

AAC SKILLS ASSESSMENT PROTOCOL

Device Features for Direct Selectors (Touch or Eye Gaze Access).

1 EARLY SKILLS FOR AAC USE:

1. **Cause/Effect:** Does the student understand that touching/looking at a screen causes a response? You can play around with this using a cause/effect app like one of these:

Big Bang Pictures, Big Bang Patterns
Children's Switch and Touch Progression, Teenager Switch and Touch Progression
Counting Songs 1, Counting Songs 2
Peek-A-Boo Barn
Fisher Price Baby
Finger Paint with Sounds (free)
Rad Sounds Cause Effect
Sesame Street Beginnings (more complex visual)
Real Fireworks (visual and auditory)
Baby View (good visual and auditory)
Forest Fighter (visually complex)
Cause and Effect Sensory Sound Box
Bubble Popper (minimal visual, good popping sound effect)
Hidden Grid

2. **Targeting On Screen:** Does the student target a specific area of the screen to activate a desired on-screen effect? You want to choose an app that has a limited number of items to activate so that your student doesn't activate by just touching anywhere. You also want the on-screen effect to be pretty OBVIOUS. Look for apps that have minimal visual complexity and big, obvious visual effects/auditory effects that the student will not miss. *Be aware of your student's sensory needs. Most sound effects can be muted if necessary.*

Tap-N-See Now
Peeping Musicians
WordToob (create your own videos!)
Shhh!
Racing Cars
Big Trucks
Bumper Cars
Baby View

3. **Picture Discrimination:** Can the student target a specific image/symbol/picture to get a desired effect with other distracting images on screen? Try some of these apps:

Sound Touch Animals, Sound Touch Vehicles, Sound Touch Musical Instruments...
Video Touch Animals, Video Touch Vehicles, Video Touch Musical Instruments...
See N' Say Animals
Inclusive Smarty Pants

2 COMMUNICATION & LANGUAGE SKILLS FOR AAC USE

1. **Early Choice-Making:** Can the student touch/look at a desired picture/symbols/image to request a desired off-screen activity in a field of 2 choices? 4 choices? 6 choices? Can the student effectively shift his/her attention from the iPad/screen to their partner and the requested activity?

Go Talk Now
Choice Board Creator
Talking Cards
So Much 2 Say
Point to Pictures

Any of the comprehensive AAC apps with decreased field of choices (use pages with less choices or hide buttons to simplify the presentation)

Trials with Early Choice-Making should include real choice-making with activities, objects, subjects that the student has already shown an interest in. Doing a motivation assessment, [Every Move Counts-3 Sensory Assessment](#) and parent/teacher interview can give you ideas about what to have on hand for the student to interact with. You cannot see true potential for choice-making unless you are positive you have included motivating activities.

This is not a “show me” task. Ask student to choose what s/he wants from the board presented. You will determine accuracy of the selection based on whether the student appears satisfied with his selection. If you are not sure they are selecting an item deliberately, offer them the device to select first. Once s/he chooses a symbol, offer a few of the options by showing the items to see if s/he picks the items she originally selected on the device. This only works for objects. Allow the student ample time to try out different symbols to “learn” what they mean. Making a mistake only teaches the meaning of the symbol. Document any improvements you note over time. Showing an ability to learn is a valuable piece of information!

2. **Later Choice-Making:** Can the student select a desired picture/symbol/image in a larger field of choices with increasing distractors? Now you can try out more advanced AAC apps with more options available!

Keep in mind the number of symbols the student has comfortably used in early app trials. As you are choosing an AAC app, consider using one for trials that allows you to easily change the number of buttons on a page. The following apps all work in that manner. You may not ultimately select the specific trialed app as your final choice however, remember, you are only looking for features that match the student's needs. The following is a list of AAC apps that meet this need although there are others. This is not a comprehensive list.

See above discussion of Early Choice Making for tips on determining accuracy of selections!

***Comprehensive Dynamic Display AAC Systems:**

Apps:

AACSpeak
AVAZ
ChatAble
Compass
Expressive
LAMP
Proloquo2Go
SonoFlex
Speech Hero
TouchChat

Dedicated Speech Generating Devices:

Prentke Romich Accent Series
Saltillo NovaChat Series
Tobii Dynavox T-Series

During this trial, YOU will navigate to a page of items for the student to choose from. Think about going to a category page of snacks, toys, videos, animals, vehicles etc. to let the student choose from. This trial is just to look at choice making in a dynamic display environment- not navigation skills.

3 VOCABULARY ORGANIZATION COMPREHENSION FOR AAC USE

1. Noun Category Based Navigation on Dynamic Display Devices/Apps

Once your student has shown an interest in choosing a desired item out of a field of choices, navigate back *one page* to see if the student can learn to select a noun category button to get to their desired item/activity page. Use a **Comprehensive Dynamic Display AAC Systems (see above)*

2. Navigation by Visual Scene Display

If you have a student who struggles with navigation via noun categories, s/he may be able to match her environment to a photograph to navigate to a page of environment related messages (“context based page”). You will need a photograph which matches the assessment environment. You can use a photograph of your treatment room/classroom with recognizable items placed obviously on the photograph. We use a photograph of our therapy table with an iPad, stack of books, clear jar of wind-ups and markers and paper placed around the table. Each item is a “hotspot” which, when touched, links to a page with social messages, requests and items related to the selected item. For example, when students touch the iPad, a page opens with several app choices, “let me pick,” “you do it,” “that’s funny,” and “did you see that!?” You can use the following apps:

ChatAble
Compass

GoTalk Now
Snap Scene (offers a Lite version)
TouchChat
Scene Speak
Scene & Heard

Or a speech generating device with visual scene displays:

Prentke Romich Accent Series
Saltillo NovaChat Series
Tobii Dynavox T-Series

3. Navigation on Dynamic Display Devices/Apps Using Grammatical Categories

Assess whether the student can locate desired items in grammatical categories such as “Actions,” “Things,” “Places” and “People.” Try to make this activity meaningful. Look for activities that requires use of these categories. If your student has shown an interest in specific items (snacks, videos, animals, vehicles, musical instruments), model the use of navigating to the “dictionary” category page. This is different on the different apps and can be called “My Words,” “Pages,” “Things,” “Nouns.” Look for the button that takes you to a page of category based folders.

To target accessing the verb/actions page, choose action words that are meaningful and easily observable such as “read,” “open,” “sing,” “play,” “sleep” (pretend to snore!).

To target “People” or “Places” go visiting. Let your student pick people or a place to visit. Play a game and let your student choose who goes next. See if your student can access the “People” button to find his friends.

4. Navigation by Multi-Meaning Icons

This is best assessed using a Prentke Romich device, the LAMP app or the Speak For Yourself app, which include multi-meaning icons. These are symbols that can mean more than one concept: noun, action, descriptor. Selection of one of these icons navigates the user to a page of words which are associated with the selected icon. Model the use of the symbol on the main page to access a page including previously motivating items. For example, select the “Apple” to get to a snack folder. Select the “Dice” to get to a toy folder. Model the use of the symbols get to specific action requests or descriptor requests (remember “fast/slow” “go,” etc)

4 CORE WORD COMPREHENSION & USE FOR AAC USE

1. Early Core Word Use for Requesting Reoccurrence/Cessation/Action Request

Using the same AAC app, see if the student can use core words “more” “go” and “stop/all done” to control the activity. *Usually these words are on a main page or a specified “core” word page. Model asking for “more” snack, video, music. Model “go” to wind up a wind-up toy, push a swing, slide down the slide, start a song. Give a verbal prep statement such as “ready, set...” Gradually decrease prompting from a direct point cue to the symbol to a point in the general area of the symbol with a verbal cue, “do you want MORE?” Ultimately stop cueing and see if the student will start to touch the symbol independently. When s/he begins to show waning interest, encourage use of “stop” and offer another choice. Check to see if over several trials, the student begins to use these spontaneously.*

2. Use of Core Words for Commenting

Using the same core word page on your AAC app, watch for the student to give an indication of their opinion of the activity/item. Does s/he like it or not? Gain the students attention to the AAC app and model the word “like” (or “not”) to reflect what the student’s body language tells you. For example, when tasting lollipops of different flavors, my student wrinkles his nose. I over exaggerate my response and say, “oh gross! You do NOT (point to “not”) like that one!” If he smiles and giggles when we swing. I stop him, show him the app and say “You LIKE it!!!” with claps and laughs, immediately returning to swinging. After several repetitions with decreasing prompting, see if your student begins to use these words with the new function of commenting.

3. Multi-Symbol Language Use- Core Word with No Navigation

Model the use of two core words to comment or request, for example, “want + it.” Some early developing 2 word phrases:

“want + it”

“you + do” (as in, “you do it” “you make it go again,” “you help me,” “you take a turn”)

“I + do” (as in, “let me pick a movie by myself,” “let me pick a wind-up toy from the bin”)

“want + go”

“want + help”

“I + can” (as in, “I can do it”)

“not + like”

5 MULTI-SYMBOL GENERATIVE LANGUAGE WITH NAVIGATION

Multi-Symbol Language Use- With Navigation

Model use of a core word + a specific item, for example, select “want” then navigate to the snack food page and pick a snack. You can also model a core word paired with a descriptor, such as “go,” navigate to describing words page and select “fast” or “slow” followed with a fun activity- swing fast/slow, run fast/slow, sing a song super fast or really slow, read a book fast/slow. Remember to over-exaggerate the rate so it’s fun and silly! Use backward chaining with your prompts to see if your student begins to independently navigate.

6 MESSAGE WINDOW/TEXT BOX MANAGEMENT

Use of a Message Window/Text Box

Once the student is using 2 or more words sequentially, model the use of the message window to speak the entire phrase. Model clearing the message window. Use backward chaining with your prompts to see if the student begins to use the message window independently.

7 SPELLING TO COMMUNICATE (TEXT-TO-SPEECH)

You can use the same techniques for functional evaluation of spelling to communicate that you use for all of the other skills. Using the keyboard, model a few object names and comments by spelling and using word prediction. Offer your student some communication options, “We could read (point to the ‘r’) or play (point to the ‘p’). Many students don’t have experience with word prediction so you may need to model this first before using backward cue chaining to see if the student begins to spell on his own. Here are some apps you could use:

Keyboards for iPad:

Phonics Keyboard (*need to set up accessibility options to allow for full access and turn Speak Screen on to speak entire message*)

Keedogo Plus

Text-To-Speech App:

Typ-O HD

Proloquo4Text

Verbally

Predictable

All Complex Communication Apps

FINAL NOTES

Once you’ve ascertained the features that a student is able to use, look for devices or apps that have the features the student is currently able to use and allows him/her to advance their skills to the next level of development. It’s important to select a system which meets the student’s current needs and allows for language development to meet future needs.

AAC Skills Assessment

Student/Patient Name: _____ Date of Evaluation: _____

Method of Access: _____ Screen Size Presented: _____

1 Early Skills for AAC Use

Discontinue administration when subsequent skill in this section is not observed with indirect or natural cueing.

SKILL ANALYSIS			PROMPTING LEVEL				
CAUSE/EFFECT	# ACTIVATIONS	VISUAL ATTENTION?	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
Apps/Toys/Electronics Presented:							

SKILL ANALYSIS				PROMPTING LEVEL				
TARGETING ON-SCREEN	# ACTIVATIONS	SIZE OF TARGET ACCURATELY SELECTED	VISUAL ATTENTION?	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program Presented:								

SKILL ANALYSIS				PROMPTING LEVEL				
PICTURE DISCRIMINATION	# ACTIVATIONS	SIZE OF TARGET ACCURATELY SELECTED	VISUAL ATTENTION?	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program Presented:								
Motivating Subjects/Activities Presented:								

2 Communication & Language Skills for AAC Use

Discontinue administration when subsequent skill in this section is not observed with indirect or natural cueing.

SKILL ANALYSIS					PROMPTING LEVEL				
EARLY CHOICE-MAKING	HIGHEST NUMBER OF SYMBOLS/PAGE WITH ACCURACY 2-6	SIZE OF TARGET ACCURATELY SELECTED	PERCENTAGE OF CHOICES WITH SATISFACTORY OUTCOMES	SYMBOL TYPE: PHOTO, PICSYM	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program/Light Tech Option Presented:									
Motivating Subjects/Activities Presented:									

SKILL ANALYSIS				PROMPTING LEVEL				
LATER CHOICE-MAKING	HIGHEST NUMBER OF SYMBOLS/PAGE WITH ACCURACY >6	SIZE OF TARGET ACCURATELY SELECTED	SYMBOL TYPE: PHOTO, PICSYM	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program/Light Tech Option Presented:								
Motivating Subjects/Activities Presented:								

3 Vocabulary Organization Comprehension For AAC Use

Discontinue administration if student is unable to navigate by noun categories or visual scene display with indirect or natural cueing.

SKILL ANALYSIS				PROMPTING LEVEL				
NOUN CATEGORY BASED NAVIGATION ON DYNAMIC DISPLAY DEVICES/APPS	HIGHEST NUMBER OF SYMBOLS/PAGE WITH ACCURACY	NUMBER OF ACCURATELY SELECTED CATEGORIES (LIST CATEGORIES)	SYMBOL TYPE: PHOTO, PICSYM	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program Presented:								
Motivating Subjects/Activities Presented:								

SKILL ANALYSIS				PROMPTING LEVEL				
NAVIGATION BY VISUAL SCENE DISPLAY	VISUAL SCENE TRIALED	SELECTED HOTSPOTS (LIST)	MESSAGE TYPE: SOCIAL, REQUEST, COMMENT	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program Presented:								
Motivating Subjects/Activities Presented:								

SKILL ANALYSIS			PROMPTING LEVEL				
NAVIGATION ON DYNAMIC DISPLAY DEVICES/APPS USING GRAMMATICAL CATEGORIES	LIST ACCURATELY SELECTED CATEGORIES (PEOPLE, PLACES, THINGS/NOUNS, ACTIONS, DESCRIPTORS)	SYMBOL TYPE: PHOTO, PICSYM, WORD	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program Presented:							
Motivating Subjects/Activities Presented:							

SKILL ANALYSIS			PROMPTING LEVEL				
NAVIGATION BY MULTI-MEANING ICONS	LIST ACCURATELY SELECTED MULTI-MEANING ICONS	LIST THE MESSAGES CONVEYED	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program Presented:							
Motivating Subjects/Activities Presented:							

4 Core Word Comprehension and Use for AAC

EARLY CORE WORD USE- REOCCURENCE, CESSATION, ACTION	SKILL ANALYSIS				PROMPTING LEVEL				
	HIGHEST NUMBER OF SYMBOLS/PAGE WITH ACCURACY	SIZE OF TARGET ACCURATELY SELECTED	PERCENTAGE OF CHOICES WITH SATISFACTORY OUTCOMES	SYMBOL TYPE:, PICSYM, WORD	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program/Light Tech Option Presented:									
Motivating Subjects/Activities Presented:									

CORE WORD USE COMMENTING (SHARING INFO, OPINION...)	SKILL ANALYSIS				PROMPTING LEVEL				
	HIGHEST NUMBER OF SYMBOLS/PAGE WITH ACCURACY	SIZE OF TARGET ACCURATELY SELECTED	PERCENTAGE OF CHOICES WITH SATISFACTORY OUTCOMES	SYMBOL TYPE:, PICSYM, WORD	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program/Light Tech Option Presented:									
Motivating Subjects/Activities Presented:									

MULTI-SYMBOL PHRASES- CORE, NO NAVIGATION	SKILL ANALYSIS				PROMPTING LEVEL				
	Subjects/ Pronouns(list)	Action/Verb	Descriptors, Negative	Avg. MLU (#words/phrase)	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program/Light Tech Option Presented:	Ex: "I"	"go"	"not"	3.0					
Motivating Subjects/Activities Presented:									

5 Multi-Symbol Generative Language With Navigation

MULTI-SYMBOL Generative Language with Navigation	SKILL ANALYSIS				PROMPTING LEVEL					
	Subject/Pronoun (list)	Action, Verb	Descriptor, Negative	Avg. MLU (#words/phrase)	Noun Category Used	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR
App/Program Presented:	Ex: "I"	"go"	"not" "fast"	3.0						
Motivating Subjects/Activities Presented:										
#messages/page (locations)										

6 Message Window/Text Box Management

MESSAGE WINDOW/TEXT BOX MANAGEMENT	SKILL ANALYSIS				PROMPTING LEVEL					
	Press to Speak	Clear	Delete Character	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR		
App/Program Presented:										
Motivating Subjects/Activities Presented:										

7 Spelling to Communicate (Text-To-Speech)

Spelling to Communicate	SKILL ANALYSIS			PROMPTING LEVEL					
	Single word messages only	Telegraphic phrases or Sentences?	Word Prediction	Natural Cue	Indirect Cue	Direct Point Cue	Hand Under Hand	NR	
App/Program Presented:									
Motivating Subjects/Activities Presented:									

Notes:

Prompting Levels-

Natural Cue: A cue that occurs naturally during the interaction, for example, a friend says, “Hi” which is a natural cue for you to say “Hi!” Natural cues or initiation of interaction are all considered independent communication.

Indirect Cue: A cue which “invites” the student to communicate but does not overtly direct them to say something specific. Examples include gesturing toward the communication board/device/app; saying “did you have something to say?” or “what do you think?” A pause cue is also an indirect cue where the partner makes a comment or statement or asks a questions and then waits expectantly for the student to take a conversational turn.

Direct Point Cue: The partner points out the symbol/picture to cue the student what to say.

Hand Under Hand Cue: The partner places her hand under the child’s hand (allowing the student’s hand to “ride” on top of the back of the partner’s hand and messages are generated together. This is a full assist.

****Never grasp a student’s hand in yours and pull his hand toward a message on his screen. This creates a natural “pull back” reaction in many students and encourages the idea that the message is generated by the partner instead of the student. Students who don’t pull away will only be encouraged toward learned helplessness, an issue for many nonverbal students. Students who resist can also develop behavioral issues including avoidance of their device in subsequent interactions.**

NR- No Response: The student does not respond to any cues provided.

Comprehensive Dynamic Display AAC Systems Used at Dynamic Therapy

*Comprehensive Dynamic Display AAC Systems:

Apps:

AACSpeak
AVAZ
ChatAble
Compass
Expressive
LAMP
Proloquo2Go
SonoFlex
Speech Hero
TouchChat

Dedicated Speech Generating Devices:

Prentke Romich Accent Series
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