AAC Implementation: Teaching, Modeling & CORE Language

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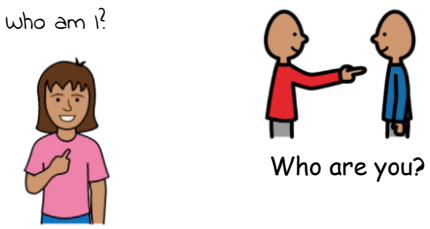
Learning Objectives:

1. Participants will define CORE vocabulary and understand its relationship to typical language development.
1. Participants will describe the steps for implementing CORE language and AAC in the classroom.
1. Participants will identify effective strategies for supporting students who use AAC in the classroom.

Introductions



CORE Language

Let's look at typical language development...

We know:

- Children begin to demonstrate an **understanding of spoken** words at between **8 and 12 months** of age (Windsor, Reichle & Mahowald, 2008).
- At between **10 and 14 months** of age, they begin **producing their first words**.
- The **first 20 spoken words** produced by children are primarily **nouns.**
- By **24 months**, children have between **150-300 words**.....**nouns no longer dominate.**
- At 2 years children begin to put two words together, including core words.
- By **26 months** a child is using **80% core vocabulary**.
- These developmental milestones are consistent across race, gender and socioeconomic status

Gail Van Tatenhove, www.vantatenhove.com

Banajee Study (2003)

a	all	done	finished	go
help	here	I	in	is
it	mine	more	my	no
off	on	out	some	that
the	want	what	yea/yes	you

(Core Vocabulary **Banajee**, M., Dicarlo, C., & Stricklin, S. B. (2003). Core vocabulary determination for toddlers. Augmentative and Alternative Communication, 19, 67-73.)

Language Development: Semantics & Syntax

In typical development, children do not begin to combine two words together until they have a vocabulary size of at least 50 words.

Implications for intervention→ increase the number of single words (core and fringe) words

Word Order

Word Order Changes Semantic Meaning

Evan go.	vs	Go Evan.
Doggie run.	vs	Run doggie.
Mommy shoe.	vs	Shoe Mommy.
Daddy sleep.	vs	Sleep Daddy.

Communication Functions:

1. Communicate wants and needs

1. Exchange Information

1. Social closeness and etiquette

Functions:

Answering

Statement

Protesting

Negate

Requesting

Comment

Greeting

Taking Turns

Labeling

First 100 Words

➡ More than just nouns

➡ Social function words, common action words, prepositions,adjectives/adverbs, early pronouns

➡ What does this say to us about the language we should be targeting?

Just for fun...

What if you were told that you could teach only 5 words to your nonverbal student?

What 5 words would you choose?

Goldfish
Cracker
Juice
Pretzel
Apple
Milk

OR

That
Mine
More
All done
Want

What do we know about CORE Vocabulary?

- Concept relating to **typical language** development
- Our generative language system is **based upon CORE words**
- According to Project CORE, 85**%** of what we say comes from a small **set of 250-350 words**
- 20% of what we say comes from a bank of **thousands of fringe words**
- CORE words are flexible words that can be used in a variety of ways

CORE vs. Fringe

CORE-80%

- Abstract words
- Semantically these words have multiple meanings
- NOT comprised of nouns

Ex: Want, Like, More

FRINGE-20%

- Concrete words
- Typically single semantic meaning
- Nouns
- Personal vocabulary

Ex: Pizza, baseball

We need to teach a balance of both core and fringe vocabulary 80/20.

Gail Van Tatenhove

Universal CORE Vocabulary (Project CORE)

So, what is our goal?

- We need to teach our students 'CORE language' in **multiple contexts.**
- So that our students with complex communication needs can **spontaneously generate novel utterances (S.N.U.G.)** and **demonstrate a variety of communicative intents**.

Implementing CORE Vocabulary in your classroom or therapy environment...

1. Select Vocabulary
2. Make Language Visible
3. TEACH
4. Develop a Plan
5. Prompt and Support

1. Selecting Vocabulary

How do you select vocabulary?

- Selecting vocabulary should include the team, **collaboration** is important.
- Vocabulary must be **simple** and **consistent**.
- Add more vocabulary as you go along. **Keep moving**.
- Use CORE vocabulary **resources**

CORE Vocabulary Resource

1. 36 Location Universal CORE Communication Board-downloadable with PCS, Symbols Stix and High Contrast Symbol Sets (Boardmaker or PDF) www.project-core.com/36-location
2. Dynamic Learning Maps CORE Vocabulary 40 Grid med.unc.edu/ahs/clds/files/dlm-core-vocabulary-40
3. 50 Word Core Board from Gail Van Tatenhove's Pixon Project Kit http://bit.ly/VanTatenhove_50_word_core
4. PRC 100 CORE words arranged by part of speech http://aaclanguagelab.com/files/100highfrequencycorewords2.pdf

(Links taken from Lauren Enders 2.26.18)

How do we decide which words are important?

1. **Observation** other same aged communicators
2. **Environment-**pay attention to daily routines/schedules and what is in the environment!
3. **Communication breakdown** diary
4. Analyze **behaviors** that may be a result of the inability to communicate.
5. **Interest** inventories
6. **Developmental language** norms

Fitzgerald Color Coding System

Customizing Vocabulary:

Personal Core:

These are words that an individual person uses all of the time but may not be 'CORE vocabulary' words. These words are personal to the student, or AAC user. These words are often nouns (common and Proper nouns) and should be included.

Examples:

- Likes/dislikes
- Motivating vocabulary
- People
- Favorite toys or foods
- Personal or identifying information

CORE across environments

Morning Circle:

- Who is here today?
- Who is ready?
- I am here.
- What are we doing today?

Math:

- How many?
- How much?
- More
- all

Motor:

- Walk
- Run
- Go
- Stop
- Fast
- Slow
- Up
- Down

Social Skills:

- I
- Feel
- Happy
- Sad
- silly

Library:

- Get it
- Take it out
- Take it home
- Read it
- Look for it
- Quiet
- I like it

Cooking:

- What are we making?
- I like it.
- I don't like it.
- Put it in.
- More please.
- Open that.

2. Make Vocabulary Visible

Symbol Selection:

dog

dog

dog

Research does not support a symbol hierarchy, rather we know students will learn the symbols they are taught, therefore the number of opportunities to teach the word will impact learning

What does the classroom look like?

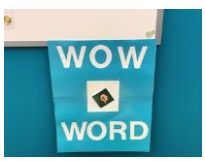
- individual boards (adapted and modified as needed)
- large classroom board (with target words indicated)
- activity boards/fringe boards (unique)
- boards at different stations around the room
- core word labels around the room
- Flip'n'Talks

Classroom Core Vocabulary Boards

https://www.youtube.com/watch?v=_ivICrYKkC4&t=82s

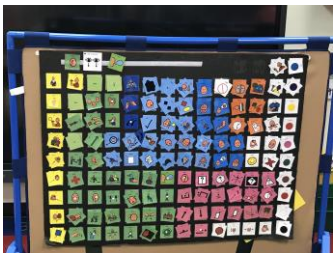
CORE boards around the room…

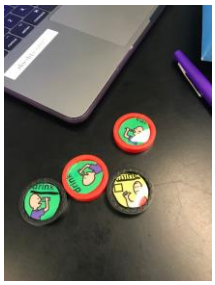
Word of the Week Display



Descriptive Labels

Visual Scripts





Students need to have exposure to the symbolic language system that we are expecting them to use. This environmental exposure is how they will get this type of language exposure.

3. TEACH

Teaching through modeling

MODEL

Model

Model

model

model

Modeling, AKA

- Aided Language
- Aided Language Modeling
- Focused Language Stimulation
- Focused Aided Language Stimulation
- Partner Augmented Input
- Natural Aided Language

The biggest reason that AAC fails...

Lack of Aided Language

What is Aided Language Stimulation?

➤ Communication partners provide aided language input by highlighting symbols on the child's communication displays as they interact with the child verbally

➤ Kind of like we are "thinking out loud" and touching key symbols while doing so....

➤ When providing Aided Language across a range of activities and environments, we are helping children to understand what symbols mean by modeling and making it visual in context

Aided Language Stimulation

https:/ /2-U

https://www.youtube.com/watch?v=flFNMky22-U

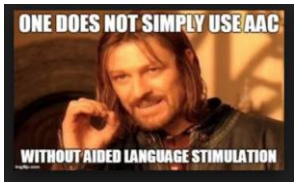
Aided Language Stimulation

➤ Modelling in AAC is a technique that is supported by research and clinical experience.

➤ Children learning to use AAC need lots of modelling (input) before they can be expected to produce similar messages (output).

https://www.youtube.com/watch?v=QPuKRCnMNnk&index=5&list=PLt3kzykL-yXYU5Ueq4wUn0DWfeitHnCCj

Aided Language Stimulation-don't forget



Rule of Thumb…

➜ Model utterances that are 1 to 2 words beyond what the child is typically using.

➜ Remember that in general receptive language precedes expressive language

Modeling Options-

➜ model key concepts with **individual pictures of core words**

➜ model with **core board**

➜ model using **wall charts, descriptive labels** and **mini scripts**

➜ model on student's individual **AAC DEVICES!!!!**

When modeling, keep in mind…

➜ use a stable surface when possible

➜ in group activities, make sure each student has a board/device and model on it

➜ model from the student's visual perspective

➜ use a precise point and **s-- l-- o-- w rate**!

It takes time to get good at this…

(Carole Zangari, PrAACtical AAC 2.25.12)

➜ Remember how long it takes typically developing children to make sense of the language around them….

➜ START SMALL: just model key core words OR just pick one activity to model the first week, then add an additional activity each week!

➜ Consider 'rehearsing'

➜ Plan ahead

➜ Create scripts

➜ Create vocabulary pathways or cheat sheets for high tech devices

The typically developing child will have been exposed to oral language for approximately 4,380 waking hours by the time he begins speaking at about 18 months of age.

If someone is using a different mean to communicate and only has exposure to that system two times a week, for 20 – 30 minutes each, it will take that person 84 years to have the same experience with his system that the typically developing child has with spoken words in 18 months!!!

(Jane Korsten, Author of Every Move Counts)

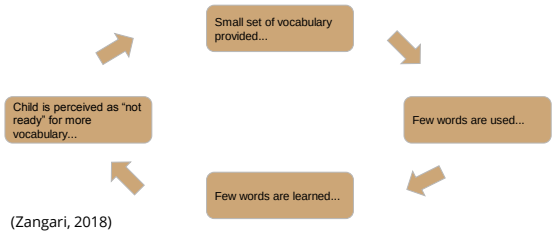
Teaching vocabulary

How do children "learn" new words?

Understanding it... Using it...

Saying and using new words, builds our comprehension of them. Learning vocabulary depends a great deal on using the word... (Zangari, 10.2.18)

Typical AAC situation⟶ "readiness model"



(Zangari, 2018)

Improving vocabulary learning in students who use AAC...

- Provide access to larger vocabulary sets
- Make learning targets explicit
- Use discourse based instruction
- High levels of exposure to targeted words
- Practice newly learned words in a variety of contexts
- Use contrast
- Engage learner in authentic instructional activities

(Zangari, 2018)

"Language grows out of language. Language doesn't grow from silence. To learn more words, you have to HAVE more words."

(Baker, 2015)

Ideas...

1. Make vocabulary targets explicit
2. Vocabulary word walls
3. Use conversationally based instruction to teach vocabulary
4. Make the vocabulary and activities personally relevant
5. Consider special interests
6. Use contrast (big/not big rather than big/little)

A framework for semantic instruction in AAC⟶

1. **Focused language stimulation**
   a. lots of exposure and auditory bombardment of the word
   b. Use of word in primary context first
   c. Provide a student friendly definition (ex. Opinion- 'what you like' OR Equal-'the same')
   d. Student production of word
   e. Discuss it (metalinguistics)
2. **Explicit Instruction**
   a. Teaching vocabulary in a direct way
   b. Creating opportunities
   c. Goal driven/targets
   d. Requires planning
   e. structured

3. Elaboration and Solidification

a. Enjoyable activities designed to solidify understanding
b. Practice using vocabulary
c. Word sorts, matching activities

4. Ongoing Experiences

a. Move on to new words, but keep providing opportunities for receptive exposure and expressive use of previously targeted words

4. Develop a Plan

Start simple...

1. Create a list of activities throughout the day (daily schedule)

1. Select activities to start with (consistency, low cognitive load, enjoyable, motivating)

1. Create a plan (environment, language, prompting and strategies)

Daily opportunities to use CORE

1. Shared Reading
2. Independent reading
3. Independent writing
4. Alphabet knowledge/Phonological awareness
5. Math
6. Specials
7. Vocational education
8. Art
9. Must
10. Lunch
11. Personal care
12. Arrival and departure

https://www.youtube.com/watch?v=pS5CWWt8Uuw

Halloween Story

https://www.youtube.com/watch?v=zXPJeCqmEUw

Pop Up Pirate

https://www.youtube.com/watch?v=7uZITf0BygA

Hungry Hippos

https://www.youtube.com/watch?v=JYibfN9i4WE

Student reading with his device

Ideas to increase classroom participation:

1. Create a **positive communication environment.**
2. Provide wait time.....**PAUSE** time is very important for our users.
3. Provide or seek **support** when needed.
4. Add **photographs** to communication tools to support social interactions with peers.
5. Give your AAC users at least one **communication "job" a day**.
6. Make sure the device is **available at all times**. The student may not need to use the device for every interaction or activity, but they should always have access.
7. **Make a plan**. Know when, where and why the device will be used.

5. Prompt and Support

Prompting and Support:

Expect to provide a lot of support-

1. Visual Masking
2. Increase border width
3. Descriptive talking
4. Feedback
5. Penlight/light cue
6. Verbal, Gestural, Physical cues

Prompting and Support:

Visual Masking→

Prompt and Support:

Descriptive Talking→

Re-define a word that you do not have access to, with words that you do.

- **"Flexible"** easy to move
- **"Stiff"** hard to move
- **"Evaporate"** change and go away
- **"Liquid"** move easily, not all in one space

Prompt and Support:

Once a student communicates in any way, we need to:

- ACKNOWLEDGE the speaker
- CONFIRM that you heard
- EXPAND the message

Prompt and Support:

By following a **Prompt Hierarchy**, it allows children the opportunity to perform the desired behavior without being prompt dependent.

1. **Pause**
2. Indirect Nonverbal Prompt (i.e. facial expression indicating ?)
3. Indirect Verbal Prompt (i.e. Now what?)
4. Request a Response (i.e. Tell me what you need.)
5. Gestural Cue
6. Partial Verbal Prompt (i.e. You want.....?)
7. Direct Model
8. Physical Assistance

Positive AACtion Information Kit for AAC Teams Rocky Bay 2010

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