Beyond SGD Selection: Considerations for Meaningful Assessment of AAC Users

Carole Zangari, Ph.D., CCC-SLP, BCS-CL August 11, 2021

People who use AAC are often subjected to unfair testing practices.

They are required to do things like:

- Use an SGD or AAC app that they are still learning to answer test questions
- Use a new or exhausting motor pattern to produce a written product for grading

We also expect students without sufficient test-taking skills to demonstrate their knowledge on quizzes & exams.









Where do we go from here?

How can we improve this situation so that AAC users are assessed in more appropriate ways?





Planning Assessments: Stakeholder Involvement

- What are the AAC users' goals?
- ${\scriptstyle \bullet}$ Assess in areas that will prepare them to traverse barriers
- Consider supports such as Talking Mats & rating scales
- Family
- Service providers
- Educators
- Therapists
- Input from close friends/peers

















Consider what type of sample to collect

- Traditional: SLP engages the learner in relevant activities designed to elicit language
 Specific rules & guidelines for eliciting language samples
- Specific rules & guidelines for eliciting language
 Minimum number of utterances
- Willing of otterances
- Recording sample of spontaneous language in therapy sessions
 Guidelines are looser and may be determined by the evaluator (e.g., do not record answers to direct questions)
- Written language samples
- Generally have significant differences when compared to samples derived from interaction



Determine what analyses to conduct

- Total number of utterances
- Total number of words
- Number of words by category (e.g., part of speech, semantic)
- Number of different/unique words
- Measure of linguistic diversity
 Mean length of utterance in words and morphemes
- Communicative functions
- Morphological structures
- Sentence constituents & syntactic structures
- Use of repair strategies
- Pre-stored vocabularyDiscourse skills (if appropriate)
- Narrative analysis (if appropriate)
- Etc.







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AAC Fair Testing Practices

A set of guidelines on how to test an individual student so that you are getting information on their knowledge & skills, *not confounded by disability-related issues* like fatigue, inattention, or difficulties with seating/positioning

Guiding Questions (Proctor & Zangari, 2009)

- Test materials
 What materials
 - a. What materials are needed? (e.g., slant board, sticky notes, marker, AAC device)
 - b. Who will prepare those materials?
 - c. What vocabulary is needed on the student's AAC device?
 - d. Who will make sure that it is programmed correctly?
- 8. Does the student need to be oriented to new vocabulary on the AAC device prior to testing?
- 9. What prompts and cues are allowed and beneficial?



Guiding Questions (Proctor & Zangari, 2009)

- 10. What feedback and reinforcement is allowed and beneficial?
- **11.** How will the student indicate that a break is needed?
- 12. How will adaptations to standard protocols be documented?
- 13. How can we ensure that FTPs are implemented as designed?

Challenges Commonly Faced in Testing Situations

- Linguistic response
- Motor responses
- Long or complex instructions
- Limited test-taking skills
- Managing the expectations of testing situations & dealing with anxiety







Sample FTP

"When assessments require a change in routine, use Samuel's First/Then process to help him select an enjoyable/relaxing activity to follow the testing. Create a visual support using his preferred format and implement the established First/Then procedures." First Then

Visual supports alone are not enough.Teach the process.



Challenges Commonly Faced in Testing Situations Linguistic response Motor responses Long or complex instructions Limited test-taking skills Managing the expectations of testing situations & dealing with anxiety



Advocacy

- Build these FTPs collaboratively.
- Include the AAC user whenever possible.
- Develop a formal plan & document it.
- Review it periodically.
- Check in with the team and the AAC user/family to be sure things are being implemented as designed.
- Do an extra check-in prior to any high-stakes testing
- Help students advocate for themselves, when possible.
- Monitoring is important. Don't assume that everyone will do the right thing.





DOING THIS AS A SOLE PROVIDER IS A GOOD FIRST STEP.

Advocating for other team members to do develop & use Fair Testing Practices is *even better*.

Tests of Receptive Language Abilities (US ex	amples)
Tests & subtests for specific receptive language skills Assessment of Children's Language Comprehension (ACLC; span & sequen	ce)
 Clinical Evaluation of Language Fundamentals (CELF 5; Word classes, follow increasing length & complexity, understanding spoken narratives) 	ing directions of
• The Listening ComprehensionTest-2 (main idea, details, concepts, reasoning)	
Kaufman Test of Educational Achievement (TKEA-3; Literal & inferential)	
Token Test for Children (TTFC-2, Relational & prepositional concepts)	
Trial The Surprise	
Andy liked to visit his grandfather who lived on a farm in the country. The last time Andy saw his grandfather, he had promised to sen Andy a supprise, Andy was excited because hin more said the supprise would come today. After breakfast, Andy's dad brought a big ba Into the kitchen. Andy head a "meero" and saw a long forty atil a coming from induce the basket.	
1. Why was Andy excited? Correct: because the surprise would arrive today	
2. What happened after breakfast? Correct: Andy's father brought a basket/cat into the kitchen	Image: CELF 5 Subt
3. What did Andy hear coming from the basket?	Paragri









CASL-2: Selected Subtests

- Syntax construction (Grammatically correct oral expression of phrases/sentences)
- Grammaticality judgment (Judgment of & ability to correct sentence grammar)
- Sentence comprehension (Given syntactically different sentences, recognition of same or different meanings)
- Meaning from context (Derivation of the meaning of words from their linguistic context)

Modifying Formal Assessments

What's your purpose in using this assessment tool? What do you want to know?

Clarify that so you can make intelligent & appropriate decisions about the modifications

<u>Spontaneous Language</u>

- 1. At first I was confused about what to do with my device it was new technology.
- 2. I heard you came by my school yesterday and you didn't say anything to me.
- Yesterday I had this experience I wanted to go to the Junior section in Macy's.
 She is Autistic maybe I should have explained it better.
- 5. In my IEP it says I need extra time why would you put the due date on Tuesday.

Doing the assessment over time is often best.

- It's a process. Plod, don't sprint.
- Assess over time. Answer different questions at different times.
- Prioritize: What do you **most need to know** to best serve this individual?

Conjunctions: Missing or Incorrect

- 1. At first I was confused about what to do with my device ${\sf BECAUSE}$ it was new technology.
- 2. I heard you came by my school yesterday and BUT you didn't say anything to me.
- Yesterday I had this experience WHEN I wanted to go to the Junior section in Macy's.
- 4. SINCE she is Autistic maybe I should have explained it better.
- 5. In my IEP it says I need extra time SO why would you put the due date on Tuesday?

Adapting Formal Tests



Any change to testing procedures invalidates the use of normative data.

We cannot compare results from individuals who take the test in an adapted fashion to those who took the test in the standard way.

















Using Core Vocabulary

For SOME testing, we can change the wording so that the student can answer using core words .

<u>Examples</u>

- Ms. Jones got fired from her job. Now she is ____ [unemployed]
 What does unemployment mean? {not work; no have job}
- What is the 2 called in this fraction: 2/3 [numerator]
- In this fraction, where does the numerator go? {on top}

Considerations in Using Core Vocabulary

- •The individual must have command over core words in the AAC system for this to be appropriate. •Is the word or feature (e.g., word ending) in the AAC device?
- Do they know how to find/retrieve and use it?
- If not, we are testing their knowledge of the AAC device, *not the linguistic or academic concept* that the test was designed for.

A Case for Observational Assessments

- Helps us to understand how the individual is communicating in real-world situations
 Helpful in painting a picture of their present level of performance
- Can be used to capture information about the environment & communication partners, as well as the AAC user
- Purpose-driven
- Opportunity for gathering quantitative data
- May yield richer, more comprehensive data (Sutton, Soto, & Blockberger, 2002)

Guidelines for Modifying Assessments

- Simple is best.
 - Make as few modifications as are needed
- Understand that normative data cannot be used.
- Document
 - Explain the modifications in detail on test form & report
 - Describe:
 - The purpose for adaptations,
 - What adaptations were made, and,The student's response

(But we still can't use the normative data)

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3	SITUATION				COMMU	NICATIVE IN	ITENT			
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Name:			Date:				
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2.	 Word(8) Wd approx Other sound 						
3.	 Word(s) Wd approx Other sound 						
4.	 Word(s) Wd approx Other eound 						
5.	 Word(s) Wd approx Other sound 						
6.	 Word(8) Wd approx Other sound 						

	Th Log of Intentional Co (Differentiates b Student Dates of Observ				
	Indicator	Dates/Context/Partner	HowForm	Whotheration	
	is there allernating gare between an object and the partner?				
	It there body orientation to indicate that the				
Intentionality	is more need environments to indexide that the signal (communication behavior) is being directed toward the communication partner?				
incentionality	When a signal (communication behavior) is produced, is there a passe before signal is repeated that might indicate the student is	1			
Log	represent was the processing the student in any string a response from the communication partner?				
	When a signal (communication behavior) is produced and the partner responds, does the signal (communication behavior) terminate?				
	When a signal (communication behavior) is produced and the partner responds, does the student persist by repeating or changing the signal?				
	When a signal (communication behavior) is produced and the partner fields to respond, does the student pensist by repeating or changing the signal?				
	Is the signal (communication behavior ritualized 6.e., the same overy time) or does signal have a presentional form (pointing, shaking bead)?				
	Adapted from Beskelman & Missada, 2005. Sources: Siegel	& Coss, 2000; Carlor & lacor	e, 3002.		Image Credit: Bridge School





		AAC Co	mmunic	ation Op	portunity	Scale			
	While con	nmunicating usir	ng AACit	's all abou	ut the opp	ortunities a	nd the words		
This tool is design	ed for the purpose of	observing and collecting	g data on how	many and wh	hat type of com	municative oppo	rtunities are availabl	e in the communication	
environment. This	s data can then be use	d to inform instruction	and design im	plementation	supports and s	trategies.			
<u>Task/Activity</u> What are we doing?	Place Where are we doing it?	AACTools How: what AAC tools are available for the partner and the student to communicate	Core words Which word communicated by the stu	ds are being y the partner and	Which functions a demonstrated by	<u>ctions</u> are being the partner and the	Opportunities to communicate How many chanced did I have to communicate?	Observations/Conclusions	
		with?			student?				
			Words heard & seen by student	Words spoken, shown or demonstrated by student	Functions heard & seen by student	Functions spoken, shown or demonstrated by student			

Level 1 Pre- Intentio Behavio			Exp	A2 resses Cor	nfort			Interest	13345		Used							
Level 2 Intentio Behavio			32 es Action	Obtains	B3 More of S	omething		E Attr Atte	acts		tered							
Level 3 Uncorw Commu		ts More	C3 Reques ts New Action	C4 Reques ts More Object	C5 Makes Choice	C6 Reques ts New Object		CB Reques ts Attenti on	C9 Shows Affecti on									
Lavel 4 Conven Commu		ts More	C3 Reques ts New Action	C4 Reques ts More Object	C5 Makes Choice	C6 Reques ts New Object		CB Reques ts Attenti on	C9 Shows Affecti on	C10 Greets People	C11 Offers, Shares	C12 Direct Your Attanti on	C13 Polite Social Forms	C14 Answer 3 Yes/No Questi ons	C15 Asks Questi ons			
Level 5 Concret Symbol	C1 Refus 5 Reject	ts More	C3 Reques ts New Action	C4 Reques ts More Object	C5 Makes Choice	C6 Reques ts New Object	C7 Reques ts Absent Objects	C8 Reques ts Attenti on	C9 Shows Affecti on	C10 Greets People	C11 Offers, Shares	C12 Direct Your Attenti on	C13 Polite Social Forms	C14 Answer 5 Yes/No Questi ons	C15 Asks Questi ons	C16 Names Things/ People	C17 Makes Comme nts	
Level	C1 Refus s.	C2 Reques ts More	C3 Reques ts New	C4 Reques ts More	C5 Makes Choice	C6 Reques ts New	C7 Reques IS	C8 Reques ts	C9 Shows Affecti	C10 Greets People	C11 Offers, Shares	C12 Direct Your	C13 Polite Social	C14 Answer	C15 Asks Questi	C16 Names Thirgs/	C17 Makes Comme	

Profiles, Inventories, & Checklists

- The Pragmatics Profile of Everyday Communication in Children/Adults
- Communication Matrix
- Early Functional Communication Profile Set
- Participation Inventory (Blackstien-Adler)
- Functional Communication Profile Revised (FCP-R; Kleimain)
- Checklist of Communicative Functions and Means (Wetherby)



Profiles, Inventories, & Checklists

- Every Move Counts (Korsten)
- Augmentative & Alternative
 Communication Profile A Continuum of
 Learning (Kovach)
- Social Networks Inventory (Blackstone)
- McArthur-Bates Communicative Development Inventory (Fenson, Thal, Reznick, Marchman, Dale, & Bates)
- Communicative Function Assessment Checklist (Quill)





Developed to answer specific clinical or educational questions

Example: "Which core vocabulary words does this student already know?"

- Logged data & language sample tell us what words the student is using, but that's likely to be incomplete.
- Informal assessment can be straightforward or game-like to get this information.













Documentation

- How should we document the changes to assessment measures?
 - Explain the modifications in detail Describe it on test the actual form & report

 - Include things like: .
 - The purpose for the changes, What adaptations were made (show/share visual supports, when
 - appropriate), The individual's response, &
 - Anything else that would help someone replicate these procedures.

THANK YOU!

You can reach me at: zangaric@nova.edu www.PrAACticalAAC.org

Final Thoughts

- Always use varied means of collecting data Direct assessment, targeted observation, stakeholder interviews & .
 - checklists Assess over time
- Standardize your process(es).
- . Make it meaningful.
 - What will help you plan for this individual? Making or selecting tools Developing therapy plan

Final Thoughts

- Get feedback from the person who uses AAC & other stakeholders
- Use what you know to help other service providers plan their assessments
- . Consider including Fair Testing Practices in the individual's IEP or other documents