

Clinical Issues in AAC App Selection for Students with Autism and Related Disabilities

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Disclosures



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Topics for Today

- » AAC app features
- » AAC app selection process
- » Tools and resources for the feature match process
- » Apps for assessment & materials
- » Case examples & clinical issues

AAC App Features



Take A GULP



- » **ASK:** “What do I want the student to be able to do with this app?”
- » **GET** a comprehensive list of AAC apps.
- » **USE** a feature match approach to ensure a good fit.
- » **LOOK** for app reviews & talk with knowledgeable users.
- » **PLAY:** Get a version to explore & use.



ASK:

“What do I want the student to be able to do with this app?”

- » Ultimate goal is for the students to be able to convey:
 - > Anything they wish
 - > To any communication partner
 - > In any setting or activity



What is/are the primary role(s) will it serve?

1. As the main means of functional communication
2. As a language learning tool
3. As a clarification tool
4. For specific situations and contexts



Determine the Purpose

» Identify intermediate steps & short term goals

- > For the student
 - + Generative language?
 - + Choicemaking & requesting?
 - + Support literacy learning?
 - + As a back-up system?
 - Verbal communicators
- > For the team
 - + Did she just say that??



Determine the Purpose

» Identify intermediate steps & short term goals

> For the team

- + Early success
- + Positive regard
- + Strong implementation



Sometimes, the best AAC option is defined as much by the needs of the student, and more by the needs of the other stakeholders.

- » The best AAC app may be the one that gets family and team buy-in.
- » Good implementation of an appropriate app may give us better outcomes that poor implementation of the perfect app.



GET:

A comprehensive listing of AAC apps



Jane Farrall's Website

- » <http://bit.ly/1sYkRkm>
- » AAC App Categories
 - > Pictures only
 - > Picture symbols with text
 - > Text only



Symbol-based Apps



- » Ability to customize/add cells with images and text
- » Ability to organize vocabulary into a multilevel system
- » Presence of good quality pre-programmed page sets, preferably based on a core vocabulary; Availability of additional page sets
- » Symbol library available; Ability to import own images
- » Ability to sequence language in a message window
- » Ability to add text/symbols to message window
- » Quality and choice of voice or ability to record speech
- » Ease of programming; Support with programming issues
- » Images can be supported with text
- » Ability to also use to text-to-speech mode.
- » Alternative access options
- » Ability to alter access settings




Text-to-Speech Apps

- » Choice of keyboard display
- » Word prediction
- » Ability to save text for future conversations/display history of conversations for easy retrieval
- » Message window options (e.g., speak word, speak whole sentence)
- » Ability to edit text in Message Window
- » Alternative access options
- » Quality and choice of voice
- » Ability to alter settings through all access methods
- » Ease of use/programming
- » Support with programming issues




TITLE	DEVICE	SYMBOL SYSTEM	PRE-PROGRAMMED PAGES & CUSTOMISATION	VOICE OUTPUT & SPEECH	ACCESS OPTIONS
 Abilipad AU \$24.99 US \$19.99 v4.1.1	iPad	Picture library with over 150,000 images	A great writingApp for the iPad - Abilipad can also be used as an AAC App. Custom keyboards can be created with pictures or text and linked to each other. A large message window at the top allows the user to combine text and pictures and have it spoken aloud. Typing is supported with word prediction and a spell check.	Acapela voices, including male Australian, female Catalan, Spanish, German, French, British and	Direct access and bluetooth keyboard
 VidaTalk - Multilingual Edition AU \$239.99 US \$189.99 v1.0	iPad	Custom symbols	AAC app with text-to-speech and whole words and phrases. Pages and TTS available in Spanish, Arabic, Chinese, Farsi, French, Haitian Creole, Korean, Russian and Vietnamese	Male and female synthesised speech.	Direct access.



AAC Ferret App Spectronics

Check for updates.



AAC App Assistant

Check for updates.

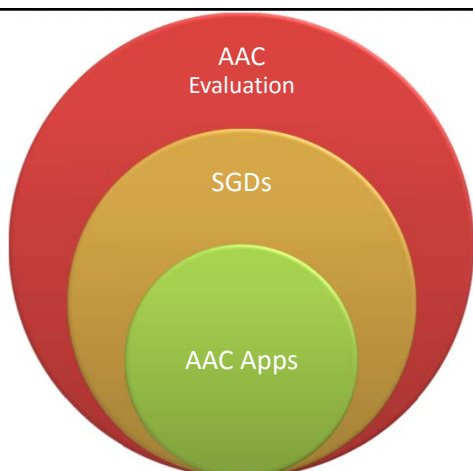


www.aactechconnect.com

USE: A feature match approach to assessment



- » Gold standard for AAC assessment for 20+ years (Shane & Costello, 1994)
- » Predictive assessment
 - > Language representation, symbols
 - > Vocabulary organization, type, amount
 - > Physical access; Hardware features
 - > Word prediction, etc.
- » **Includes device/app trials**



Language Features & Considerations



How is language
organized?



What type of
vocabulary display is
best for this student?



Options

- » Single message, sequential message
- » PECS-style
- » Tree
- » Grid display
- » Visual scene display
- » VSD-grid hybrids
- » Text-to-speech

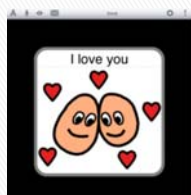
Let's look at some examples. >



These are just examples
(NOT endorsements, recommendations,
or a comprehensive list) >

Single or Sequential Message

- » TapSpeak Button; Sequence
- » Check for updates

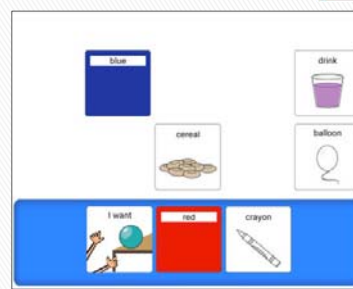


PECS-style Displays

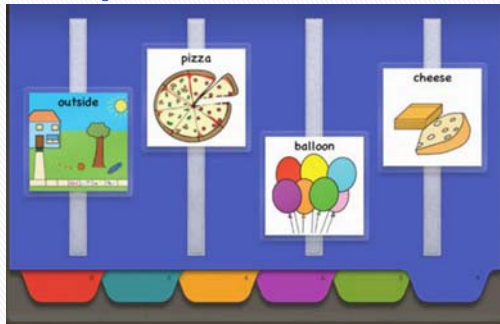
ProxTalker



SpeakAll!



PECS, Phase 3



Grace App



Tree

AACORN



Grid Displays

Sounding Board



Avaz



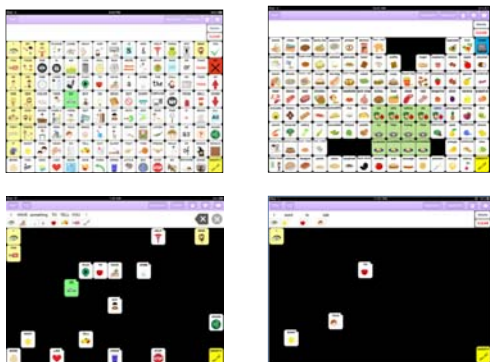
Go Talk Now



The screenshot shows the Proloquo2Go app interface. At the top, a sentence "I love to talk with my friend" is displayed with corresponding icons for each word. Below this is a grid of icons for various words and actions, organized into categories like "People", "Actions", "Little Words", "Chat", "down", "Describe", "Things", "Food", "Fun", "Places", "Help", and "More...". The grid is color-coded and includes a search icon in the top right corner.

The screenshot shows the 'Are you' game interface. At the top, there is a progress bar and a question mark icon. Below the progress bar, there is a grid of icons representing different categories or levels. The icons include various characters, objects, and symbols. The grid is organized into rows and columns, with each cell containing a unique icon. The overall layout is colorful and engaging, designed to be user-friendly for children.

Speak For Yourself



Sono Flex

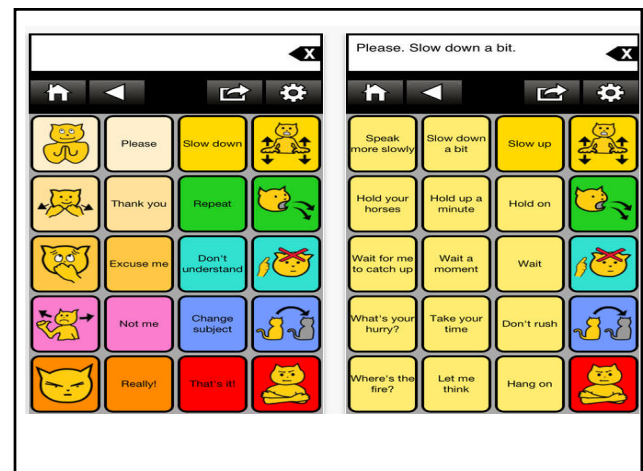
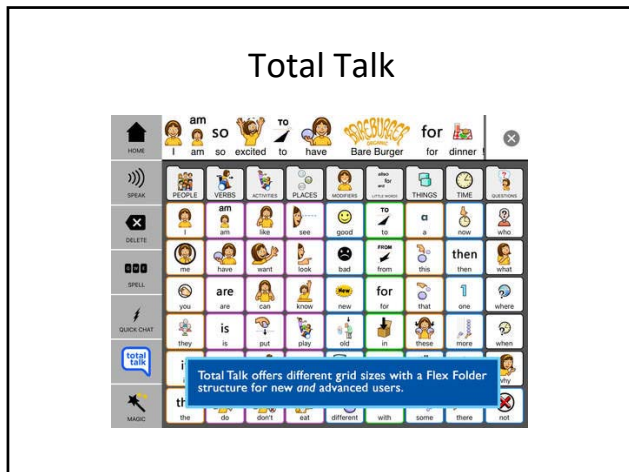


LAMP Words For Life



Compass





Visual Scene Displays

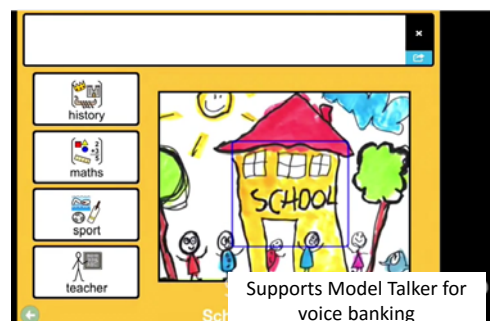
Scene & Heard



Scene Speak



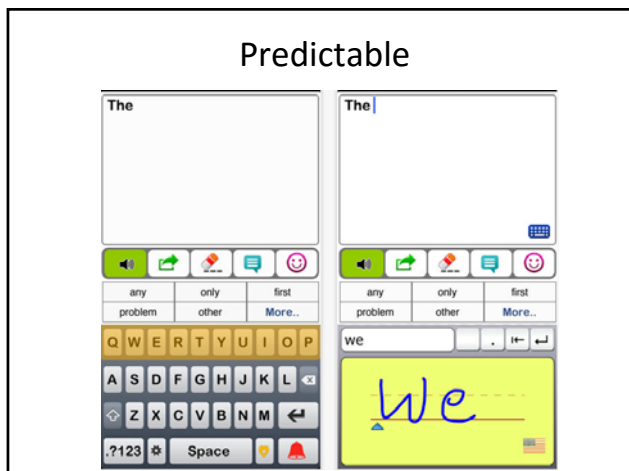
ChatAble



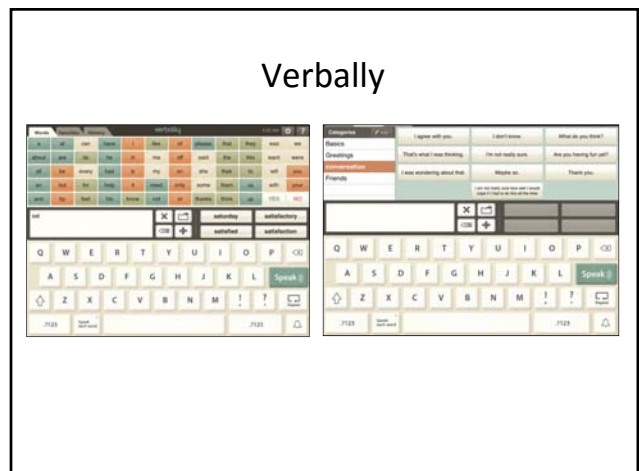
Text-to-Speech



Predictable



Verbally



Proloquo4Text



Rocket Keys



Which visual representations are best for this communicator?

»Unity/Minspeak, SmartySymbols, Pixons, SymbolStix, PCS, LessonPix, Widgit, Mulberry, AACORN symbols, photographs, clipart, etc.



Does it need to be consistent with AAC already used by this student?



What about vocabulary?

- »How many words?
- »What kind? Core vs. Fringe? Academic?
- »Other languages?
- »Ready-made page sets?



How does it address core vocabulary?



- » Well
- » Fairly Well
- » Poorly
- » Not at All



How does it handle morphological changes?

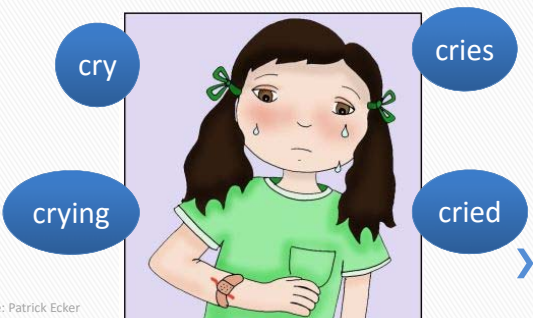


Image: Patrick Ecker

What rate enhancement features are available?

Slot fillers
Word prediction



How will the student access the alphabet?

- » Keyboard or alphabet screen
- » Layout/customization
- » Word prediction



Operational Features That Impact Language Learning

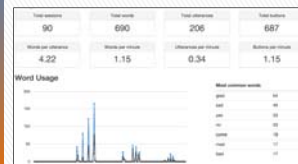
- » What tools are there for language exploration?
 - > Word Finder/Tutor
 - > Babble/Explore

Features That Impact Intervention

- » What is the process for making changes on the fly? (e.g., Hide/Show)
- » Saving sentences on the fly
- » Sharing, social media, interface with other apps

Assessment/Data Features

- » What tools are available for data collection & analysis? (e.g., history, data logs for language sampling, analytics)



Other Features

- » Search feature
- » Saving phrases/sentences on the fly
- » Managing interruptions
- » Back-ups
- » Support
 - > Particularly if you are not using an SGD company



LOOK: To others for app reviews & feedback





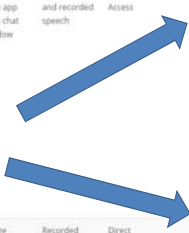
- » App Reviews: Beyond the App Store
 - > Yapp Guru



- > Blogs (e.g., Speechy Musings, Special Apps Special Kids, Home Sweet Speech Room)
- > Jane Farrall's site



TITLE	DEVICE	SYMBOL SYSTEM	PRE-PROGRAMMED PAGES & CUSTOMISATION	VOICE OUTPUT & SPEECH	ACCESS OPTIONS	RATING (OUT OF 5)
 Remote AAC for non-verbal children Free Free version includes 10 free messages. A subscription plan must be purchased for ongoing use. v2.04	iPhone iPad	Has a number of symbols. User can add own images.	Category based AAC app which also includes the option of remote chatting. With the app installed on multiple devices, users can chat face-to-face or remotely. Message window allows user to construct sentences.	Synthesised and recorded speech	Direct Access	★ ★
 Communication System AU \$57.99 US \$45.99 Lite version available v1.4	iPad	Contains a number of photos of common items. User can add own images.	Designed to simulate a Picture Exchange Communication System (PECS) approach to AAC. Communication pages are designed to be stored under categories e.g. bathroom, clothing. Text appears over photos. Once an item is selected, it appears in the sentence strip at the bottom of the page and the sentence strip can be spoken whenever it is visible by pressing it. JOI. The Panda appears in many of the photos (e.g. on the school bus). Existing vocabulary can be added to, edited or deleted. The app also offers the easy	Recorded Speech	Direct Access	★



Other Considerations

- Free and Lite Versions
- One-Time Fee vs. Subscription
- Availability for Trials



PLAY: Get the app to explore & experience



- » Look for a lite version of the app
- » Download an emulator
 - > E.g. Chat Editor
- » Work toward having a mobile device loaded with a variety of AAC apps that staff can borrow to learn them.
 - > Assessment Centers: Reach out to app developers



PLAY: Get the app to explore & experience

- » Contact your state AT project
- » Look at the app from your client's point of view
 - > Which vocabulary set?
 - > What would the starting point be?
 - > How would you expand language w/ this app?



<http://bit.ly/1KPcDDs>



Build Your AAC App Library

- For assessment purposes
- You don't even have to own a mobile device!
 - Set up an account: iTunes App Store, Google Play
- How do you find free/reduced cost apps?
 - Facebook Groups & Pages
 - SLPs Talk Apps
 - iTeach: Apps for the Classroom
 - Amazing Kids
 - Appy Mall: Tech in Special Ed Autism Apps
 - Apps for Apraxia-KIDS



Break

Feature Matching

A process in which a communicator's strengths & needs (current+future) are evaluated & matched to specific features of AAC symbols, strategies, & devices.

(Costello & Shane, 1994; Glennen, 1997)



AAC Feature Match Process

- » Begins with information gathering
 - > Multiple stakeholders: Student & family; teachers, therapists, aides; School & community
 - > "What can he do? What does he need to do? What has been tried? What happened? Top priorities?" etc.
 - > Review of previous speech, language, and communication evaluations



AAC Feature Match Process

- » Purpose-driven observation with quantitative data collection
- » Environmental inventory
 - > Allies and obstacles
 - > Classroom atmosphere
 - > Team functioning



Multiple Stakeholders

- » The more time that an individual spends with our student, the more important it is that we get his/her input.
 - > When we proceed without the input of key stakeholders, we set ourselves up for poor implementation.
 - > "Buy – in" starts with the assessment.



Direct Assessment

- » Assess to attempt to answer specific questions regarding:
 - > Language comprehension
 - > Symbols: Preference, performance, environmental support, history
 - > Expressive communication: Form and function
 - > Language skills
 - > Vision and hearing
 - > Motor skills
 - > iPad skills



In Collaboration with Others

- » Determine what features the student needs in an app
- » Determine which apps have those features
- » Create a 'short list' of AAC apps for trial use



Trial Period

- » Obtain those apps
- » Try a few *appropriately programmed* apps to see which one is most promising.
- » “How long should the trial period be?”
 - > It depends. It can be anywhere from a few sessions to a couple of months, depending on the student.
 - > The slower the student learns, the longer the process.



Trial Period, continued

- » Begin teaching use in natural contexts & therapy
 - > Frequent models of competent AAC use (aided language input)
 - > Consider providing full support (e.g., most-to-least prompting)
 - > Focus on teaching, NOT testing
 - > Activities and messages that are high in motivational value
 - > Support for frequent use



Trial Period, continued

- » Probe periodically (not often) to assess learning but only AFTER the team has been doing the other things for awhile.
 - > "Is he starting to 'get' it?"
 - > "Does this have potential?"
 - > "How does his skills with this compare to use of other AAC?"
- » Repeat with other apps, then bring to team for discussion & decision



"What if I can't do a full feature match process?"



- » Retain the key elements

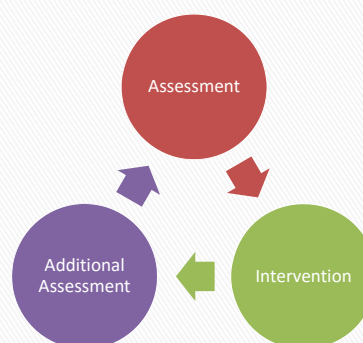


Limited Feature Match

- » Pre-selected range of options
- » Consider key features
- » Trial data
- » Data-driven recommendation



Dynamic Process



Checklists & Rubrics

- | | | | | |
|------------------|----------------|--------------|----------------------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Does not support | Little support | Some support | Considerable support | Fully supports |



Tools & Resources

- » App Lists & Comparison Tools
 - > www.JaneFarrall.com
 - > (AAC Ferret)
 - > (AAC App Assistant)
 - > AAC App Feature Match Rubric
 - > Rubric for Evaluating the Language of AAC Apps



Fonner & Marfilus

**Scott Marfilus
& Kelly Fonner**

Assistive & Educational
Technology Consultants
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<http://bit.ly/1XghYuF>

Feature Match Checklists

Page Directory:

2. Electronic Readers
3. Portable Electronic Readers
4. Portable Writing Systems
5. Talking Word Processors
6. Word Prediction Systems
7. Accessible Testing Software
8. OnScreen Keyboards
9. Alternative Keyboards
10. Webbing, Graphic Organizers & Outliners
11. Symbol to Text Systems
12. Task & Behavior Support Software
13. Portable Task & Behavior Supports
14. AAC Apps



Feature Match Listings page 15

Features of AAC (Augmentative & Alternative Communication) APPs (Applications)

Portable Operating System <input type="checkbox"/> iPad <input type="checkbox"/> iPhone <input type="checkbox"/> iPod <input type="checkbox"/> Android <input type="checkbox"/> Other	Input Features <input type="checkbox"/> Access by _____ Touch _____ Pen/Stylus _____ Switch _____ Joystick _____ other <input type="checkbox"/> Input Cueing <input type="checkbox"/> Auditory Cue <input type="checkbox"/> Visual Cue (highlighting/graying) <input type="checkbox"/> Adjustable Timing <input type="checkbox"/> Rate of Selection _____ Delay <input type="checkbox"/> Delay on Call <input type="checkbox"/> Key Latching <input type="checkbox"/> Set Screen Locations/markers/Spots/Markers <input type="checkbox"/> Camera
Other Features <input type="checkbox"/> Free <input type="checkbox"/> Life Version Available <input type="checkbox"/> Cost \$ _____ <input type="checkbox"/> Back up/Portable <input type="checkbox"/> Battery Life _____	Visual Appearance <input type="checkbox"/> Landscape View <input type="checkbox"/> Portrait View <input type="checkbox"/> Type of Board <input type="checkbox"/> _____ Text only _____ Pictures <input type="checkbox"/> Digital Images <input type="checkbox"/> Customizable Boards <input type="checkbox"/> Number of Cells <input type="checkbox"/> Size of Cells <input type="checkbox"/> Intermix Cell Sizes on board <input type="checkbox"/> Color of Cell Background <input type="checkbox"/> Color of Board Background <input type="checkbox"/> Symbols on Call <input type="checkbox"/> _____ Text _____ Pictures <input type="checkbox"/> _____ Picture _____ Symbol <input type="checkbox"/> _____ Digital Image _____ Tactile <input type="checkbox"/> Other
Output Features Visual Feedback <input type="checkbox"/> Key Appears depressed when active <input type="checkbox"/> Message Display on Screen <input type="checkbox"/> Text Message Display only <input type="checkbox"/> Symbol Display <input type="checkbox"/> Color Display <input type="checkbox"/> Size of Display _____ Auditory Feedback <input type="checkbox"/> Text-to-Speech Synthesis <input type="checkbox"/> _____ Voice Output <input type="checkbox"/> Digitized/Recorded Sound <input type="checkbox"/> Key Click	Processing Features <input type="checkbox"/> Static Board (Single Level) <input type="checkbox"/> Dynamic Boards (Multiple Level) <input type="checkbox"/> Keyboard Layout <input type="checkbox"/> QWERTY _____ ABC <input type="checkbox"/> NEMO _____ DVORAK <input type="checkbox"/> Frequency _____ other <input type="checkbox"/> Customizable Layout <input type="checkbox"/> Cell Functions <input type="checkbox"/> Speak only _____ Branch/Linkonly <input type="checkbox"/> Speak and Branch/Link <input type="checkbox"/> Function <input type="checkbox"/> Branching Linking <input type="checkbox"/> _____ to another layout _____ to move <input type="checkbox"/> _____ to internet _____ to application <input type="checkbox"/> Rate Emphasis <input type="checkbox"/> Word Prediction <input type="checkbox"/> Abbreviation Expansion <input type="checkbox"/> Scripted Macros <input type="checkbox"/> Smart Branching
Scanning Features <input type="checkbox"/> Number of Switches _____ 1 Switch <input type="checkbox"/> 2 Switch _____ 3 Switch _____ Multiple <input type="checkbox"/> Step Scanning <input type="checkbox"/> Automatic Scanning <input type="checkbox"/> Inverse Scanning <input type="checkbox"/> Organization of Scan <input type="checkbox"/> _____ Linear <input type="checkbox"/> _____ Circular <input type="checkbox"/> Row/Column <input type="checkbox"/> Column/Row <input type="checkbox"/> Group/Item <input type="checkbox"/> Block/Row/Column	



Katie Lyon



Autism Apps Rubric

Each app in the app lists is rated according to the following system:

	Five ★★★★★	Four ★★★★☆	Three ★★★☆☆	Two ★★☆☆☆	One ★☆☆☆☆
Independence	Child can navigate, launch and use app independently	Child requires occasional assistance to launch app but can navigate independently	Child requires regular assistance to launch app and how to use it.	Child requires constant assistance to navigate, launch and use app.	Child requires constant assistance to navigate, launch and use app.
Motivation	Child is highly motivated to use the app.	With some prompting child may be highly motivated to use the app.	With some encouragement child may be motivated to use the app.	Child may view the app as "work" and may be easily distracted.	Child is not motivated to use the app.
Feedback	Feedback is specific with data available electronically to user.	Feedback is specific, however electronic data is not available.	Feedback is limited to correctness of responses and child is not able to reattempt answer.	Feedback is limited to correctness of response and child is not able to reattempt.	No feedback provided.
Sensory Friendliness	App has no sound and has appropriate visuals.	Appropriate sounds and visuals.	App contains some sounds or visuals that may be over stimulating.	Unpleasant or over stimulating sounds or visuals.	Unpleasant or over stimulating sounds and visuals.
Customisation	Multiple options to customise the features of the app.	Options to customise the features of the app.	Can customise certain features of the app.	Very limited options for customisation.	Cannot customise app.
Language Skills Needed	No language skills required – this is purely a visual app.	Early language skills required.	Early literacy skills required.	Language and literacy skills required.	High level language and literacy skills required.

Rubric for Evaluating the Language of Apps for AAC (RELAACs; Parker & Zangari, 2012)

<http://bit.ly/1KtSxzJ>

RUBRIC FOR EVALUATING THE LANGUAGE OF APPS FOR AAC: RELAAACs
Howe & Zangari, 2012

PURPOSE: This rubric is designed to help speech-language pathologists compare AAC apps on the dimension of language and communication. It should be used in conjunction with more comprehensive checklists that address a variety of app features, such as those developed by [Sugrue \(2011\)](#) and [MacArthur Inventory \(2012\)](#). When selecting AAC apps for an individual, this rubric should be used in the context of a comprehensive AAC evaluation, which considers a range of strategies and tools.

App Name: _____ Evaluation: _____

App Version: _____ Date of Evaluation: _____

	DOES NOT SUPPORT	LITTLE SUPPORT	SOME SUPPORT	CONSIDERABLE SUPPORT	FULLY SUPPORTS
	1	2	3	4	5
1. Object/action requests, choices	1. No capacity for making requests of desired objects or actions.	2. Very limited capacity for making requests of desired objects or actions.	3. Some capacity for making requests of desired objects or actions.	4. Fairly good capacity for making requests of desired objects or actions.	5. Excellent capacity for making requests of desired objects or actions.
2. Other requests (help, attention, escape, negotiation)	1. No capacity for making requests of help, attention, escape, or negotiation.	2. Very limited capacity for making requests of help, attention, escape, or negotiation.	3. Some capacity for making requests of help, attention, escape, or negotiation.	4. Fairly good capacity for making requests of help, attention, escape, or negotiation.	5. Excellent capacity for making requests of help, attention, escape, or negotiation.
3. Negatives, refusal, protest	1. No capacity for making negatives, refusal, protest, or generative negation.	2. Very limited capacity for making negatives, refusal, protest, or generative negation.	3. Some capacity for making negatives, refusal, protest, or generative negation.	4. Fairly good capacity for making negatives, refusal, protest, or generative negation.	5. Excellent capacity for making negatives, refusal, protest, or generative negation.
4. Social interaction	1. No capacity for making social interaction requests.	2. Very limited capacity for making social interaction requests.	3. Some capacity for making social interaction requests.	4. Fairly good capacity for making social interaction requests.	5. Excellent capacity for making social interaction requests.

<http://bit.ly/1KtSxzJ>

How well does this app support the most frequently used words? Think about common pronouns, helping verbs, descriptors, and conjunctions.

11. Syntax & sentence-building	1. No capacity for syntactic learning or sentence-building.	2. Very limited capacity for syntactic learning or sentence-building.	3. Some capacity for syntactic learning or sentence-building.	4. Fairly good capacity for syntactic learning or sentence-building.	5. Excellent capacity for syntactic learning or sentence-building.
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How well does this app support language competence through word combinations? Think about its capacity for assembling single words into phrases/sentences.

12. Morphology & word forms	1. No capacity for modifying word forms.	2. Very limited capacity for modifying word forms.	3. Some capacity for modifying word forms.	4. Fairly good capacity for modifying word forms.	5. Excellent capacity for modifying word forms.
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How well does this app support language competence by permitting variations of word forms? Think about its capacity for verb conjugation, changing verb tense, singular/plural, comparative/superlative, etc.

13. Narratives & story telling	1. No capacity for telling pre-stored stories or creating new ones.	2. Very limited capacity for telling pre-stored stories or creating new ones.	3. Some capacity for telling pre-stored stories or creating new ones.	4. Fairly good capacity for telling pre-stored stories or creating new ones.	5. Excellent capacity for telling pre-stored stories or creating new ones.
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How well does this app support storytelling? Think about personal narratives (e.g., recounts, accounts), stories, myths, and events.

14. Semantics & new word learning	1. No capacity for planned expansion or extensive restriction in word types.	2. Very limited capacity for planned expansion or significant restriction in word types.	3. Some capacity for planned expansion & some variety in word types.	4. Fairly good capacity for planned expansion & good variety in word types.	5. Excellent capacity for planned expansion & extensive variety in word types.
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How well does this app support the learning and use of new words? Think about organizational features of the app, ability to hide/show and support for exploration of language and lexical diversity.

15. Lexical aspects of this app seem best suited for:	1. Very beginning communicator (not yet using words).	2. Beginning communicator (1 word/cell).	3. Early sentence users (2-5 words using multiple cells).	4. More complex sentence users.	5. Adult-like language users.
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16. Customization (5 poss pts)

1. Either no premade displays or no customizability.	2. Inadequate balance of premade displays & customizability.	3. Moderate balance of premade displays & customizability.	4. Fairly good balance of premade displays & customizability.	5. Excellent balance of premade displays & customizability.
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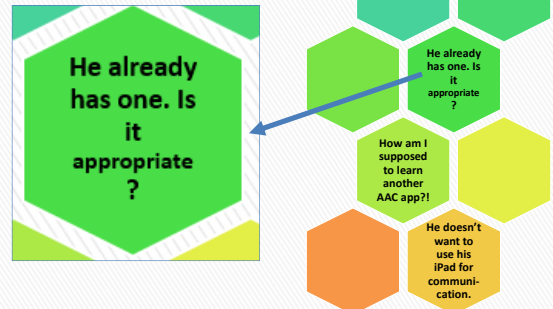
How well does this app strike a balance between being entirely pre-set and fully customizable? Think about how much is pre-stored and how much the user needs to create.

TOTAL _____ out of 75 possible points (Points can be used to compare one AAC app to another.)

Some Common Sense Guidelines

- » Presume competence
- » Maximize the use of whatever the student currently has
- » Keep asking questions and searching for answers
- » Work toward a more optimal process and/or set of tools
 - > Understand the implications of your decisions

Real-world issues

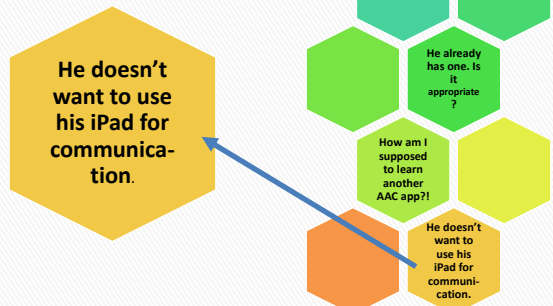


“He already has an AAC app. Now what?”

» Questions to Ask

1. How did he/she get it?
2. What made you pick his particular one?
3. How has he/she been doing with it?
 - + What seems to be working about it?
 - + What's not working?
4. How receptive are other stakeholders to changing?

Real-world issues



Some suggestions

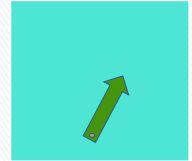
- » Make it a dedicated device
 - > Mobile device for communication only
- » New case that looks VERY different from existing case
- » Guided access
- » Button covers



“But my kid wants to use the app on his own terms, not with ME!”

Strategies to Try

- » Make expectations clear w/ visual supports
- » New app, new rules
- » Make a separate folder for apps that are shared with another person
- » Use a visual schedule
- » Write a social narrative



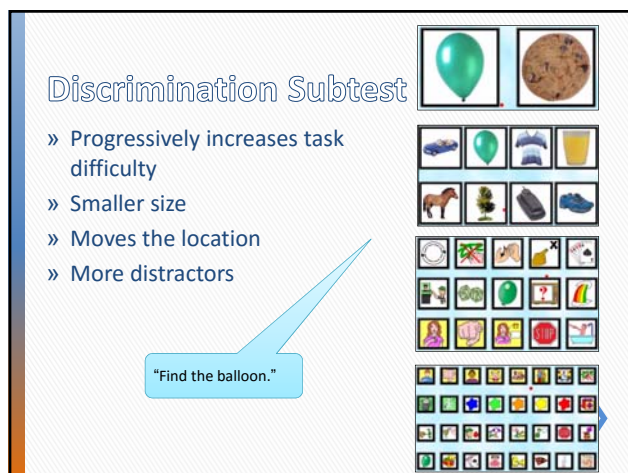
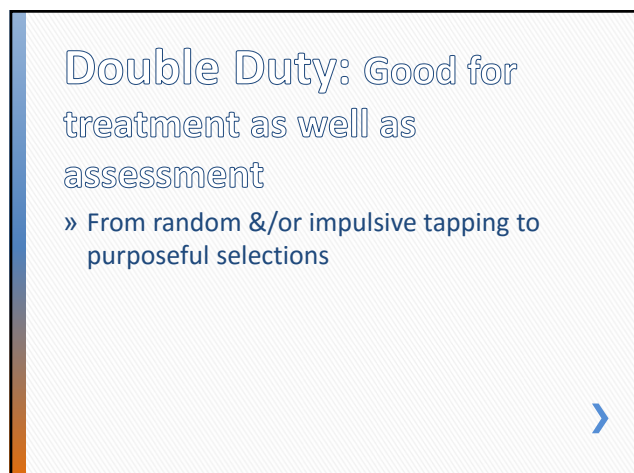
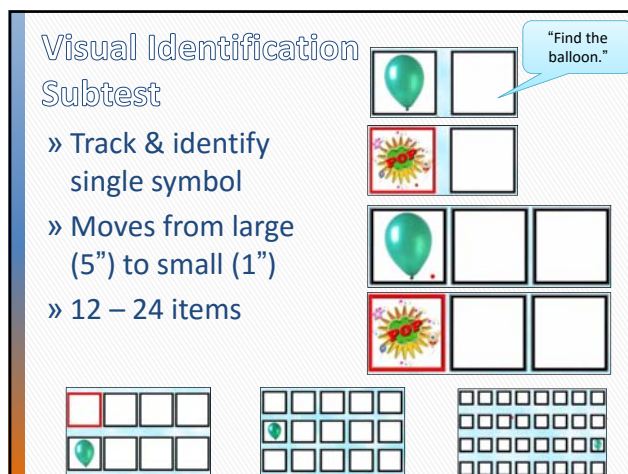
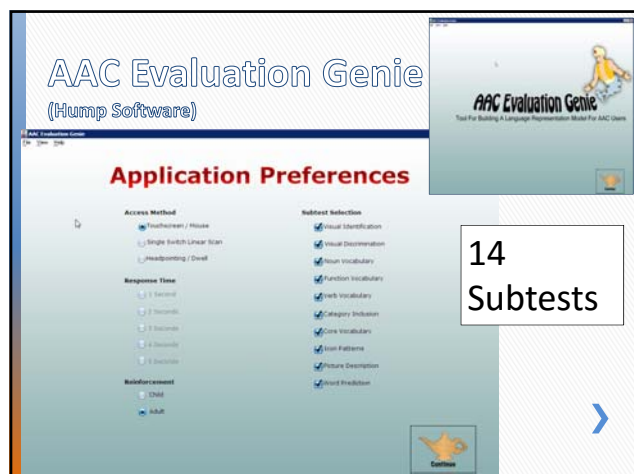
- » I like to do things on my iPad. I look at books, watch videos, and play games. I like to do that alone.
- » Sometimes, other people want to play with me on the iPad. They want to have fun. They want to help me learn. That is good and helpful.
- » It is okay for them to play with me on the iPad. Playing together is good.
- » I will try to share and take turns. They will be happy if we play together.
- » If I feel upset, I can tell them or ask for a break. I know that I will get to play by myself later on.
- » I can have fun by myself. I can have fun with other people, too.

Social Narrative



Apps for Assessment





Noun & Verb Vocabulary Subtests

"Find drink."



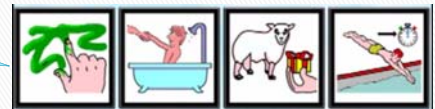
Word Association Subtest

"What goes with a chair?."



Pixon Core Vocabulary Subtest

"Find the word do."



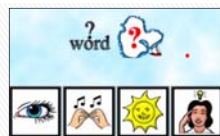
Unity Core Vocabulary Subtest

"Find the word like."



Unity Icon Pattern Subtest

"Where would you find the word listen?"



Picture Description Subtest



Word Prediction Subtest

"Find word that matches this picture."



Results Summary

Name: _____ Date: _____

Visual Identification	Vocabulary Knowledge & Use	Picture Description
5" Field Of 2	Noun Vocabulary	He is coloring a picture
4" Field Of 3	Function Vocabulary	She is going home
3" Field Of 4	Verb Vocabulary	He is drinking (the) juice
2" Field Of 6	Category Inclusion	He is playing
2" Field Of 4	Core Vocabulary	They are playing a game
2" Field Of 8	Icon Patterns	She is drinking (the) milk
2" Field Of 15	Word Prediction	She is eating (the) corn
1" Field Of 15		They are playing
1" Field Of 32		He is sleeping
		He is reading a book

MLU (Words) _____

Gives % Correct for Most Subtests

Calculates Mean Length of Utterance for Pix Description Subtest

AT Eval 2 Go

- » Documentation & report-writing
 - > Background information
 - > Observations and assessment results
 - > Recommendations
 - + Bank of common goals, tools, & strategies
 - + Customize with own goals, tools, etc.
- » Text, audio, picture
- » Exports report for further editing or printing



Apps for Making Materials

- » Custom Boards



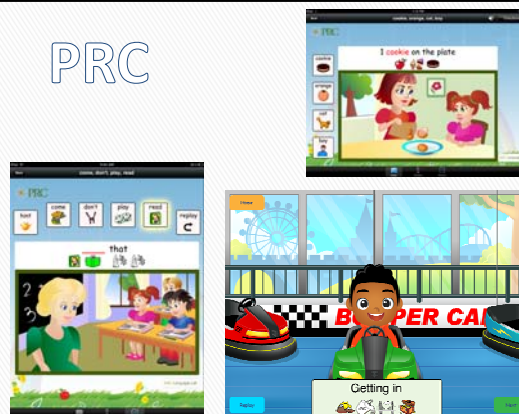
AAC Therapy Apps

- » Speech Tree
- » PRC
- » FreeSpeech

SpeechTree



PRC



FreeSpeech



"Just like a piano alone doesn't make a pianist, nor does a basketball make an athlete, an AAC device alone doesn't make one a competent, proficient communicator. Those who rely on AAC strategies begin as AAC novices and evolve in competence to become AAC experts with SUPPORT, ENCOURAGEMENT, ROLE MODELS, and TEACHING STRATEGIES."

David Beukelman, 1991

- » 20 y/o with ASD and significant intellectual disability
- » IEP goals: Self care (e.g., hygiene, dressing) & life skills (e.g., safety [elopement], meal preparation)
- » Has struggled with:
 - > Object and picture schedules
 - > Matching and picture identification
 - > Choicemaking with objects and pictures
 - > Following single step directions

Garrett

Garrett

AAC App Features

- > Photos, symbols, text
- > Visual scene display for context
- > Grid-like display for less concrete words/messages

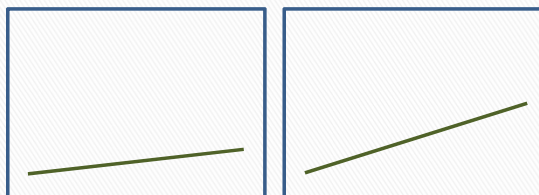
Intervention Issues

- > Build intentionality
 - + Increase purposeful action
 - + Create an 'active participant' mindset
 - + Increase active participation
- > Boost exposure to symbols
- > Matching and picture identification
- > Choicemaking with objects and pictures
- > Following single step directions

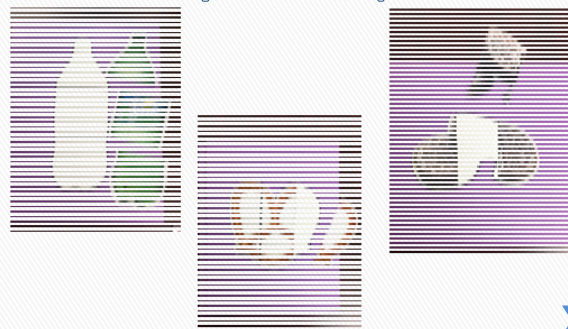


Garrett

- » How can we impact a situation in which the rate of learning has been so gradual?
 - > We need to change his learning trajectory.
 - > What can we do to help him learn faster?



More Symbol Experiences





Communication Book >

Video Modeling

- » Private YouTube Channel
- » Video models of target behaviors
 - > Greetings
 - > iPad use
- » Video self-modeling
 - > Target behaviors
 - > Task expectations



Focal Points:

Commenting, Requesting, Rejecting

- » Vending Machine
 - > Commenting – I like it, I don't like it
 - > Rejecting - No thanks
 - > Requesting – I want + Sprite, money, help
- » Art
 - > Commenting – I like it, I don't like it
 - > Rejecting - No thanks
 - > Requesting – want, glue, help, finished
- » Snack Time
 - > Commenting – It tastes good
 - > Rejecting - No thanks
 - > Requesting – (Snack items)



- » 14 y/o with ASD and apraxia
- » IEP goals: Communication, literacy, math, emotional regulation
- » Has been successful with:
 - > Picture schedules; First/then boards
 - > Low tech AAC to request, protest, comment, and answer questions
 - > Mostly single words
 - > Some 2-3 word sentences
 - > Social narratives
 - > Sight word programs (reading)

Wilson

Wilson

AAC App Features

- > Symbols, text
- > Core vocabulary
- > Room for expansion

Intervention Issues

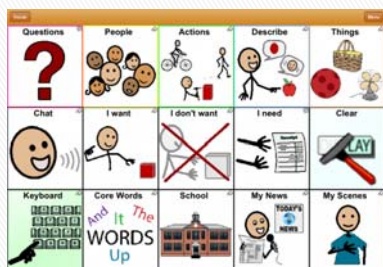
- > Communicate more frequently
- > Larger vocabulary
- > Longer sentences
- > Greater range of communicative intents
- > Make room for exploration
- > Support literacy learning

Clinical Issue

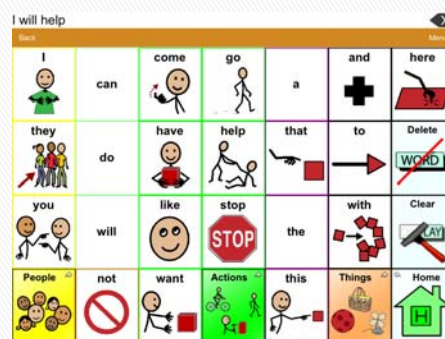
» What do we do when they have already purchased the app?

- > Seems Ideal
- > Appropriate but not ideal
- > Not appropriate

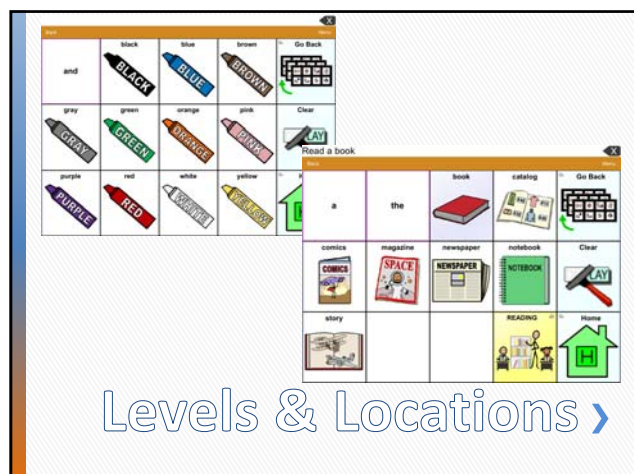
Grid Display



TouchChat
(Multichat 15)



Core Vocabulary

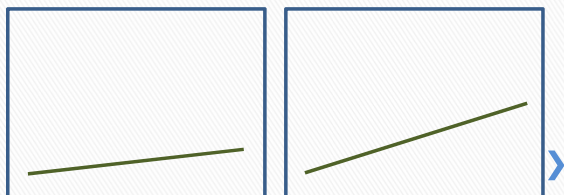


Focal Points

- » Operational
 - > Safe handling
- » Linguistic
 - > Expand single word vocabulary
 - > Increase sentence length
 - > Add new communicative intents
- » Social
 - > Greeting
- » Literacy
 - > Authentic writing
 - > Reading
 - > Phonics

Wilson

» How can we help him learn faster?



Additional Strategies

- » Social Narratives
- » Online books
 - > Tarheel Reader
 - > Pictello
- » Increased writing opportunities
 - > Schedules
 - > Signing name
 - > Science Log
- » Repetition with variety
- » Visual supports



A New Talker



1

People talk in many ways. They say words. They write. They use their faces and bodies. Some people also use Talkers.



2

At Speech, I sometimes use a Talker. I use it to tell Carly what I want, or what I think. Carly uses it, too.



3

We use the Talker when we read on the computer and when we do experiments. The Talker stays at Speech.

It is important to take good care of my new Talker.



4

It is important to keep it safe. My family will be happy to see me take good care of my Talker.



5

When I get my new Talker, I can use it at Speech with Carly and Dr. Z. If I need help, Carly and Dr. Z can help me. I will try to take good care of my new Talker. Carly and Dr. Z will be happy about that.



6

It is important to take good care of my new Talker. It is important to touch it gently. My family will be happy to see me take good care of my Talker.

Social Narratives


Repetition w/ Variety

- » Predictable routine for sessions
- » Thematic therapy
 - > Science book
 - > Experiment
 - + Preview: Gathering materials, reviewing steps (task schedule); making predictions (Science Log)
 - + Conduct the experiment
 - + Document: Review outcomes (Science Log); photos for Pictello story

Sample Sentences

- » I see that.
- » That go up/down.
- » Help with that.
- » You do.
- » Will you help?
- » Do with me.

Sink Or Float?



Steps:

1. Get bin with water.
2. Choose object.
3. Does it sink or float?

Today's Schedule

1. Talk Time
2. Read a Book
3. Rate the Book
4. Science

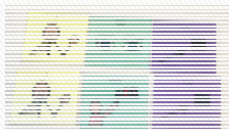
Materials:

- Bin with water
- Lungs
- Car
- Cow
- Pen
- Battery
- Egg
- Shovel

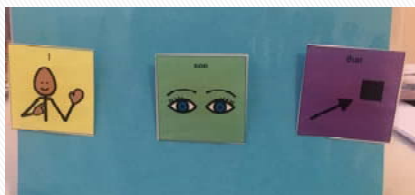
Pictello Stories

- » Document session activities
 - > Engaging reading experience
 - > Demonstrate therapy activities to stakeholders at home and in school
 - > Build interest in photography
- » Developing Pictello stories
 - > Take photos of session materials & action shots
 - > Import into app
 - > Develop narrative
 - > Print as PDF, send code to family

Visual Supports



Use color to teach patterns.



1. Turn your body to the person
2. Look at the person.
3. Smile
4. Wave or say hi/bye

Greetings



Other Clinical Issues

» Best practices mobile devices

- > AAC-only ipad
- > Guided access
- > Cases, speakers, stands, straps
- > Back-up processes (how), schedule (when)



Support for AAC Apps

- Many AAC app options
- Many have free or lite options (however, some are better than others)
- App developers love feedback
- Website often includes content about communication teaching
- Most use social media (e.g., Facebook pages, Twitter feeds, blogs, YouTube channels)



PrAACtical AAC: App Resources



Interested in learning more about Scene Speak by Good Karma Applications? Here are some useful links:

- User Guide
- Creating New Scenes Video
- Creating a New Hotspot Video
- Editing a Hotspot Video
- Using the Settings Menu Video
- Creating a Book Video
- Where to Go for Help
- Knowledge Base and Contact form



Support for AAC Apps

- Many developers have their own PD
 - E.g., Able Net Professional Development: <http://www.ablenetinc.com/Professional-Development>
- Tech in Special Ed/ AAC Appy Mall: <http://www.appymall.com/appystore/AppsforAAC>
- Apps for AAC: <http://appsforaac.net>
- Georgia Assistive Technology-Tools for Life AppFinder: <http://www.gatfl.org/favorite-search.php>



Support for AAC Apps

» Twitter

- > #AACapps, #AugComm, #AAC, #assistivetech
- > Search for app developers

» Pinterest

- Lauren Enders: <http://www.pinterest.com/lasenders/>
- PrAACtical AAC: <http://www.pinterest.com/aacandat/>



Questions?

Thank you!

