



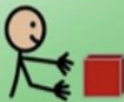
finish



like



want



more



Ormie

How can admin support AAC...



1. Model AAC Use Themselves (Aided Language Input)

- Practice what you promote: Use AAC during school events, in classrooms, or during assemblies to normalize it.
- Greeting students: Use a speech-generating device or low-tech board to say "hello" in the morning.
- Staff meetings: Occasionally introduce AAC tools to model and demystify them for staff.

2. Prioritize AAC in Professional Development

- Training for all staff, not just speech-language pathologists (SLPs).
- Ensure ongoing coaching, not just one-time workshops.
- Offer peer mentoring, where experienced staff support others in AAC strategies.

3. Create an AAC-Friendly Environment

- Ensure visual supports and AAC tools are available throughout the building (e.g., hallways, nurse's office, cafeteria).
- Include core boards or communication posters in all classrooms and common areas.
- Encourage visual schedules and choice boards even for general ed classrooms.

4. Ensure Access to Devices and Tools

- Develop clear procedures for procurement, repair, and maintenance of AAC devices.
Avoid device lock-in; work with SLPs to ensure the tool matches the student, not the other way around.
- Budget for high-tech AAC and low-tech backups.

5. Include AAC Goals in School-Wide Plans

- Integrate AAC into school improvement plans, behavior intervention strategies, and inclusive education efforts.
- Encourage teachers to embed communication opportunities across all activities, not just during speech sessions.

6. Support Family and Caregiver Involvement

- Provide family training on how to use AAC at home.
- Host AAC nights or open houses to showcase student use and celebrate success.






7. Track and Celebrate Progress

- Monitor student progress with AAC just like other academic and functional skills.
- Celebrate milestones: first message sent, increased vocabulary, use in new settings, etc.

8. Foster a Culture of Communication

- Promote a message that “everyone communicates”, regardless of how.
- Use inclusive signage, AAC slogans, or student-created boards to spread awareness.

Tips for All Ages

-  **Be patient and celebrate all communication attempts.**
-  **Model regularly, even if the person doesn't respond right away.**
-  **Keep it fun—engagement drives communication.**
-  **Collaborate with to update vocab and troubleshoot.**
-  **Family/community involvement**

CASE STUDY 1

Person: 3yo with severe to profound bilateral sensorineural hearing loss. Has hearing bilateral hearing aids, rarely wears them. Aided since 18mo, no early intervention services.

Placement: General education preschool, with inconsistent school attendance.

Communication Hx: spoken English spoken in the home, no exposure to sign language. School provided core boards to support communication at the beginning of the year. Has been responsive to static visuals.

Other Considerations: Some fine motor concerns with isolating digits. No other dx currently documented.

CASE STUDY 2

Person: 10yo with bilateral moderate to profound sensorineural hearing loss; was implanted at 6yo bilaterally.

Placement: School for the Deaf since 5yo, with ASL classes in group and 1-1, speech-language services 3-1 since arrival.

Communication Hx: Family only speaks spanish at home. Student did not wear CI consistently at home. Prefers drawing, acting out communication.

Other Considerations: learning disabilities have been suspected, possible undiagnosed syndrome.

CASE STUDY 3

Person: 28yo , not aided.

Placement: Adult day program with an interpreter.

Communication Hx: Receptively understands ASL, expressively communicate home signs, pointing and some approximated signs.

Other Considerations: Adult day program staff, interpreter staffing, Autism Spectrum Disorder dx, and has visual concerns is currently following up with ophthalmologist.



signingslp@gmail.com

- How can we keep families engaged to use the device...
- What happens if they are successful with AAC...
- What happens if they are not interested ...
- Why is AAC often not the first recommendation for a Deaf child to support communication as it can be for a hearing child
- What are some of your favorite AAC features ...
- What is your favorite AAC app...
- But they don't use it...