Augmentative and Alternative Communication (AAC) Assessment: Direct Selectors

Presented by:
• Corinne Tuck, OT
• Rielle Dufour, SLP
Objectives:

• Become familiar with the potential components of an AAC Assessment
• Focus on dynamic AAC skills assessment including targeting, linguistic and non-linguistic factors
• Become familiar with how to interpret assessment information to make clinical decisions around low-tech, mid-tech and high-tech communication systems through feature matching
AAC Assessment

• AAC assessment and decision-making is complex…
• We do the best that we can until we know better then we do better… That’s our disclaimer.
• This presentation will demonstrate considerations to make when assessing for different systems
AAC assessment questions frequently heard:

- How do you pick between iPad apps?
- How do you pick between low-tech?
- How do you just know the right system?
I CAN Guiding Principles

• Work collaboratively with other professionals as often as possible, really….
• Aim for the outcome to be functional communication in all environments - this means no-tech, low-tech, mid-tech and high-tech systems should be explored/considered
• As often as possible provide access to as many symbols as the person can physically and visually handle
• Try to assess for a robust communication system that can support a variety of communication functions
• Try to find a communication system that will meet current communication needs and also grow with them
• Don’t assume you know what they can do or what would work best for them…. Try everything out/test your theories!
I CAN Centre: AAC Assessment

Assessment Process

Gather Information/Intake
- SETT
- Likes/Dislikes
- Current communication Inventories

Dynamic AAC skills assessment
- Targeting
- Symbolic knowledge/linguistic skills
- Non-linguistic indicators

Interpret Assessment Results
- What do we know now?

Feature Match
- Apply Assessment results to “match” client with potential systems
I CAN Centre: AAC Assessment

Appointment #1
Intake/Interview
Targeting Assessment
Vocabulary Organization Considerations
- Language representation
- Vocabulary Needs
- Vocabulary layout
- Methods of utterance generation

Appointment #2
Options/Feature Matching

Options: A, B, C, D, E

Appointment # 3-5 (+/-)
Linguistic Factors: Assessment
- Symbol use
- Functions
- Motor Plan
- Modelling responsiveness/prompts

Non-Linguistic Factors: Assessment/Considerations
- Sequences
- Navigations
- Phrases

Client
Option A
Option A, C

Environmental
Narrow Feature Match
First Trials

Ongoing Assessment of Competencies (operational, linguistic, strategic, social)
Gather Information/Intake

• SETT
  • Likes/dislikes
  • Communication Signal Inventory
S.E.T.T.T.

The SETT framework provides a way of guiding initial AAC discussions

**Student** – Know your client.

**Environment** – Know your “community”.

**Tasks** – Clarify the Assistive Technology (A.T.) need.

**Tools / Strategies** – Answer the A.T. question by exploring current tools and possible future tools.

www.joyzabala.com
http://assistedtechnology.weebly.com/sett-framework.html
https://www.gwaea.org/educators/special-education/special-ed-services/assistive-technology
### Likes/Dislikes

<table>
<thead>
<tr>
<th>Likes</th>
<th>Dislikes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recognizing Communication Signals

For individuals that are not able to communicate in conventional ways such as speaking, it is important to recognize the ways that they are able to communicate. While familiar communication partners understand each and every way that the individual communicates, it can be difficult for unfamiliar partners to read the more subtle signals. This tool is designed as a support for teams to determine an individual’s current communication skills and provide all those involved with the individual the same information.

**Eyes:**
- Looking at something/someone, looking at an item then at an adult, eye pointing to show their choice of answers, rolling eyes, closing eyes, widening eyes.

**Mouth/Sounds:**
- Sounds to show emotions (crying, yelling, etc.), babbling (repeated sounds), laugh, kiss, word-like sounds, words that have special meaning.

**Hands/Arms (gross motor):**
- Reaching for items/people, pushing things away, guiding an adult’s hand to what they want, hitting, repeated tapping/hanging, hugging.

**Hands (fine motor):**
- Signing, gesturing (waving, thumb-up, high five, etc.), pointing, hand flapping, unusual hand positioning, pinching.

**Legs/Feet:**
- Running/crawling/wheeling away, moving towards someone/something, scrabbling, kicking, stomping, pacing, leg extenator, refusal to go/leave.

**Whole Body:**
- Slumping over, tensing, falling to the floor, thrashing, rocking, wagging, dancing, swaying, jumping up/down, curling up, becoming still/quiet, self-harm, health indicators (sweating, crying, red eyes, etc.)
# Communication Signal Inventory

Adapted from Cynthia J. Cruse, Ph.D., CCC-SLP (2017)

<table>
<thead>
<tr>
<th>What the person does</th>
<th>What it means</th>
<th>What you do</th>
<th>Communication Strategy/Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dynamic AAC skills assessment
# Dynamic AAC Skills Assessment

<table>
<thead>
<tr>
<th>Targeting</th>
<th>Linguistic Indicators</th>
<th>Non-Linguistic Indicators</th>
</tr>
</thead>
</table>
| - Size of symbols  
- Numbers of symbols  
- Type of symbols  
- Presentation Method | - Symbol Use  
- Communication Functions  
- Sequencing/Combining  
- Navigation  
- Responsiveness to modeling  
- Motor Planning  
- Phrase-based | - Attention  
- Engagement  
- Impact of voice output  
- Behavior  
- Portability  
- carrying |
Targeting

• Size of symbols
• Numbers of symbols
• Type of symbols
• Presentation method

Why start here?
• We want to know what the child can physically see and touch
• This will lead to potential options to try
Size of symbols

1x1  2x2  3x3
I CAN Centre: AAC Assessment

# of Symbols (and spacing)
Type of Symbols

- PCS
- Symbolstix
- Widgit
- Minspeak
- Smarty Symbols
- .....
Presentation Method:

• **Paper-based**
  - Single board
    - Letter-sized, legal-sized, etc.
  - Book
    - Binder rings, binder, etc.

• **Screen-based**
  - Size of screen- 8” or 10” or 12”

Why both?
- Want to see if there are differences between the two
- Want to see which would give access to more vocabulary through touch
- Low-tech back-up is recommended - EBP
Presentation Methods

I CAN Centre: AAC Assessment
“We should choose the grid size based on what the AAC learner can see and touch. We should not choose the grid size based on cognitive skills, receptive language or what we think the AAC learner can do. **We often underestimate the learner’s potential.** This can result in starting with an AAC system with too few words”.

https://www.assistiveware.com/learn-aac/choosing-a-grid-size
Targeting Rule of Thumb: Low Tech

Consider the number of cells that were touched with at least 50% or more accuracy on the TASP

Refined finger point does not matter as much-smart partner determines accuracy

Go with the paper board that has the smallest size of cells with the greatest number of cells that the child can touch with the greatest accuracy

Is child able to touch all areas of the board? Check all quadrants.
Targeting Rule of Thumb: High Tech

Primary hand used has sustained isolated finger point?

Number & size of cells that were touched with greater than 50% accuracy on AAC Genie

Number of cells touched independently, reliably and accurately with an isolated finger point on a screen with AAC App

Is child able to touch all areas of the screen? Check all quadrants.
Standardized Assessments
• Test of Aided Communication Symbol Performance (TASP)
  • Low-tech (paper-based)
• AAC Genie app
  • High-tech (screen-based)

Informal
• Try out different size symbols
• Increase number of symbols per page
Standardized: TASP

• TASP helps assess symbolic skills quickly and easily. It provides a starting point for designing or selecting an appropriate AAC device page set.

• Includes subtests, which can be administered over a period of sessions to test understanding of:

  • **Symbol size and number**
  • **Grammatical encoding**
  • **Categorization**
  • **Syntactic performance**

Why categorization?
• Many systems organize vocabulary categorically
  • Not meant to exclude someone from AAC – meant to identify potential goal areas or areas of strength
TASP: Symbol size and number
The purpose of AAC Evaluation Genie is not to identify a particular speech generating device, but rather build a framework for selecting an appropriate augmentative communication device for ongoing evaluation and/or device trial.

Subtests:

- **Visual identification and discrimination**, 
- Recognition of nouns, functions, verbs, 
- **Category recognition, inclusion and exclusion** 
- Word associations, core vocabulary, picture description and word prediction

Unity ®, Pixon ® and SymbolStix ®
Areas we typically assess:

- Discrimination (symbol size and number)
- Identification (symbol size and number)
- Categorization

Tips

- Use the “screen” option to reduce the amount of time to assess
- Start with discrimination- if they are struggling drop down to identification – most likely don’t need to do discrimination and identification
- Think about assessing on a mini and regular-sized iPad for differences in targeting
Discrimination:

Visual Discrimination

This activity evaluates the user’s ability to visually track and discriminate progressively smaller icons within an increasingly complex display.

Administer all 30 items or screen 15 items.
Identification:

Visual Identification

This activity evaluates the user’s ability to visually track and identify progressively smaller icons within an increasingly complex display.

Administer all 30 items or screen 15 items.
I CAN Centre: AAC Assessment

AAC Genie Settings:
- Add new user
- Go to settings
- Reset
- Reset all off
- Select the items you want to assess
- “Finished”
- Go to start
- Select “all → screen”
- Start
Data:

<table>
<thead>
<tr>
<th>Name: Test I CAN</th>
<th>Home</th>
<th>Help</th>
<th>Email Print PDF</th>
<th>Return</th>
<th>9/4/19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visual Identification</strong></td>
<td><strong>Vocabulary Knowledge</strong></td>
<td><strong>Picture Description Sample</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Xtra Large / Field of 2</td>
<td>Noun Vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large / Field of 3</td>
<td>Function Vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large / Field of 4</td>
<td>Verb Vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large / Field of 8</td>
<td>Category Recognition</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium / Field of 4</td>
<td>Word Association</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium / Field of 8</td>
<td>Category Inclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium / Field of 15</td>
<td>Category Exclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium / Field of 24</td>
<td>Core Vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small / Field of 15</td>
<td>Core Text Label On</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small / Field of 32</td>
<td>Unity Patterns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small / Field of 45</td>
<td>Word Prediction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Visual Discrimination</strong></th>
<th><strong>Picture Description Stats</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Xtra Large / Field of 2</td>
<td><strong>Number Utterances</strong></td>
</tr>
<tr>
<td>Large / Field of 3</td>
<td>100%</td>
</tr>
<tr>
<td>Large / Field of 4</td>
<td>Number Words</td>
</tr>
<tr>
<td>Large / Field of 8</td>
<td>Mean Length of Utterance (Word)</td>
</tr>
<tr>
<td>Medium / Field of 4</td>
<td>100%</td>
</tr>
<tr>
<td>Medium / Field of 8</td>
<td>Language English</td>
</tr>
<tr>
<td>Medium / Field of 15</td>
<td>100%</td>
</tr>
<tr>
<td>Medium / Field of 24</td>
<td>100%</td>
</tr>
<tr>
<td>Small / Field of 15</td>
<td>100%</td>
</tr>
<tr>
<td>Small / Field of 32</td>
<td>100%</td>
</tr>
<tr>
<td>Small / Field of 45</td>
<td>100%</td>
</tr>
</tbody>
</table>
Informal: Targeting

• Take a “best first guess” as to number of symbols and presentation method
• Gradually increase/decrease number/page
• Use MOTIVATING activities and communication temptations
• Model and wait expectantly
• Use a prompt hierarchy

Thank you “likes/dislikes” list 😊
I CAN Centre: AAC Assessment

Intake/Interview

Targeting Assessment

Vocabulary Organization Considerations
- Language representation
- Vocabulary Needs
- Vocabulary layout
- Methods of utterance generation

Options/Feature Matching

Options: A, B, C, D, E

Linguistic Factors: Assessment
- Symbol use
- Sequences
- Functions
- Navigations
- Motor Plan
- Phrases
- Modelling responsiveness/prompts

Non-Linguistic Factors: Assessment/Considerations

Client
- Option A, C

Environmental

Option A

Narrow Feature Match
First Trials

Ongoing Assessment of Competencies (operational, linguistic, strategic, social)
Vocabulary Organization Considerations
Language Representation:

- Single meaning pictures (PCS, Symbolstix, Widgit)
- Semantic compaction (Minspeak-Unity)
- Alphabet-based
Vocabulary Layout:

Systems may be comprised of a single layout or multi-types

- Text-based/keyboard
- Core word based
- Topic/Context based
- Pragmatically organized
- Categorically organized
- Visual scene Displays

Which vocabulary layouts would be most supportive of SNUGs? Which would be least supportive of SNUGs?
Vocabulary Needs:

- Robust vocabulary
- Core Vocabulary
- Fringe Vocabulary
- Personal “key” vocabulary (ease of editing?)
- Phrases
- Keyboard layout- QWERTY, ABC, etc.
- Custom vocabulary
Method of Utterance Generation

- Spontaneous Novel Utterance Generation (word by word)
- Pre-stored Sentences/phrases
- Spelling
Not sure which system?

- Consider the most efficient way for them to access the most vocabulary
- Time to assess the different layouts
- Talk to the family:
  - Explain types (core-based, topic-based, visual scene, etc.)
  - Explain dynamic vs motor planning
  - Explain pros and cons of each
  - Ask for their input

Tip to learn the systems:
- Try out the same phrases in each
  - How static vs. dynamic?
  - How many “hits”?
Feature Matching: What is it?
Feature Matching is “the systematic process by which a person’s strengths, abilities and needs are matched to available tools and strategies” (Shane & Costello, 1994).

“Using a Clinical Approach to Answer “What Communication Apps Should We Use” Gosnell, Costello & Shane, AHSA Perspectives, July 2011
Why feature match?

- Not all systems have the same features
- Not all individuals need the same features
- Help organize what you know about the client and potential systems to support them
Do a quick “mini” Feature Match
(Use SETT, Targeting and Vocabulary Organization Information)
<table>
<thead>
<tr>
<th># of cells/targets the client can see/touch</th>
<th>1-10</th>
<th>11-20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>61-80</th>
<th>81-100</th>
<th>101+++</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW-TECH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAMP (Minispeak)</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Levelled Core (PCS, SS)</td>
<td>Level 1, 12</td>
<td>Level 2, 23</td>
<td>Level 3, 39</td>
<td>Level 4, 48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PIXON (PIXON)</td>
<td>20</td>
<td>32</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PODD one page opening – early functions (PCS)</td>
<td>9</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*PODD one page opening-expanded functions (PCS)</td>
<td>9</td>
<td>12, 16, 20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PODD two-page opening (PCS)</td>
<td>36</td>
<td>40 keyword</td>
<td>48 Expanded keyword</td>
<td>70 expanded keyword</td>
<td>99+, 100+ Complex syntax</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Project Core (PCS, SS, Widget)</td>
<td>4, 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proloquo2Go (SS)</td>
<td>77</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Snap+Core First (PCS)</td>
<td>2, 4, 6, 9</td>
<td>12, 16</td>
<td>25</td>
<td>36</td>
<td>49</td>
<td></td>
<td>63, 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Super Core (Widget, SS)</td>
<td>12, 20</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNITY (Unity)</td>
<td>4, 8</td>
<td>15</td>
<td>28</td>
<td>36</td>
<td>45</td>
<td>60</td>
<td></td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>*WordPower (PCS, SS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>88, 96 Single boards</td>
<td>108 flip book</td>
</tr>
<tr>
<td><strong>MID-TECH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GoTalk</td>
<td>9</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SuperTalker</td>
<td>1, 2, 4, 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HIGH-TECH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iPad mini (7.9&quot;) or regular (10.2&quot;)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Grid with PODD()</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• LAMP (Minispeak)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Proloquo2Go – Crescendo (SS)</td>
<td>9</td>
<td>15, 16, 18, 20</td>
<td>25, 30</td>
<td>32, 36</td>
<td>45, 49</td>
<td>60</td>
<td>64, 77</td>
<td>81, 96, 100</td>
<td>112, 121, 128, 144</td>
</tr>
<tr>
<td>• Snap+Core First (PCS)</td>
<td>1, 2, 4, 6, 9</td>
<td>12, 16</td>
<td>25</td>
<td>36</td>
<td>49</td>
<td></td>
<td>63, 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sonoflex (SS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* keyguards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• GoTalkNow, custom vocabulary</td>
<td>1, 2, 4, 9</td>
<td>16</td>
<td>25</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Run assessment appointments to determine Linguistic and Non-linguistic considerations (Typically 3+ appointments) with your initial options.
Linguistic Factors: Assessment
Assessment Activities

Always try to tie the activity to what the child is motivated by/enjoys

- Crafts: paper dolls of favourite characters, colouring pages of favourite shows (offer colour choices); make a scrapbook of family photos
- Sensory: calm-down preferences (cuddles, hugs), tickles, air/wind, tactile preferences
- Toys: wind-up, switch-activated, cause/effect
- iPad: funny videos, favourite show clips, cause/effect apps
- Books: choose simple and engaging books, use funny voices, find “core” words in the book and point them out

Thank you likes/dislikes list 😊
Assessment appointments:
- Have your initial systems ready
- Use motivating play-based activities
- Use communication temptations
- Use your prompt hierarchy - what level of support do they need?
- Swap systems in and out and assess linguistic and non-linguistic factors
Why these skills?
- Most language sets vary across these factors
- By assessing someone on the same factors across systems you can see how their skills in these areas are impacted by the different layouts
Symbolic use/understanding

• Assess current use (with modeling) of:
  – Core
  – Fringe
    • Try a motivating activity and see if they will touch a “fringe” symbol to request more i.e. “bubbles”
    • Try a motivating activity and see if they will touch a “core” symbol to request more i.e. “more” “go” “want”
    • What happened with core? fringe?
Communication Functions

● For assessment purposes; requesting, choice-making and directing activities are typically easiest to start with

● Then move on to other communication functions for more information as needed
Sequencing/Combining of Symbols:

- Model “_______”
- Model “_______ + _______”
- Model “_______ + _______ + _______”

THEN

- Use your prompting and multiple trials to see what they can do
Navigation:

• Model /1 navigation/ + _______ (a word)
• Model /2 hit navigation + ________ (a word)

THEN

• Use your prompt hierarchy- what level of support do they need to navigate?
Phrase-based vocabulary:

• Open to a phrase-based page
• Model use of the phrases within an activity

THEN

• Use your prompt hierarchy- what level of support do they need to communicate with phrases
Motor Planning:

• Model on a more “static” display and a more “dynamic” display

• Look for:
  • Can they remember the location of a cell and/or sequence with only a few repetitions?
  • Can they imitate sequences quickly?
  • Can they complete any sequence on their own quickly?
  • Do they have lots of mis-hits because of screen changes (dynamic)? Do they look confused/lost when the screen jumps?
    • Do they “mis-hit” their second button because the screen already jumped?
  • Do they get “stuck” on the pathways/sequences for something that was previously modeled?
## Organize the information:

<table>
<thead>
<tr>
<th>Tool/Strategy</th>
<th>Describe</th>
<th>Access</th>
<th>Observations</th>
</tr>
</thead>
</table>
| iPad mini with T/C WP  | WP 60 basic SS- during bubbles    | Direct: Primarily isolated finger point with R. hand- often hit buttons multiple times | Symbol use: Was able to use some single symbols  
Core: Used: Go, more, stop independently (model then spon.)  
Fringe: Used “bubbles” and “bubble wand”  
Communication Functions: Requested and stopped activity. Requested more and items. Directed clinician to “go”  
Combining: Modeled “I + want”- client multi-hit on I and was frustrated  
Navigation: Modeled pathway for “groups + toys/games + bubbles” with expectant wait- poor attention to navigation  
Receptiveness to modeling: Highly receptive to single word and just expectant wait  
Phrase-based: not assessed  
Motor Planning: Multiple hits on buttons noted |
Non-Linguistic Factors: Assessment and Considerations

These are ongoing factors that continue to be collected throughout the entire process.
## Non-Linguistic Factors

<table>
<thead>
<tr>
<th>Client specific factors/considerations</th>
<th>Environmental/other considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention</td>
<td>FAMILY!!!</td>
</tr>
<tr>
<td>Impact of voice output</td>
<td>Ease of editing/programming</td>
</tr>
<tr>
<td>Durability needs</td>
<td>Environmental considerations</td>
</tr>
<tr>
<td>Portability/positioning</td>
<td>Cost</td>
</tr>
<tr>
<td>“Locking features”</td>
<td>Training/implementation supports</td>
</tr>
<tr>
<td></td>
<td>Other AT/academic needs</td>
</tr>
</tbody>
</table>
Client specific factors/considerations
Attention/Engagement

• Things to consider:
  • What prompts help them attend
  • Are there visual attention getters that could help
  • If they are constantly looking away - why? Visually overwhelming? Screen light? ... adjust.
  • If attention is extremely poor - would a system with fewer dynamic screen “jumps” be a better fit?
  • What attention strategies work best for that client?
Voice output

• Things to consider
  • Hearing loss - try out different voices, digitized vs synthetic, FM
  • Does voice output help them with their verbal speech?
  • Consider volume
  • Would they benefit from an amplified case?

SETT-Environments provides lots of information
Behaviour/Durability?

- Do they see the device as their voice?
- Device behaviors (ex iPad=videos, NOT communication)
- Do they have a history of breaking devices – is it safe to loan equipment – how can we make it more safe?
- Are they constantly “on the go” – how durable do they need the case or screen to be?
Portability/Positioning

- What position is the child going to use the device in most often?
- Targeting abilities may change in different positions
- If there are big discrepancies, go for the position that is most reliable to start
For individuals who walk:

- Can they safely carry the device?
- If not safe for child to carry, who will carry it?
- How light does it need to be?
- Consider overall size and weight
- How will they carry it? (in hand, cross body strap, shoulder strap, waist strap)
- If they refuse to carry it, you need to make a plan to get them to carry it and work on this

I CAN Centre: AAC Assessment

SETT (presentation methods...), Dynamic AAC assessment
Locking features:

- Most kids need to be locked out of the editing features.
- Most children should have guided access turned on for iPad based systems.
- How tech savvy is the child? Are they constantly trying to get out of the communication app?
- Need to consider locking as a feature – some systems better than others.
Environmental/other considerations
Environmental/Other

Family
• The family will be supporting the system
• What do they prefer, what do they feel works better for the child

Ease of editing
• Do they need to personalize quite a bit?
• Can the family support the editing in the program?

Environmental considerations
• Do they have siblings using talkers? Does their school district have training on certain systems
• If the environment doesn’t support it- higher likelihood of abandonment

Cost
• What makes the most sense for the family financially?

Training/Implementation supports
• What supports/services do they have to support implementation?

Other AT/academic needs
• Is this tool only for communication?
• Do they need to save/send what they wrote on the device to anyone, etc.
Feature Match: Trials and Data Collection
Organize your assessment information

Compare your Dynamic AAC ax notes for each system tried

<table>
<thead>
<tr>
<th>Tool/Strategy</th>
<th>Describe</th>
<th>Access</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPad mini with T/C</td>
<td>Multichat 15</td>
<td>Direct</td>
<td>..............</td>
</tr>
<tr>
<td>iPad regular with T/C</td>
<td>WP 25, 42 Basic SS</td>
<td>Direct</td>
<td>..............</td>
</tr>
<tr>
<td>iPad regular with proloquo2go</td>
<td>Crescendo 15, 20, 30</td>
<td>Direct</td>
<td>..............</td>
</tr>
<tr>
<td>iPad mini with Proloquo2go</td>
<td>Crescendo 20, 30</td>
<td>Direct</td>
<td>..............</td>
</tr>
<tr>
<td>Paper-based Wordpower flip-book</td>
<td>Wordpower 42 Basic ss</td>
<td>Direct</td>
<td>..............</td>
</tr>
</tbody>
</table>

Review and make notes on Non-linguistic factors

<table>
<thead>
<tr>
<th>Client specific factors/considerations</th>
<th>Environmental/other considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention</td>
<td>FAMILY!!!</td>
</tr>
<tr>
<td>Impact of voice output</td>
<td>Ease of editing/programming</td>
</tr>
<tr>
<td>Durability needs</td>
<td>Environmental considerations</td>
</tr>
<tr>
<td>Portability/positioning</td>
<td>Cost</td>
</tr>
<tr>
<td>“Locking features”</td>
<td>Training/implementation supports</td>
</tr>
<tr>
<td></td>
<td>Other AT/academic needs</td>
</tr>
</tbody>
</table>

Discuss as a Team (school, family, etc.) to decide on trial options
Narrow your Feature Match further to decide on trial options.
Run Trials

• Try to loan or run a trial of the systems both at home and school/community as possible

• Length of time:
  • Often varies.
  • Ensure you check-in regularly for extended trials
    • A check-in could be a phone call, a review of the data collected to date, email to the family/team, etc.
Collect Ongoing Data:

- Language Samples
- Core Competencies (Operational, Linguistic, Social, Strategic)
If you have considered targeting, linguistic and non-linguistic factors...likely you have found a "good fit".
AAC assessment is continuous:
- Even when you have a system in place we need to constantly be re-assessing and making modifications as the individuals’ needs change over time
- For example:
  - Can we increase the # of cells per page as the person’s physical access improves?
  - If the individual has become literate how can we make modifications to their system to allow easier/more efficient access to text?
    - Keyboard on the main page
    - Make word prediction available
    - Is there another language set that is text-based?
    - Can we turn symbols “off” and move to text-only?
Remember:
- Work collaboratively as a team (SLP, OT, individual, family, etc.)
- Provide access to as many symbols as the person can physically and visually handle
- Provide access to a robust vocabulary that allows for communicating a variety of purposes
- AAC assessment is dynamic
Thank you!