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# Augmentative and Alternative Communication (AAC)

Autism in Education Webinar Jan. 23, 2020

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# Disclosures:

I am not affiliated with any company that supports augmentative and alternative communication.

I do not receive compensation for any of the materials or resources mentioned in this presentation.

# In this session, we will...

- Define AAC and review different types of AAC
- Look at how typically developing children learn language
- Look at how children using AAC learn language
- Consider our end goal for our AAC users
- Review evidence-based strategies for vocabulary selection
- Discuss prerequisites for AAC use

# But first, a quick introduction...

Jack-of-all-trades, master of none...

With particular interest in the areas of Autism Spectrum Disorder and (more recently) AAC

I am not an expert, but will share what I have discovered.

# What I have learned...

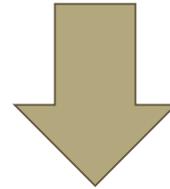
- You don't need to reinvent the wheel
- There is lots of information out there
- Due to the volume of information, it can quickly become overwhelming!

**What is AAC?**

# AAC = Augmentative Alternative Communication.

AUGMENTATIVE

ALTERNATIVE



supplements

# Video

## What is AAC? (2:39)

[https://www.youtube.com/watch?v=r3m8\\_YmTDDM](https://www.youtube.com/watch?v=r3m8_YmTDDM)

# Types of AAC

**NO TECH:** Doesn't require any extra equipment  
e.g. gestures, pointing, facial expression, sign language

**LOW TECH:** Doesn't require a battery  
e.g. picture symbol boards or books, writing, alphabet boards

**HIGH TECH:** Systems that use technology  
e.g. communication apps on iPads, eye gaze system, speech generating devices

# Low Tech AAC Options

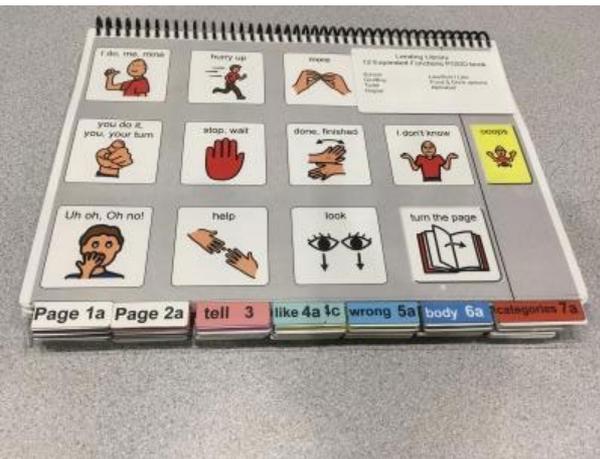
## Core word Boards or Books

Lots of low-cost or free core vocabulary boards and books online.

e.g. Project Core [Universal Core Communication Systems](#)

Proloquo2Go <https://www.assistiveware.com/blog/assistiveware-core-word-classroom>

## PODD (Pragmatic Organization Dynamic Display)



[+ zoom / larger image](#)





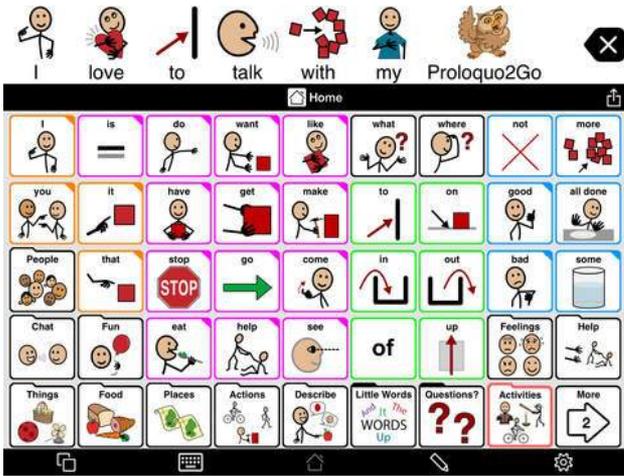
# High Tech AAC Options

iPad Apps (\*not an exhaustive list)

Proloquo2Go, Snap+Core first, TouchChat with Wordpower, LAMP, Speak For Yourself, WordPower

Dedicated Communication Devices

e.g. devices from Tobii Dynavox (includes eye gaze devices)



# Who is a candidate for AAC use?

**Anyone who cannot meet their daily needs with spoken language alone would likely benefit from AAC.**

# Who is a candidate for AAC use?

1. **Developmental disabilities and genetic conditions** (e.g., autism, Down syndrome, cerebral palsy.)
2. **Acquired disorders** (e.g., traumatic brain injury, stroke, dysarthria.)
3. **Progressive disorders** (e.g., Parkinson's disease, motor neurone disease, amyotrophic lateral sclerosis(ALS).)
4. **Cognitive-communication disorders** (e.g., dementia, aphasia)

**What is communication?**

Communication is the process of passing information and understanding from one person to another.

# Communication Bill of Rights

National Joint Committee for the Communication Needs  
of Persons With Severe Disabilities (NJC)

I have the right to:

Be communicated with (and responded to) in a dignified manner, and to request, refuse, socially engage, obtain information about the world around me, seek assistance, and have some control over the interactions and activities in which I participate.

**How do children typically learn  
language?**

# Learning Language

**Language development** is a process that **occurs over time** and in response to motivations and interactions inherent in an individual's environment and relationships.

# Learning Language

“From the moment a baby is born, they hear and respond to the spoken word. We bombard that infant with language for the first 12- 18 months of their lives. During that time, we do not expect that they will utter a single understandable word.”



# Learning Language

Not Through “Instruction”



- dog n. 1. A domesticated carnivorous mammal, *Canis familiaris*, raised in a wide variety of breeds and probably originally derived from several wild species.

# Learning Language

...But Through Modeling

- “Look at the dog!”
- “He’s feels so soft.  
Let’s pet the dog.”
- “The dog is barking.  
That’s loud.”



# Learning Language

Initially infants don't understand what we're saying... But we keep talking to them...



# Video

Video of dad talking to baby(1:25)

<https://www.youtube.com/watch?v=Yn8j4XRxSck>

How do children using AAC learn  
language?

**The same way that children  
learn ANY language. They need  
to be immersed in it.**

"The average 18 month old has been exposed to 4,380 hours of oral language at a rate of 8 hours/day from birth. A child who has a communication system (AAC) and receives speech/language therapy 2 times/week for 20-30 min. will reach the same amount of language exposure (in their AAC language) in 84 years"

- Jane Korsten

Again...

If AAC learners only see symbols modeled twice weekly for 20 to 30 minutes, it will take **84 years** to have the same exposure to their AAC language as an 18 month old has to spoken language.

# Learning AAC

Why then do we expect a child to spontaneously begin using an AAC system from the first day they receive it?!?



**HAVING A  
COMMUNICATION  
DEVICE DOESN'T MAKE  
YOU AN EFFECTIVE  
COMMUNICATOR ANY  
MORE THAN HAVING A  
PIANO MAKES YOU A  
MUSICIAN.  
(BEUKELMAN, 1991)**



# Learning AAC

AAC users also need and deserve a period of learning from the models of others. This modeling can and should be done by parents, peers, siblings, professionals and others on a regular basis for an extended period of time.

*To teach AAC, you need to speak AAC.*



# Teaching AAC

We need to learn how to use the AAC Learner's communication system so that we can model language for them.

# AAC Intervention (AAC Toolkit ©2018)

## **Typical Language Development:**

We talk to or model language for babies for a year before we expect their first word.

## **AAC Intervention:**

We model language using their system for a long time before expecting any words or language back.

# AAC Intervention (AAC Toolkit ©2018)

## **Typical Language Development:**

Young children learn to talk in single words before being expected to use sentences.

## **AAC Intervention:**

AAC users are taught single words before they are expected to use sentences. Single words are honored.

# AAC Intervention (AAC Toolkit ©2018)

## **Typical Language Development:**

Babies and children can hear their language spoken to them or around them most of the day.

## **AAC Intervention:**

AAC systems are modeled and used consistently throughout the day.

# AAC Intervention Toolkit ©2018)

## **Typical Language Development:**

Babies are encouraged to babble or play with sounds and language, in a no pressure, fun environment. They are responded to even when their vocalizations aren't full words or don't make sense.

## **AAC Intervention:**

AAC users are encouraged to play around with their systems (e.g. press buttons) in a no pressure, fun environment. What they say is responded to in a respectful, encouraging way, even if it doesn't make sense.

# AAC is another Language

Learning AAC is like learning a second language.

It takes **2 to 3 years** for proficiency with **basic social communication**

It takes **5 to 7 years** for proficiency with **academic language.**

(Collier, 1987)

# AAC Competency Takes Time

Even if progress is stalled, do *not* stop modelling.

**KEEP COMMUNICATING**

**Communication is NOT a school subject**

**What is our goal for our AAC Learners**

# The same as our goal for teaching language:

To be able to say whatever they want, to whomever they want, whenever and wherever they want to say it.



Using speech generating devices  
to communicate during play

- Gayle Porter -

The AAC system needs to enable a variety of communication functions:

1. **Expressing their needs and wants** (requesting, rejecting, gaining attention)
1. **Giving/getting information** (questioning, commenting, describing, planning, explaining)
1. **Social Interaction** (politeness, social routines, teasing, joking)

**The AAC system also needs to enable them to:**

- **learn to combine words into sentences to express thoughts, feelings, and opinions**
- **learn literacy**

**We need to provide the building blocks of language and communication:**

- **A system whose vocabulary includes many words in every grammatical category**
- **Access to the alphabet**

How do we decide what AAC  
vocabulary to start with?

Let's look at the research...



# Core Vocabulary

Many studies across different languages and age groups have found that:

- about 50 words account for 40 to 50% of what we say,
- 100 words account for about 60%, and
- 200 to 400 words account for 80% of the words we use everyday.

Core words are those 200 to 400 words that make up most of what we say in a typical conversation and writing.

# Core Vocabulary

- relatively small number of words that constitute the vast majority of what is said in normal conversation.
- consist of pronouns, prepositions, verbs, adverbs, adjectives, demonstratives and a few nouns
- high frequency words that are very versatile.
- can easily combine them to form meaningful phrases and sentences.

## Core words are consistent across:

- **Population** (toddlers/preschoolers, adolescents, adults, elderly, people who use AAC)
- **Environments** (home, restaurants, malls, churches, hospital)
- **Topics** (work, food, family, life, gossip, education)
- **Activities** (talking on phone, eating, shopping, playing games, hobbies)

i.e. regardless of the population, environment, topic, or activity,

**the same 400 words make up the 80% of the words we use!**

# Core Vocabulary

Core means that the word can be used in many ways; the meaning changes based on the context or the environment.

# Core Vocabulary

Consider the meaning of:

**“I want to go”**

In the context of:

- a board game
- a conversation regarding the grocery store
- a non-preferred activity

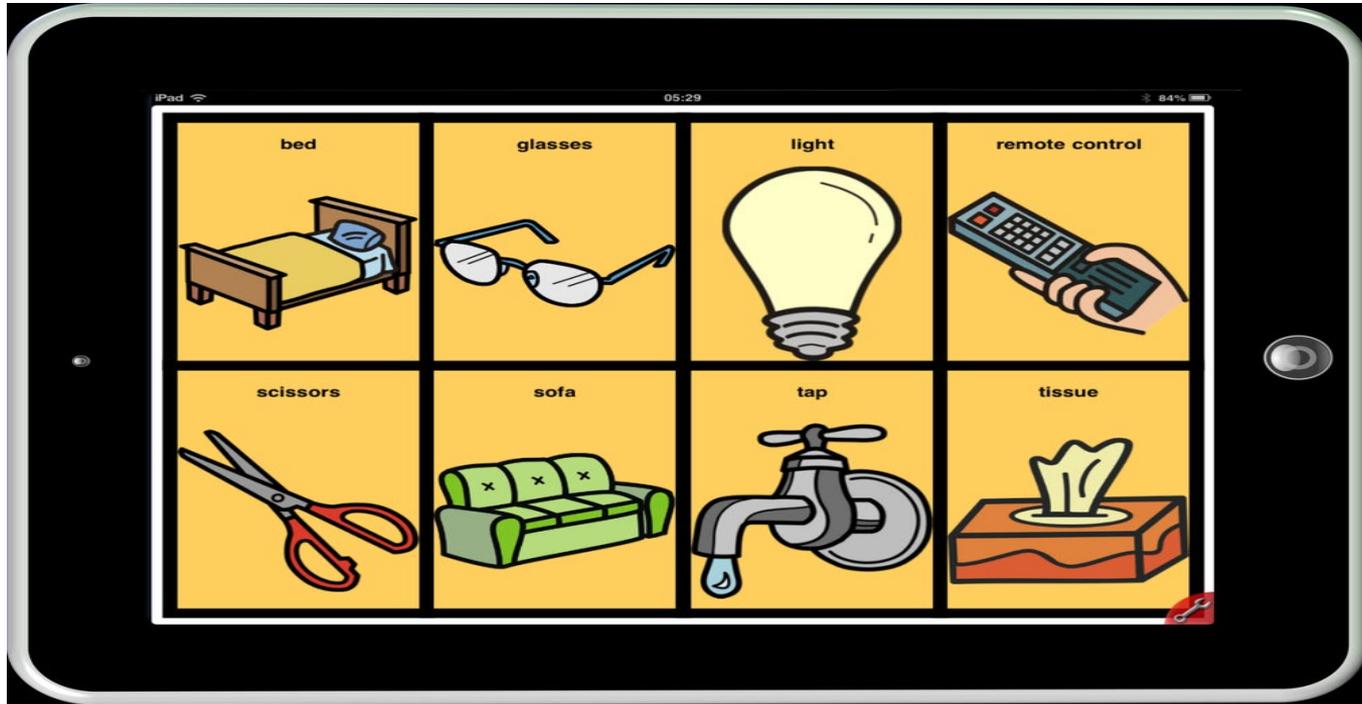
Same message, 3 different meanings

# FRINGE WORDS

- Make up the remaining 20% of the words we speak
- Comprised mostly of nouns
- Low frequency words
- Specific to a particular person or activity (morning routine/activities, center time),
- Students may use fringe vocabulary repeatedly in those specific activities/environments, but not anywhere else.

# Activity

Try to create a meaningful sentence using only no



# Activity

Now see how many sentences you can come up with using the following six words:

No, you, I, want, go, more

# Sample Conversation

Example of phone conversation between friends:

The first one says, “**What would you like to do?**”

The second one responds, “**I don't know.**”

And the first one replies, “**Why don't you come over here, and we can watch a movie.**”

How do we select the AAC your students  
need?

Even emerging communicators should have  
access to both types of vocabulary.

# How do we select the AAC your students need?

Ideally, we need to provide our students with a system that is a combination of:

- Core words
- Personal core: people, places, things
- School core: letters, numbers, shapes, calendar, etc.
- Fringe: nouns
- Common phrases: greetings, social discourse, questions, emergency information, etc.

Don't underestimate the amount of vocabulary needed.

If we add new words, things shift around.

How would YOU like to adjust to having letters in different places every time you sat down at a different keyboard?



# Video

## The Language Stealers

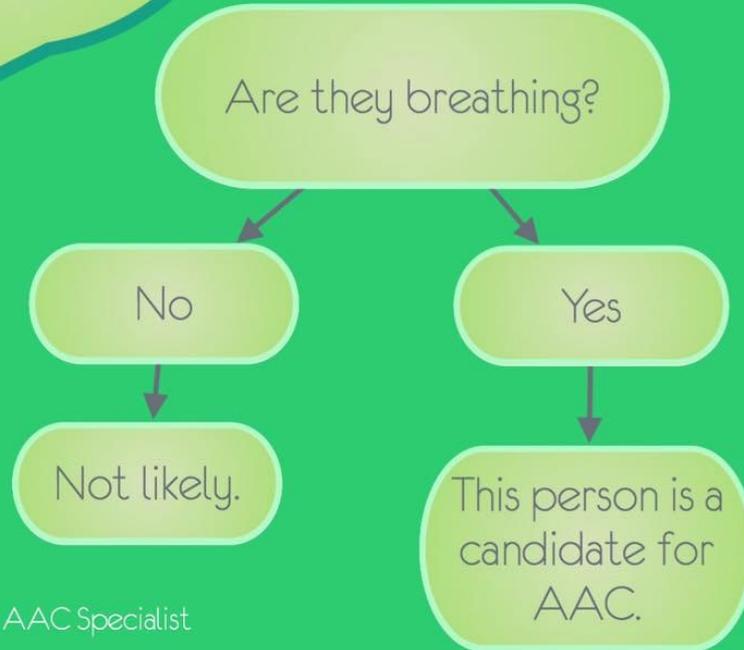
[https://youtu.be/Vib2\\_BDCXc?list=PL99EA14E1A07F2075](https://youtu.be/Vib2_BDCXc?list=PL99EA14E1A07F2075)

**(2:51)**

**How do we know when someone  
is ready for an AAC system?**

**Is this person  
capable of  
learning AAC?**

A handy decision-  
making flowchart



Rachael Langley AAC Specialist

# Presume Competence

There are NO prerequisites for AAC.

Presuming competence means an AAC user is given the tools and instruction they need to learn, regardless of their speech impediment, diagnosis or degree of difference.

# Presume Competence

Presuming competence is based on two principles:

1. Everyone has something to say

1. Everyone can learn

When we presume competence, we understand that opportunities and instruction are needed.

# Presume Competence

To allow AAC users to reveal and realize their potential, we need to provide AAC systems that:

1. Give them words
2. Enable them to communicate for all reasons
3. Access to the alphabet

# Resources I have found and like:

AAC Implementation Toolkit - (2018) Shannon Werbeckes, SpeechyMusings.com

(\*available from Teachers pay Teachers

<https://www.teacherspayteachers.com/Product/AAC-Implementation-Toolkit-Training-Handouts-Data-Sheets-and-More-4211851> )

Includes

1. AAC Training Guide
2. Editable Pages - AAC Training Guide
3. People of Color Core Vocabulary Boards
4. Staff Training Powerpoint

# AAC Websites

## 1. PrAACtical AAC

[https://www.google.com/search?q=praactical+aac&rlz=1CAFQZI\\_enCA868&oq=praactical+aac&aqs=chrome..69i57j69i60l3j0l2.7035j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=praactical+aac&rlz=1CAFQZI_enCA868&oq=praactical+aac&aqs=chrome..69i57j69i60l3j0l2.7035j0j7&sourceid=chrome&ie=UTF-8)

## 2. Project Core <http://www.project-core.com/>

“The Project Core implementation model is designed to empower teachers and classroom professionals to provide students with access to a flexible Universal Core vocabulary and evidence-based communication instruction to teach them to use core vocabulary via personal augmentative and alternative communication (AAC) systems.” \*All downloads on this site are FREE!

# AAC Websites (continued)

## **3. Assistiveware (the company that makes Proloquo2Go)**

[https://www.google.com/search?q=assistiveware&rlz=1CAFQZI\\_enCA868&oq=assistiveware&aqs=chrome..69i57j69i60l2j0l3.4851j0j7&sourceid=chrome&ie=UTF-8](https://www.google.com/search?q=assistiveware&rlz=1CAFQZI_enCA868&oq=assistiveware&aqs=chrome..69i57j69i60l2j0l3.4851j0j7&sourceid=chrome&ie=UTF-8)

Has a number of ideas for AAC implementation which are relevant even if you are not using the Proloquo2Go App.

# AAC Websites (continued)

## **4. TobiiDynavox Eye Gaze Pathway**

<https://www.tobii-dynavox.com/en-US/eye-gaze-pathway/?redirect=true>

The Eye Gaze Pathway develops the skill of using eye gaze to communicate and to learn. Has six steps: 1. Screen Engagement, 2. Responding, 3. Exploring, 4. Targeting, 5. Choosing, 6. Full Control. Each of the six steps follow a clear structure and contain practice activities, instructional videos and communication tips to help get you on your way with eye gaze.

# AAC Websites (continued)

## **5. Pathways for Core First (available as a free App or online)**

<https://www.tobiidynavox.com/en-US/software/free-resources/pathways-for-core-first/#PathwaysOnline>

Pathways for Core First is also available as an online version accessible directly from your web browser. The online version is more step-by-step than the app version but can also be self-directed. This makes it ideal for those who would like direction on implementing Snap Core First. Use it to help you setup and use Snap Core First for the first time and to expand the user's skills.

# Facebook Groups (not an exhaustive list!)

AAC Through Motivate, Model, Move Out of the Way

AAC for the SLP

Partner Augmented Input in the Classroom

Ask Me, I'm an AAC User

AAC and AT NETWORKING

Coughdrop User's Group

Tobii Dynavox Community

Angelman Academy

**Thank you for your interest in  
helping to improve the  
communication skills of your  
students!**

If you have any questions, please feel free to email me at:  
[mariestirling@nlesd.ca](mailto:mariestirling@nlesd.ca)