Background Information:
Max is a 10 year old boy, with diagnoses of autism, cognitive delay, and mixed receptive and expressive language disorder. He is in a self-contained fourth grade classroom with peers with autism. He lives at home with his parents and an older sister. Outside of school, he participates in adapted sports groups and attends church activities with his family. In the past, his team has tried sign language and using low tech symbols books. These have had limited success as his communication partners do not always know sign, or there was not enough vocabulary in his book.

Hopes and Dreams:
His parents report his safety and the ability to communicate as a method to reduce challenging behaviors as the primary goal. They want to be able to understand what he wants, and for him to be able to tell them about his day, things he likes and doesn't like, and to be able to tell people emergency information if he gets separated while in the community. His school team reports that they would like for Max to be able to communicate with his peers to improve social interactions, communicate what is on his mind, ask questions as it relates to learning, and participate in classroom activities such as art time, snack time, and circle time.

Current Communication:
Currently, Max uses a combination of speech attempts, minimal sign language, facial expressions, and behaviors to communicate. He is judged to be less than 50% intelligible by familiar listeners, and this drops to less than 25% intelligible for unfamiliar listeners. His signs are not always accurate due to low-tone and apraxia and are not know by those unfamiliar with Max. PECS was tried but rejected as it did not meet his higher receptive language skills and did not allow for novel communication. A mid-tech device was also tried with minimal success as it relied on a communication partner to change the overall limiting access to a large vocabulary. He has emerging literacy skills and writing, but not enough to be his primary mode of communication.

Skills & Behaviors:
Max is ambulatory and has delayed fine motor skills due to low muscle tone. He is a fast learner and when motivated can scan a variety of symbols on a page to find what he is looking for. When communication breaks down, increased behaviors such as throwing, yelling, and hitting have been observed. His verbal approximations do not allow for communication breakdowns to be repaired increasing these behaviors.

Levels of Independence & Barriers to Participation:
Max seeks out assistance in using the device. He often grabs for an adults hand to support touching the device. He benefits from modeling and will visually attend to a visual model on an iPad or on a low-tech board. He can follow a visual schedule with reminders. He does not yet ask for help when he doesn't understand what to do. He will occasionally watch his peers to help learn what to do during activities. Some staff get frustrated that he will impulsively look through things instead of waiting for them to model what he should do.

Strengths:
Max seeks social interaction especially from his peers but is working on appropriate social greetings and skills. He tries to interact with his peers even though they don't always understand him. He loves making people laugh. He enjoys sensory activities, bowling and trying new things.

The Assessment of Learning Process (ALP) for AAC ™

Max C.   1-15-21

STAGE	PHASE	Activity & Movement with AAC Device	Understanding of AAC device use	Attention	Social interaction	Expressions/ emotions
Explore Performance *Extrovert - Focus on body, tool/s, environment & occupation*	**8** Expert "I'm not thinking about how to use this - I just do it."	Uses tool for *multiple activities in various settings.* Effortless tool-use for interaction & communication. Movements automatic, fluid, precise.	*Integrated tool use* Tool use is sub-conscious/ automatic. Consciousness is focused on interaction and communication in the actual situation and occupation.	*Attention regulation* is well established/ sustained	Consistently/simultaneously interacts with tool, environment and social partners	Depends on the occupation involving interaction/ communication
	7 Proficient "I'm in control and use it fluently."	*Controlled, smooth tool use* for interaction and communication. Refinement of movement fluency. Uses full scope of communication device.	Complete awareness of tool use; Refines choices and correcting mistakes	*Shares attention* on multiple items Generally focused	Open to multiple interactions at once; Uses tool to facilitate social interaction	Happiness Satisfaction
	6 Competent "I can use this to communicate."	Uses tool in a *goal-directed way* for interaction and conveying messages. Movements are purposeful, but coarse and unrefined.	*Competent tool use;* Conscious of how to respond to interaction and create own messages. May ignore mistakes	*Focus on goal;* Can focus on many items, but easily disrupted	Consecutive interactions one after the other; tool use interrupts social interaction	Serious Contented Laugh Excited
Explore Sequencing *Difficult transition - Focus on body, tool/s & environment*	**5** Sophisticated Beginner "I know its use and try to master it."	*Puts chains of acts/effects together (sequencing)* Knows the message, focuses on how to say it. Repeated, varied, eager movements when experimenting to find best pattern. May appear to be stuck/ plateauing.	Aware of the AAC device's expanded use for communication & language; Searches patterns for linking effects into meaningful expressions. May be reluctant/ unwilling to follow directives.	*Active concentration;* Two channeled shared attention	Engages partner in interaction, communication on object, or other person.	Eager Smile Serious Frustration
	4 Advanced Beginner "I find out more ways to use it."	*Builds chains of acts/effects (early sequencing)* Explores more effects & ways to approach the tools for choosing output. Able to find and select targets. Intentional, cautious movements.	Conscious that the tool can be used to interact with the environment/ communicate. Aware of variations and choice of effect/output.	*Attentive;* Spontaneously shifts between two foci (e.g., environment and task) for attention	Involves others in interaction; May indicate need for help	Serious Smile Sometimes laugh
Explore Functions *Introvert- Focus on body & tool/s*	**3** Beginner "I'm making that happen."	*Acts to get anticipated effect with intent* Activates tool/s; Distinct targeted movements; Able to find a target, and may select	*Basic tool use* Conscious of cause-effect relationships. Anticipates a specific effect/output	*Alert.* One focus for attention but able to shift att'n when prompted.	Initiates interaction Keeps and responds to eye-contact Facial signaling	Serious Contented Smile
	2 Curious Novice "Something is happening, but not sure how or why."	Attempts *approximate activation;* Explores all parts of the tool/s without clear purpose or intent; Diffuse vague multi-directed movements; May try various body parts to get effect	*Awareness* that something happens at activation but not conscious of where, when and how	*Increased alertness;* One focus for attention	Responds to interaction; Some eye-contact; Behavioral mirroring	Contented Curious Anxious Angry
	1 Novice "This is all new to me."	Excited interest – look, touch; or Non-act; or Rejecting behaviors	*No or vague idea* of how to use the AAC device for interaction and communication	Alert/ curious; or Non-focused/ passive; or Distractible	Limited interaction with others	Open Indifferent Anxious

1- "AAC Device" could be replaced with any type of low or high tech AAC solution, or another computer interface being used. 2- "Tool" refers to a combination of the access method (e.g., finger/ switch/ eyes/ head) and device (e.g., AAC device, low tech board, computer interface, etc.).3 - This is meant to be a qualitative assessment based on what is observed during a specific activity.

prc-saltillo

AAC SETT Framework

Name: Max C.   **Date:** 1-15-21

Team Members: Jennifer, Sue, John

Student/Client (how do they learn, what are their strengths and weaknesses, what are their language skills like)	**Current Abilities:**	fast learner, receptive lang. stronger than expressive
	Areas of Need:	frustrations with communication break downs 25-50% intelligible, low muscle tone
	Other Factors:	cognitive delay
Environments (where do they go that they will need to communicate in)		home, school, after school activities, church
Communication Tasks (what are they not able to communication now that we would like them to do)	**Functional Messages:**	emergency info., gaining info, ask questions, participate in classroom activities
	Social Messages:	socializing w- peers, state opinions

Tools — Features that will meet their needs:

Current Tools & their Limitations: verbal attempts, some signs, facial expressions have tried low tech manual boards (36-90 cells) not enough vocab, unable to make novel message

Symbol Type: (Photos) (Symbolstix) ~~PCS/Boardmaker~~ (Minspeak) App-specific Text Tactile Braille

Linguistic Features: Sentence based (Phrase Based) (Single/Core Words) Spelling

Voice Features: No Voice   Digitized voice   (Synthesized voice)   Personalization   Voice Banking   Message Banking   Other Lang. Options   (Amplification)

Access Features:

Direct Selection (Keyguard) (Touchguide) stylus   Visual supports   Touch settings (dwell, delay, release)

Mouse Head mouse   light pointer   Joystick   ~~trackpad~~   Trackball   alternative

Scanning Method *1-switch, 2-switch, auto)   Feedback (outline, magnify, invert colors, auditory, combo)   Pattern (linear, row/column, block, flow, combo)   Switch type (button, proximity, voice, grip, other)

Head Tracking With head mouse   ~~With facial recognition~~

			Eye Tracking	Interaction settings (calibration/camera settings)
				Activation signal (dwell, blink, switch)
				Feedback (color, cursor, style, outline, highlight)
		Integration	Environmental controls Internal computer access	
			External computer access	
			MP3 player Calculator	
Tools Cont'd	**Features:**	**Portability & Positioning:**	Size ___8-10 inches___ Weight:_____	
			Mount/Stand_____	
			Durability ___yes_____	
			(Handle) (carrying strap) carrying case	
		Other:	Charging options: single port dual port wireless	
			Funding options (Warranty/repair options)	
			(Tech Support) (Additional Training)	
			Computer interface Vocab transfer/backup	
			Other considerations:	

Additional Notes:

- Max wants to interact with others but is not understood especially by his peers.

- no tech options do not have enough vocabulary and peers still struggle to understand.

- we want something that can grow with him over the next 5 years as his environments will be changing at school.

Contents Page / Summary Sheet

Part A: **Establishing context & motivation**

1

1.1	Likes
1.2	Dislikes
1.3	Key people
1.4	Key places

Part B: **Reasons to communicate & reactions to communication**

		Does this	May do this	Does not do this	Not applicable	Potential target
2	**Gaining attention for communication**					
2.1	Interest in interaction	√				
2.2	Gaining an individual's attention	√				
2.3	Understanding of gesture	√				
2.4	Gaining attention to prepare for an interaction		√			
3	**Attention directing**					
3.1	Drawing attention to self	√				
3.2	Drawing attention to an event or action	√				
3.3	Drawing attention to an object		√			
3.4	Drawing attention to other people	√				
4	**Requesting**					
4.1	Requesting a person		√			
4.2	Requesting recurrence	√				
4.3	Requesting cessation		√			
4.4	Requesting assistance			√		
4.5	Requesting an object	√				
4.6	Responding to a direct request for action	√				
4.7	Requesting an event or action		√			
4.8	Requesting information			√		
4.9	Responding to a request for information			√		
4.10	Requesting confirmation of information			√		
4.11	Understanding indirect requests			√		
5	**Rejecting**					
5.1	Rejecting a person	√				
5.2	Rejecting an object	√				
5.3	Rejecting an event or action or task	√				
5.4	Rejecting assistance	√				
5.5	Protesting		√			
5.6	Responding to 'no'	√				
5.7	Negotiating			√		
5.8	Responding to negotiation			√		

		Does this	May do this	Does not do this	Not applicable	Potential target
6	**Naming**					
6.1	Naming an object		✓			
6.2	Naming an action or event		✓			
7	**Commenting**					
7.1	Commenting on the existence of people, objects or events		✓			
7.2	Commenting on the non-existence of people, objects or events			✓		
7.3	Commenting on an attribute in the immediate context			✓		
8	**Giving information**					
8.1	Giving information about self			✓		
8.2	Giving information about other people or events			✓		
8.3	Giving information to direct other people or actions		✓			
9.	**Asking questions**					
9.1	Asking questions using 'who?'			✓		
9.2	Asking questions using 'what?'			✓		
9.3	Asking questions using 'where?'			✓		
9.4	Asking questions using 'when?'			✓		
9.5	Asking questions using 'why?'			✓		
9.6	Asking questions using 'how?'			✓		

Part C: Contextual variation

10

		Does this	May do this	Does not do this	Not applicable	Potential target
10.1	People				*see notes*	
10.2	Places					
10.3	Time					
10.4	Topic					

Part D: Participation in conversation

11   Strategies used

		Does this	May do this	Does not do this	Not applicable	Potential target
11.1	Conversational breakdown	*see notes*				
11.2	Signalling communication breakdown			✓		
11.3	Repairing communication breakdown			✓		
11.4	Requesting clarification			✓		
11.5	Maintaining an interaction or conversation over more than 2 turns		✓			
11.6	Giving feedback to a communication partner when listening			✓		
11.7	Giving feedback to a communication partner when formulating a message			✓		
11.8	Changing the topic		✓	*see notes*		
11.9	Joining a conversation		✓			
11.10	Terminating an interaction		✓			

12   Use of social etiquette

		Does this	May do this	Does not do this	Not applicable	Potential target
12.1	Using social greetings and partings		✓			
12.2	Complying with social conventions			✓		
12.3	Telling jokes		✓			
12.4	Responding to jokes			✓		

![prc-saltillo]

Participation Inventory Grid

Name: **Max C.** Date: **1-19-21** Setting: **classroom**

Activity: **science lesson**

Steps of Activity	Level of Independence	Opportunity Barriers	Access Barriers	Notes
1. Look at smart board for lesson	P – independent C – verbal assist	None	None	
2. Watch teacher add food color to water	P – verbal assist C – physical assist	None		
3. Students comment on what they see	P – independent w-set up C – physical + verbal	Knowledge		C-needed prompts to make comments
4. Watch teacher add more food color to water	P – independent C – independent w-set up	None		
5. Students comment on change	P – independent w-set up C – verbal assist	Knowledge	Cognitive	teacher's explanation was not fully understood which may impact response
6. Teacher asks for prediction about adding a new color	P – independent C – verbal assist	Knowledge		
7. Students make prediction	P – independent w-set up C – physical + verbal	Knowledge	Cognitive	C – still working on prediction concept

Key:

P= peer   CC= complex communicator

Level of Independence: Physical Assistance, Verbal Assistance, Independent with set up, Independent
Opportunity Barriers: Policy, Practice, Knowledge, Skill
Access Barriers: Physical/Motor, Cognitive, Literacy, Visual/Auditory

9-15-20HBP Modified from Beukelman and Mirenda Participation Model

The Assessment of Learning Process (ALP) for AAC ™

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The Assessment of Learning Process (ALP) for AAC ™

Stage 3
Extrovert/ Exploring Performance

Focus is on body, access method, communication & environment. SGD focus = improved use of language and system

8 Expert

"I'm not thinking about how to use this – I just do it." Fluid, precise, automatic movement. The task (not access) is focus.

7 Proficient

"I'm in control and use it fluently." Uses device/ access method for multiple functions, movement is controlled and refined.

6 Competent

"I can use this to communicate." Purposeful but unrefined movement. Increased sequencing, may ignore mistakes.

Stage 2
Difficult Transition/ Exploring Sequencing

Focus is on body, access method & communication. SGD focus = intro to language/ communication

5 Sophisticated Beginner

"I know its use and try to master it." Overshoots and undershoots movement. Repeats and varies movement to explore different effects. Exhibits frustration at times.

4 Advanced Beginner

"I find out more ways to use it." Able to locate and select target, and explores different targets. Shifts attention between people and activity.

Stage 1
Introvert/ Exploring Functions

Focus is on body & access method. SGD focus = early exposure to access method, games & participation

3 Beginner

"I'm making that happen." Able to locate target, shows basic understanding of access method.

2 Curious Novice

"Something is happening but I'm not sure how or why." Attempts approximate activation. Increased interest/ alertness during activity.

1 Novice

"This is all new to me." No or vague idea of how to use, may use unintentionally and be curious or passive.

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AAC SETT Framework

Name:_____ **Date:**_____

Team Members:_____

_____

Student/Client (how do they learn, what are their strengths and weaknesses, what are their language skills like)	**Current Abilities:**	
	Areas of Need:	
	Other Factors:	
Environments (where do they go that they will need to communicate in)		
Communication Tasks (what are they not able to communication now that we would like them to do)	**Functional Messages:**	
	Social Messages:	
Tools	**Current Tools & their Limitations:**	

Features that will meet their needs:	**Symbol Type:**	Photos Symbolstix PCS/Boardmaker Minspeak App-specific Text Tactile Braille
	Linguistic Features:	Sentence based Phrase Based Single/Core Words Spelling
	Voice Features:	No Voice Digitized voice Synthesized voice Personalization Voice Banking Message Banking Other Lang. Options Amplification

Access Features:

Direct Selection	Keyguard Touchguide stylus Visual supports Touch settings (dwell, delay, release)
Mouse	Head mouse light pointer Joystick trackpad Trackball alternative
Scanning	Method *1-switch, 2 -switch, auto) Feedback (outline, magnify, invert colors, auditory, combo) Pattern (linear, row/column, block, flow, combo) Switch type (button, proximity, voice, grip, other)
Head Tracking	With head mouse With facial recognition

Modified from Joy Zabala's AT SETT Framework, HBP 5-2020

		Eye Tracking	Interaction settings (calibration/camera settings) Activation signal (dwell, blink, switch) Feedback (color, cursor, style, outline, highlight)
Tools Cont'd	**Features:**	**Integration**	Environmental controls Internal computer access External computer access MP3 player Calculator
		Portability & Positioning:	Size_____ Weight:_____ Mount/Stand_____ Durability_____ Handle carrying strap carrying case
		Other:	Charging options: single port dual port wireless Funding options Warranty/repair options Tech Support Additional Training Computer interface Vocab transfer/backup Other considerations:

Additional Notes:

prc-saltillo

Participation Inventory Grid

Name:_____ Date:_____ Setting:_____

Activity:_____

Steps of Activity	Level of Independence	Opportunity Barriers	Access Barriers	Notes
1.				
2.				
3.				
4.				
5.				
6.				
7.				

Key:

P= peer   CC= complex communicator

Level of Independence: Physical Assistance, Verbal Assistance, Independent with set up, Independent
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