

# AAC IMPLEMENTATION

Keeping it simple and effective!

Presented by: Gretchen Storm MS, CCC-SLP

Introduction!

## Agenda

- Types of AAC Users
- Considerations
- Modeling to Teach
- AAC Goals
- Tools Available for Implementation
- Coaching/Cuing  
(parent/teacher/paraprofessional coaching)

## AAC Users

- Verbal
- Partially Verbal
- Non-verbal
- Typical Motor Coordination
- Complex Motor Coordination
- In-tact Vision
- Vision Deficits
- Word Finding Challenges

## Considerations

- Access Method
- Device Vocab
  - What are we looking for in a vocabulary?
    - Growth?
    - Word prediction?
    - Keyboard?
    - Symbol type
    - Layout?
- Tools within the device available
- Resources
  - Websites for sharing information
  - Downloadable files
  - Activities available within the device to teach

What is the difference between the options?

### Access

- Direct Select (with extremity)



- Eye Gaze



- Switch Scanning





## Symbol Options

Minspeak



PCS (Boardmaker)



Symbol Stix



## Current Device and App Companies

### Device Companies

Prentke Romich Company (PRC)  
Tobii Dynavox  
Saltillo  
FRS Solutions

### App Companies (with robust vocabulary options)

TouchChat  
LAMP  
CoughDrop  
ProLoQuo2Go  
GoTalkNow  
Speak for Yourself

## Devices on the Market! Company: Saltillo

### NovaChat

- Android based
- Symbol Sets
  - Symbol Stix and/or PCS Symbols
  - Option for LAMP (Minspeak vocab)
- Core Vocabularies
  - Vocab from 15 buttons per page to 120 buttons per page
- Screen Sizes
  - 5 inches to 12 inches
- Keyguard Options
  - hinged (comes with a set for several vocab)
  - fixed (comes with one customized keyguard)
- Switch Scanning Options



[www.saltillo.com](http://www.saltillo.com)

### \*\*Cool Features\*\*

- Phonics Keyboard
- Visual Scenes
- Home/School News
- Literacy Pages
- Siri and Alexa Pages

## Devices on the Market!

[www.prentrom.co](http://www.prentrom.co)

### Accent

- Tablet Based
- Symbol Sets
  - Minspeak
- Core Vocabularies
  - PreStored Vocab from
- Screen Sizes
  - 8 inches to 12 inches
- Keyguards
  - Keyguard or Touch Guide
- Switch Scanning Options



### \*\*Cool Features\*\*

- Phonics Keyboard
- Visual Scenes
- Literacy Pages
- Can plug in to the computer and type directly into a Word Document

## Devices on the Market! Company: Tobii Dynavox

[www.tobiidynavox.com](http://www.tobiidynavox.com)

### Eye Gaze Device

- Windows Based
- Symbol Sets
  - Symbol Stix and/or PCS Symbols
- Core Vocabularies
  - Vocab Types
    - Snap Scene
    - Snap + Core First
    - Communicator
    - Grid 3
- Screen Sizes
  - I-12 (12 inches) or I-15 (15 inches)
- No Keyguard Option
- Switch Scanning Options



### \*\*Cool Features\*\*

- Eye FX and Look 2 Learn Eye Gaze Learning Programs
- ALL Literacy Program
- Environmental Controls

## Devices on the Market! Company: Forbes AAC

[www.forbesaac.com](http://www.forbesaac.com)

### ProSlate

- iPad Based
- Pick your app
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- Screen Sizes
  - ProSlate 8 (8 inches) OR ProSlate 10 (10 inches)
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  - Only for specific apps and only magnetic
- Switch Scanning Options
  - Only with specific apps
    - TouchChat and GoTalk apps scan well



### \*\*Cool Features\*\*

- Detachable Microphone (can be worn around the neck)
  - Specify NOT fixed in report



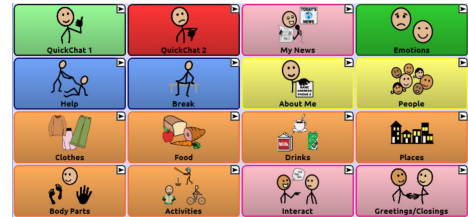
## What is the difference between the vocabulary options?

### • Vocabulary

- Simple Pragmatic Organization (Functional Language)
- Grammatical and Noun Categorical Organization
- Context Based Messaging (Visual Scenes or Grids)
- Single Message Core Vocabulary
- Multi-Meaning Core Vocabulary

• These types of language representation systems have research supporting their efficacy as tools to assist non-verbal communicators in developing and using language. Robust vocabulary systems will often contain more than one type.

## Simple Pragmatic Organization (Functional Language)



## Grammatical and Noun Categorical Organization



## Context Based Messaging (Visual Scenes or Grids)



## Single Message Core Vocabulary







## Multi-Meaning Core Vocabulary








## Device Screens

Static Screen	Dynamic Screen
Screen doesn't change How much can the vocabulary grow? How much work will it be to edit/grow the vocabulary?	Screen changes as buttons are pushed How basic do the vocabularies start? How complex is the most complex pre-made vocabulary? How flexible is the programming? What is the vocabulary based on? Is it predictive?
 	 

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PCS (Boardmaker) 

Symbol Stix 

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www.salttillo.com

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## What is Core Vocabulary?

- Messages and words that are frequently used by many individuals across many contexts. This vocabulary typically consists of "functor" words such as "is, was, he, she" and common nouns and primary verbs (e.g. person, like, want).  
(Beukelman & Mirenda, 1992)



## Classes of Words – CORE vocabulary

- VERBS:**
  - Go, get, do, want, like, make, play, stop
- ADJECTIVES:**
  - Big, little, red, funny, wet, dry,
- PREPOSITIONS:**
  - Under, over, on, off, in, out
- PRONOUNS:**
  - I, my, you, yourself, his, her, she, it
- INTERJECTIONS:**
  - Yes, no, please, all done, cool, hey
- QUESTION WORDS:**
  - What, where, when, why
- ADVERBS:**
  - Here, there, always, never, not

What class of words is missing?

**NOUNS**

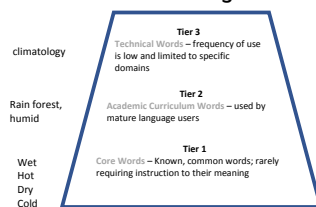
## Fringe Vocabulary

- More specific than core vocabulary
- May be different for different people
- Mostly nouns



## Core Vocabulary and AAC

### 3-Tier Model for Choosing Vocabulary



Developed by Isabel Beck

## CORE VOCABULARY – AAC Users

- Words that are the "lowest common denominator" of language
  - Rocket: big thing, fire under, go up fast, go far
  - Volcano: hot come out, hot mountain
- Core words are words that can be used in multiple situations
  - Playdoh/ legos/ iPads/stories/academics/social

## Fry's instant 100 sight words vs. 100 Core words



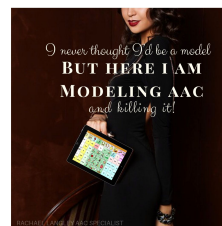
Word	Word	Word	Word
the	and	is	in
to	of	it	on
at	by	for	with
from	as	but	or
so	that	this	about
into	between	toward	under
over	above	below	beside
opposite	near	far	nearby
distant	close	farther	further
less	more	fewer	greater
smaller	bigger	longer	shorter
wider	narrower	deeper	shallower
higher	lower	older	younger
faster	slower	quieter	louder
softer	harder	easier	harder
softer	warmer	colder	warmer
colder	warmer	colder	warmer
colder	warmer	colder	warmer
colder	warmer	colder	warmer



## Resources Available

- Word Finder
- Plug in to type directly into Word
- Data Logging
- Phonics Keyboard
- Sharing
  - Vocab Files
  - Things Said
- Websites for sharing files
- Ability to write with the symbols on the device
- Support reps
- Etc.

## Modeling



## What do we need to remember about modeling?

1. It's similar to learning verbal language
  - I think of it as typical language therapy with visuals to point to as I go.
2. Make it as natural as possible
  - Incorporate activities that are already being done at home or in the classroom
3. You owe it to the user to be one step ahead of them on their device.
  - If needed, take time to practice on their talker outside of therapy sessions to ideally be able to expand on their language just as you would for someone who is verbal!

## How is modeling typically viewed?

"Make sure the student uses the talker \_\_\_\_ times per day."

"Use your talker!"

"Touch \_\_\_\_."

"Make sure to show the student what to touch so they can make the sentence on their talker."

## Meghan Conover's Adaptation (Colorado Consultant for Saltillo)



Adapted from Gayle Porter



Adapted from Gayle Porter



WHAT HAPPENS WHEN YOUR  
LANGUAGES DON'T MATCH?



Adapted from Gayle Porter

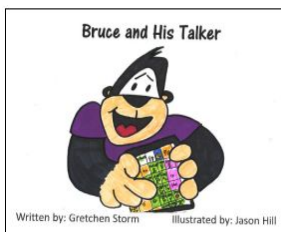
What can we do?

**Model - Teach others to use the device**  
**Don't expect that they know it!**

#### Considerations

- Can't model if you don't know the device
- Encourage everyone to use "Word Finder"
- Teach vocabulary location through shared reading and structured errorless activities
- Doesn't matter the symbol set but have to specifically teach icon location in each device

**Bruce and His talker**



**Modeling without expectation: talking to a student  
without expecting them to answer.**

- Self-Talk
    - Example: Talk to your self saying things like "get out", "make it hot", "wash it", "put it away", etc. while in the kitchen.
  - Push buttons to mirror verbal speech when talking to the user and when talking to others in the user's presence.
  - Use low tech visuals with sentence strips to model communication with symbols in other ways than on the speech generating device.
- \*Check out Saltillo's website at [www.Salttillo.com](http://www.Salttillo.com) for a pre-made core-board!*



<https://www.youtube.com/watch?v=XBROVLF1Clo>

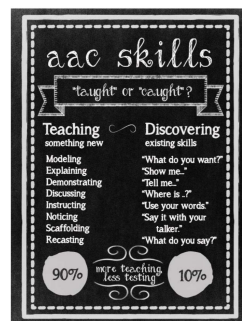
## Modeling without Expectation

- 
- Learn
- Model ask questions try again
- allow time Keep the device ready
- Presume Competence
- Listen model more
- Laugh smile Push all the Buttons
- In the world of AAC we always...
- Keep Modeling
- Respect ALL communication
- Do More Than Request
- Use core vocabulary Be a good listener

- Use the communication device to self talk and comment on what other students are doing.



- Users don't learn the parallel between verbal communication and communication using a device.
- Users will likely not use a communication device if no one else is using one.
- If a user is asked to "say it on their talker" it is placing an extra demand on their already demanding communication situation.
- The user will become frustrated if we ask them to repeat what was already communicated (signed, gestured, spoken), again on their communication device.





- [www.qacintervention.com](http://www.qacintervention.com)

*Give Me Bones, and I'll Make Soup!*

**WHAT:** When a typically developing 9-month old says "bah" parents jump to assign meaning. "You want your: Bottle? Baby? Boppy?" Unfortunately, when students explore their AAC systems, just "hitting buttons" we often assume that they don't know, rather than recognizing this as exploration and giving helpful feedback. See this video for a great explanation! <http://youcpl.org/expert-videos/intro-to-sac/>

**WHY ATTRIBUTE MEANING?** We do this naturally with students who are developing speech. If we attribute meaning for people who are learning AAC:

- It sends a message of competence
- We can help students learn what words or phrases mean in that context

#### HOW TO SUPPORT BY ATTRIBUTING

**HOW TO SUPPORT BY ATTRIBUTING**  
**MEANING:** Just remember back to listening to children babble and trying to think of possible meanings. Have fun with it! If the student says anything that could possibly be meaningful in the situation, go with it. Ex: It's snack time and the student hits WHAT. You say WHAT are

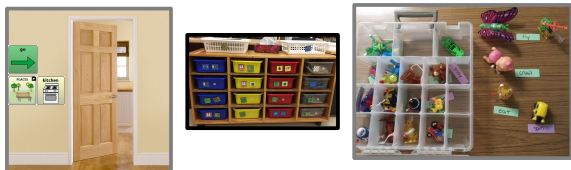
**Student Explores** → **Partner Attributes Meaning**

Dr. Caroline Ramsey Musselwhite Tin # 2, 2018

Context	Student Says	Partner Attributes Meaning!
Waiting for the bus	WANT GET	I think you WANT to GO home! Did you GET your backpack? Yes!
Doing art	CAN COME	CAN I HELP you? Yes I CAN! We could ask Jacob to COME LOOK! COME LOOK Jacob!
	EAT	NOT quite time to EAT yet. And we can't EAT that paint!
Reading a book	PUT DO	Oh, should I PUT that in writing? WHAT are they Doing? Let's read MORE.
	ALL	Yep. We have to read ALL of this!
Science Experiment	GO DIFFERENT MAKE?	We should GO ahead and PUT it in? Right. This might be DIFFERENT! Yeah. WHAT are we going to MAKE?!

Dr. Caroline Ramsey Musselwhite Tip # 2, 2018

- Start thinking about how you will prompt others to communicate using visuals not just the user. Use low tech visuals as a reminder/guide.

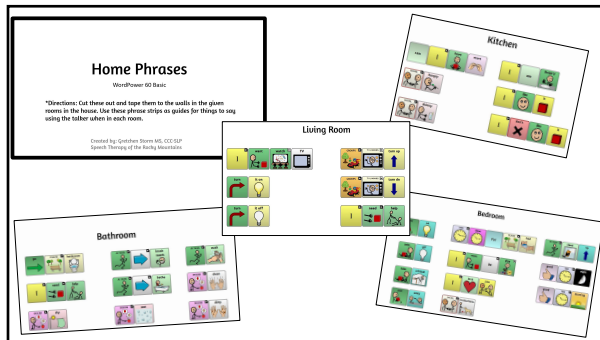


## WordPower 62 Basic

\*Directions: Cut these out and tape them to the walls in the given rooms in the house. Use these phrase strips as guides for things to say the father when in each room.

Created by: Gretchen Storm MS, CCC/SL  
Speech Therapist of the Rocky Mountain

### Living Room



When **PLAYING WITH** a peer, here are some things I can say:



When GREETING others, here are some things I can say:



When **REFUSING** something, here are some things I can say:



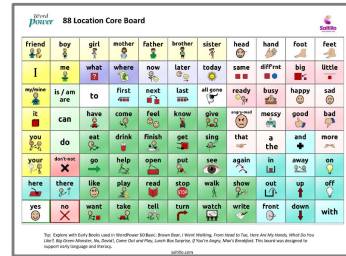
- Read a book while sitting next to the user and use the talker to mention adjectives and verbs as you read. Then close the book and use the communication device to recall.
- To make this really easy take icon sequences and actually tape them into the book.



## Implementation Tools

- Core Boards
- Icon Books

## Core Board



## Classroom core boards – low tech option



## Core board with a few add ons...



## Use Peers

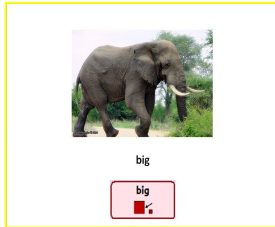
- Peers are amazing tools.
- Consider having peers sit down and read to the student using the student's talker.
  - Can use premade books for this.
  - Consider reading the "Bruce" book. It opens up nice conversation for classmates.
  - Set morning routine questions.

## Pre-Made Icon Sequence Books

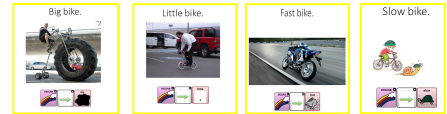
*Teach core vocabulary locations in the communication device while also doing shared reading!*



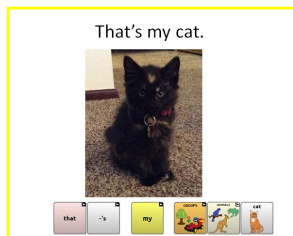
Here is a book where the symbol in the book matches the symbol in the device.



## Targeted Book for Teaching Vocabulary



## Personal information to share



## Something about the weekend



## Monster Adjectives Example



## Where do you go from here?

Move into activities which don't always include the exact pathway.



## Structured Errorless Activities


- Phrase boards to use with activities in the classroom
- Question boards with icon sequences
- Games/Activities with specified phrases

## Phrase boards



- Give specific instructions written on the board
- Something like "Pick one or two phrases that apply to an activity. Flip the board over and Velcro only the target phrase/s to the back."
- Use these phrases yourself and encourage \_\_\_\_ to use the phrase to participate as well.

Give specific instructions -  
example


**Directions:**

1. Pick one of the photos
  2. Put the blue strip in front of the student and show them the photo
  3. Decide if it is he or she (using the choices that look like below) then put it on the blue sentence strip:
-   
**he**




or

  
**she**
4. Put "is" on the blue sentence strip after the pronoun
- is**
5. Give a choice of 3 pictures and have the student pick which one goes with the photo
-   
**eating**

and

  
**playing**

and

  
**sleeping**
- Example: (show-) and (show-)  
 Ask "Which one matches the photo?"
6. Finally use the talker to read the sentence aloud.
  7. Put a new photo and start all over!


SAMPLE

Concrete instructions for carryover are important!

She plays.



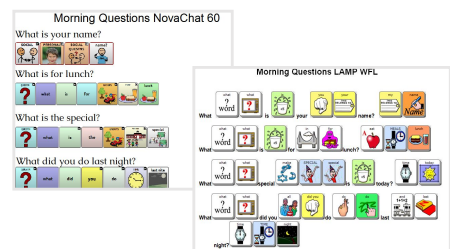
NOW PRACTICE SOME OF YOUR OWN

- \* Remember all actions are "green"
  - \* You can search for actions by the first letter of the action under
- 
- Do an action and try to find that action on the talker.
  - Watch a peer do an action then talk about what the peer just did using the talker.
  - Have the student tell you what action to do.

## Question Boards with Icon Sequences

- Develop question boards with the icon sequences
- I like to start with morning routine type questions and expand from there
  - What is for lunch? What did you do last night? What special do we have today.
- Encourage peers to do this with the student
- Teach peers to gesture prompt if needed and then also to answer the questions using the communication device

## Morning Questions





## Back and forth communication with symbols

Today is \_\_\_\_\_  
 Monday Tuesday Wednesday Thursday Friday Saturday Sunday

It is \_\_\_\_\_  
 It feels \_\_\_\_\_

In Math I \_\_\_\_\_ In Writing I \_\_\_\_\_

In Reading I \_\_\_\_\_ Other: \_\_\_\_\_

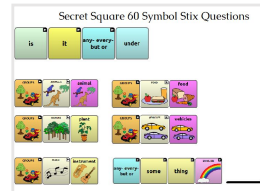
Today's special was \_\_\_\_\_

For lunch I ate \_\_\_\_\_

At recess I played \_\_\_\_\_ with \_\_\_\_\_

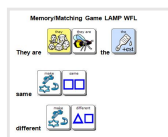
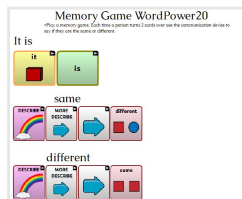
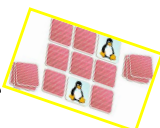
Speech Therapy of the Rocky Mountains, LLC

## Games with phrases



## Game with Phrases

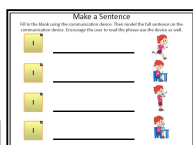
- Simple matching game
- Identify if "same" or "different"



## Use the Core Board to adapt games and books!



Once the user is easily matching the icon pictures to the icons in their communication device it is important to start fading the visual prompts. Ideas for ways to do this:



Find on Teachers Pay Teachers: Gretchen Storm

## Home Activities for Carry Over

**HOME PRACTICE**

We are focusing on the core vocabulary word "I". Below are some phrases to work on at home.

I eat \_\_\_\_\_

I drink \_\_\_\_\_

I dance \_\_\_\_\_

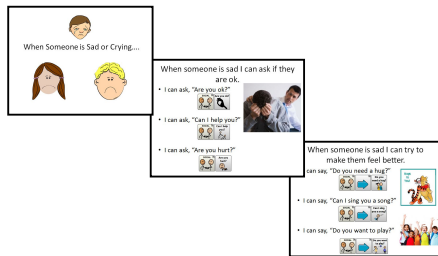
I sit \_\_\_\_\_

I sit down in my location and model "I sit" on the child's communication device every time you sit down. After many models, have them say "I sit" next time they sit down.

Parent Comments:  
 How did it go?



## Example of Using Chat Editor for Social Story



## Editor Software

\*These don't work on Macs unless you can change to a Windows platform



Salttillo- Chat Editor

PRC- NuVoice

MyTobiiDynavox- Communicator, Snap + Core First

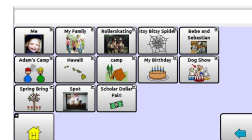
\*\*\*Google these: ALL are available for FREE downloads and use

## Writing Using High Tech AAC

Can also upload pictures taken on the communication device and make conversational topics with them.

• Visual scenes:

• Can then look like this to promote diverse conversational topics.



## Snap Scene



## Home and School News

• To record school news:

• Record using first person

• Example: "Today we got to play basket ball in PE. During lunch I went on the swings with \_\_\_\_."





## Writing with the talker

- Use phonics keyboard to sound out words
- Use the copy/paste feature to make own buttons
- Have student use talker to talk about a picture or video and scribe for them.



## Time to Expand!

- See the talker as a tool that can be used to provide visuals throughout Olivia's day.
  - Example of how to do this during shared reading in class.
  - Choices for writing topics and expansion on writing.
  - Writing.
- \*Magazine example video



Fossil Museum Field Trip  
September 2016



Me friends. I am sit between friend. Same shirt. I am inside. Look at a tree rock (fossil of tree in rock). We eat lunch in the park. I like it. It okay.

## Goal Writing

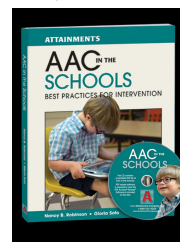
- Utilize information from
  - The QUAD Profile
    - <https://speechdudes.wordpress.com/2015/05/21/the-quad-profile-a-quick-and-simple-language-evaluation-tool/>
  - Communication Matrix
    - [www.communicationmatrix.org](http://www.communicationmatrix.org)
  - Functional Communication Assessment
    - Linguistics
  - AAC Profile
    - Linguistics

## Goal Writing Resources Online

- <http://proacticalaac.org/toolbox/>
  - Go to "Therapy"
  - Select "PrAACtical Goals that Matter Draft 1"
- [www.aaclanguagelab.com](http://www.aaclanguagelab.com)
  - Go to "Resources"
  - "Language Reference Charts"
- <https://www.tobiidynavox.com>
  - Go to "Support & Training"
  - "Resources"

## MORE Resources

## School Resource:



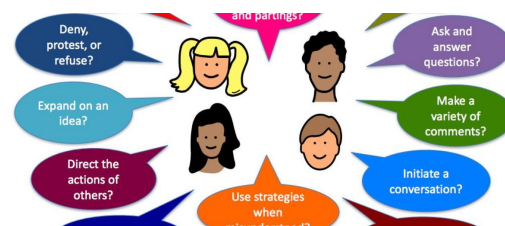


## PRAACTICAL AAC

• <http://praacticalaac.org>



## Facebook Group: AAC For the SLP



## AAC Intervention Website

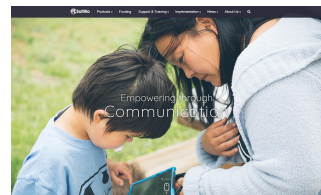
• <http://www.aacintervention.com>



## Free 1 Hour Webinars

[www.salttillo.com](http://www.salttillo.com)

- Support and Training
- Recorded Webinars
- Guest Webinars



## Low Cost Webinars

[www.prentrom.com/education](http://www.prentrom.com/education)



October 2018

Goal Driven Planning: Setting and Meeting Long and Short-term AAC Goals	Wed, October 10 1:00pm - 3:00pm	Michelle Borrie	0.1	\$10.00	<a href="#">MORE DETAILS</a>
10 Real-World Scenarios: Planning Language Lessons from Core Standards	Wed, October 10 2:30pm - 3:30pm	Michelle Borrie	0.1	\$10.00	<a href="#">MORE DETAILS</a>
Apps to Help Grow Language	Wed, October 17 4:00pm - 5:00pm	Jane Lally	0.1	\$10.00	<a href="#">MORE DETAILS</a>
Teaching Language to the Classroom: Speaking, Reading and Writing with AAC	Thu, October 18 3:00pm - 4:00pm	Elaine Pyscott	0.1	\$10.00	<a href="#">MORE DETAILS</a>

## More Webinars

[www.mytobiidynavox.com](http://www.mytobiidynavox.com)

(check under "Resources")

(check under "Support and Training")  
FREE LIVE WEBINARS

### AAC 101

Basic information about augmentative and alternative communication (AAC).

[All AAC 101](#)

### Videos

Helpful training videos to help you use your communication solution to its fullest potential.

[All Videos](#)

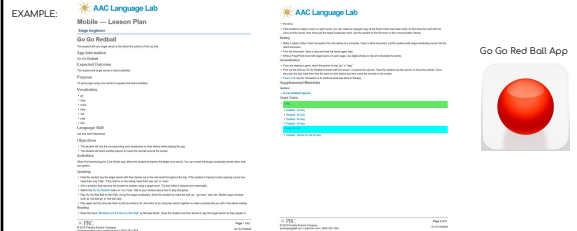


## AAC Language Lab (\$9.95 per year)



## App Lesson Plans for AAC

[www.aaclanguagelab.com](http://www.aaclanguagelab.com)



## Speech Therapy of the Rocky Mountains, LLC

[www.stormspeechtherapy.com](http://www.stormspeechtherapy.com)



Scroll to the bottom of the AAC page to find the resources in the subpages.

[AAC/Device/Software/Books](#) [Parent Resources](#) [QJAD and Activities](#) [Student Department and AAC](#) [Training Boards](#) [Writing for AAC Users](#)

Questions?

Thank you for coming!

Don't hesitate to contact me with questions:  
Gretchen Storm MS, CCC-SLP  
Speech Therapy of the Rocky Mountains, LLC  
Implementation resources available on my website:  
[www.stormspeechtherapy.com](http://www.stormspeechtherapy.com)

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