AAC Resource for Individuals with Aphasia

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This document is based on the AAC Aphasia Category framework by Garrett and Lasker (2005).   The framework differentiates between two types of communicators with Aphasia:

1. **Independent communicators**:   individuals who are able to *independently initiate* use of different communication strategies.

2. **Partner Dependent communicators**: Individuals who *consistently depend on a partner* to manage informational demands and provide communication choices within highly familiar contexts.

We need to ask 5 Assessment questions to determine which category best describes the client:

1. Does the person with Aphasia (PWA) use unaided communication strategies (e.g., gestures, writing drawing)?   If so, with what degree of cueing?

2. Are partner dependent strategies being used? (e.g. partner writing key words, providing choice of responses)

3. Can the PWA use external stored information/messages (i.e. messages that don't talk on a communication board)?

   The *Multi-Modal Communication Screening Task for Persons with Aphasia* can be used to assess this skill, available for free at http://aac.unl.edu/screen/picture.pdf

4. Can the PWA access stored messages on a speech generating device?

   'Aphasia -Stored Message Assessment' pages available in TouchChat through iShare: Go to Public Files > Adult > General Communication > Aphasia-Stored Message Assessment.

5. Can the PWA formulate/generate messages to communicate?

These questions may be answered by observing the PWA and a partner in role play situations.

Please use the checklist below to assist you in assessing and providing AAC intervention for your clients with Aphasia.

PARTNER DEPENDENT COMMUNICATORS						
Communicator Type	Skills	Challenges	Target Skill required for AAC	Assessment Ideas	Therapy ideas	AAC Options – low tech / high tech
Emerging Communicator	☐ Increased attentiveness to tangible objects (e.g., clothing), personal photos, or reminiscence items ☐ Emerging ability to demonstrate (nonverbal) acceptance or rejection of a tangible choice ☐ Looks up when greeted ☐ Takes objects and returns them to command within familiar routines	☐ Poor comprehension without visual or personal context ☐ Inconsistent or nonexistent signal for "yes" or "no" ☐ May demonstrate emerging awareness of daily routine, but is easily confused by changes in the routine or new events ☐ No functional speech or gestures	**EXPRESSIVE (*Multimodal)** ☐ Ability to use gestures ☐ Ability to draw ☐ Ability to point to an object / photo /symbol given an array of choices to: • make a choice • direct care • answer question • assist with identifying direction of conversation (topic)	• *BDAE -3: Praxis subtest* • Informal – E.g., draw common objects, faces, etc. • Object / photo/ symbol selection given a verbal cue for a target picture / symbol • Select a target object / photo/ symbol to answer a question • Select a target object / photo/ symbol to complete a carrier phrase (spoken / written) *E.g. MCST-A: Section A*	1. Target those skills required for AAC at this level to maximize life participation. E.g., • establish reliable yes/no response: learn to communicate affirmation with a head nod and refusal with a head shake • to choose pictured items in the context of a functional activity (e.g. choosing items in grooming routine) 2. Communicate affirmation and refusal (e.g. head nod/shake), symbols to represent affirmation and refusal)	**Low-Tech – Supported Communication Approach** **Augmented partner input (with training)** ✓ **Gestures** ✓ **Written key words** ✓ **Drawings** **Specific context supports** ✓ Premade pages for the partner to use for: ▪ Choice of activities ▪ Directing personal and medical care ▪ Participation in games ▪ Writing letters ▪ Financial management ▪ Etc.
			RECEPTIVE (*Multimodal) ☐ Reliability of yes / no • thumbs up/down • pointing to written cues	• Yes /No questions using personally relevant or context bound questions	3. Modeling yes/no responses – gestural responses (eg. Head nod/shake) in supported conversation **training partners is key	**Family scrapbook / visual scenes (low tech / high tech) to assist with retelling of family events** **Simple conversational scripts using modality available to client (e.g. personal photos, gestures, eye gaze)**
			READING / WRITING ☐ Word recognition an asset	• Picture word matching	4. Focus on *Partner Assisted Communication / Supported Conversation* Training	
			SYMBOL	• Assess ability to associate meaning with objects, photos, picture symbols	5. Increase attention to visual supports (e.g. cards, tic tac toe)	**Mid to High-Tech AAC** None Recommended
			PRAGMATIC ☐ Scripts for Social situations • Greetings • Responses • Carrier phrases with a choice	• Assess ability to take turn in conversation • Eye contact	6. Conversational Group 7. Functional role plays to practice using the low tech solutions set up to support Partner Assisted Communication.	
			LINGUISTIC OPERATIONAL CONSIDERATIIONS	• Assess ability to attend to stimuli presented, recall information with repeated teaching through informal observation	8. Conversation scripts, E.g., greeting and response sequence 9. Games to target turn taking	
			COGNITIVE COMPONENT ☐ Attends to Environmental supports provided by partner • written supports, pictorial cues, gesture cues, object cues	• Do they respond to environmental supports E.g., use of photos illustrating communication locations and activities for scheduling	10. Practice **copying**/ writing the names of objects *(select objects that will be used on a daily basis and can be used to assist with directing care etc)*	

PARTNER DEPENDENT COMMUNICATORS						
Communicator Type	**Skills**	**Challenges**	**Target Skill required for AAC**	**Assessment Ideas**	**Therapy ideas**	**AAC Options – low tech / high tech**
Contextual Choice Communicator	☐ Some attempts to communicate via natural modalities ☐ Can clearly indicate an answer or preference by pointing to a choice of objects, pictures, or large print written words ☐ Can participate in multi-turn conversations given partner supported strategies (written choice, tagged yes-no questions, augmented comprehension) ☐ Confirms or selects topics of interest ☐ Clearly aware of daily routine (e.g., tries to get shoes on before therapy) ☐ Augmented partner input and support enhances comprehension	☐ Speech or gestures are minimally comprehensible ☐ Generate little information on their own ☐ Seldom initiates, even by pointing or vocalizing ☐ Poor comprehension of decontextual auditory information (e.g., commands, questions that do not pertain to events in the present and/or personally relevant information)	**EXPRESSIVE (*Multimodal)** ☐ Ability to indicate a choice by pointing if visually presented, ☐ Ability to indicate a choice with gesture / vocalization if presented auditorily ☐ Ability to point to a word given a list of choices to make a choice /direct care/answer question/assist with identifying direction of conversation (topic) **RECEPTIVE (*Multimodal)** ☐ Comprehension of written words, picture or other visual symbols in shared context **READING / WRITING** ☐ Recognize a word in context ☐ Read at the word or phrase level in context ☐ Identify the first letter of a word **SYMBOL** ☐ Understands a symbol can represent a word or concept **PRAGMATIC** ☐ Social competence - Initiating conversation ☐ Ability to confirm comprehension or signal lack of comprehension through gesture or verbalization **LINGUISTIC OPERATIONAL CONSIDERATIION** ☐ Ability to locate vocabulary in communication book and/or level of support required with navigation **COGNITIVE COMPONENT** ☐ Awareness of daily routines and schedules ☐ Ability to navigate between pages in a system	• Select a target word given verbal cue • Select a target word to answer a question given a choice of 3-4 words • Select a target word to complete a carrier phrase (spoken or written • Informal observation • *MCST-A, response to written choice technique* • *BDAE – 3, WAB, informal observations* • Assess ability to answer personally relevant yes/no questions • Assess ability to provide response when written choice technique used • *BDAE-3, MCST-A, RCBA* • Assess ability to match pictures to words, and understand written words/phrases in context • Assess ability to spell for communication • First letter of keyword / word / phrase • Assess symbolic ability - what level of representation client can use (i.e. objects, photos, picture symbols, text) • *TASP, MCST-A, subtests from the BDAE-3, WAB, AAC Evaluation Genie* • Informal observation • Assess informally in conversation; role play breakdowns and repair sequences • Assess ability to categorize vocabulary (ex. TASP –Categorization Subtest, AAC Evaluation Genie, MCST-A) • Assess informally (e.g. family interview)	1. **Teach key partners:** ✓ To use augmented input strategies when needed ✓ Respond to all communication modes and interpret communication attempts ✓ Use tagged yes/no questions ✓ To use written choice conversation strategy 2. **Teach communicators** ✓ to reference their topic by pointing, gesture ✓ Turn taking in conversation with gestures, written key words, drawings and a list of choices ✓ meaning of graphic symbols ✓ reliable yes/no response (gesture, pointing, verbal) ✓ how to indicate choice in response to questions ✓ to initiate/ask questions by pointing or through verbalizations, gestures ✓ To visually attend to partner's augmented input ✓ To confirm whether message understood ✓ To show new partners any instruction cards provided 3. **Identify preferred/familiar topics** 4. **Identify key partners , and assess current conversational supports used by key partners** 5. **Target conversational exchange (greetings), sharing personal and biographical information** ✓ Teach client to initiate communication 6. **Anticipation shelves (calendar boxes), communicator learns to associate an object with an activity** ✓ Sort objects or pictures cards into different buckets/piles (animals, foods, transportation, etc) 7. **Category Therapy App**	**Low-Tech – Supported Communication Approach** **Augmented partner input (with training)** ✓ **Gestures** ✓ **Written key words** ✓ **Drawings** **Notebooks for use in supported interactions** ✓ Strategies: Written choice, rating scales to communicate opinion, preferences, and qualitative responses and augmented partner input ✓ Instruction card for notebook cover describing strategies **Family scrapbook / visual scenes (low tech / high tech) to assist with retelling of family events** **Remnant Communication book containing personally relevant information, photos, mementos** **Premade pages for the partner to use for:** ✓ Social etiquette phrases ✓ Choice of activities ✓ Directing personal / medical care ✓ Participation in games ✓ Writing letters ✓ Financial management ✓ Etc. **Mid to High-Tech** **Single message button, step-by-step for greetings, introductions** **iPad: Supported use of Communication Apps** ✓ TouchChat app with customized/simplified page set ✓ Sounding Board app

PARTNER DEPENDENT COMMUNICATORS						
Communicator Type	Skills	Challenges	Target Skill required for AAC	Assessment Ideas	Therapy ideas	AAC Options – low tech / high tech
Transitional Communicator	☐ Can access holophrastic messages on a board or device with cues ☐ Can shift modalities with cues ☐ Can initiate a partial message on occasion and in specific contexts, but requires support to communicate a complete message ☐ Can request by pointing or vocalizing ☐ Can greet or produce gestural or spoken word responses in automatic social conversation	☐ Requires constant cueing to think to access stored messages ☐ Requires constant cueing to use alternate modes of communication ☐ Unable to repair conversation breakdowns independently ☐ Does not initiate questions, but may initiate requests for physical needs or comment without cues ☐ Uses mostly automatic speech, if any	**EXPRESSIVE (*Multimodal)** ☐ Ability to respond to questions by gesture/symbols/text ☐ Ability to categorize personally relevant information ☐ Ability to link two items with a model (noun + verb or noun+ adjective) ☐ Ability to use a higher level of response to yes / no questions (i.e., something else / you are on the right track / you are on the wrong track) ☐ Ability to point to / write the first letter of a word for first letter cueing	• Ability to categorize • Determine word class ability (noun, verb etc) • Picture Description tasks that range in complexity from N+V, N + Adj, Prep +N, V+O, N+V+O, done with different supports/devices wrong?" pictures, picture description within barrier task • Assess ability to identify letters, and recognize common sight words • *WAB, "What's wrong picture?"* • *TASP, AAC Genie*	1. Group language therapy (context-based 'world' news/social chat) with access to various AAC supports 2. Partner training- Partner Assisted Communication (with focus on modeling/cueing with visual supports) 3. Conversational turns (basic level script training?)	**Low-Tech – Supported Communication Approach** **Wallet communication book organized categorically but with less vocabulary than a book** **Introduction card** **Communication book with or without basic Core Vocab; categorically organized**

			RECEPTIVE (*Multimodal)
			☐ Comprehend basic verbal and/or written information
				• Auditory comprehension of sentences with and without visual cue
				• Ability to follow 1-3 step directions
				• Ability to identify time and use functionally
				  ○ Day of the week /Time of day/Season
				  ○ Yesterday / today / tomorrow
				• Ability to direct finances
				  ○ Identify word/symbol/photo for specific bank, cheque book, money
					4. ORLA (introductory level)
					
					5. Possibly Constraint Induced Language Therapy (e.g., produce S + V or V + O with cueing)
					
					6. Practice 'sentences' using communication board or book – modeling support
						Communication board with single symbol to convey a whole message
						
						Tangible topic setters (objects, photos, remnants)
						
						Mid to High-Tech
						
						Static displays: Tech Talk, Go Talk 9, Bluebird

			READING / WRITING
			☐ Recognize personally relevant text
			
			☐ Ability to write a single word to:
			  • direct care
			  • answer question
			  • assist with identifying direction of conversation (topic)
				• Reading comprehension – picture/word matching, phrase/picture matching, sight words
				• Ability to copy/write/type the names of objects *(select objects that will be used on a daily basis and can be used to assist with directing care etc)*
				• *WAB, APAR, CADL*
					7. Introduce self with low or high tech AAC strategy
					
					8. Practice answering predictable questions (e.g. autobiographical, topical) by searching for and selecting prestored messages on a Speech Generating Device (SGD)
						iPad/tablet: Supported use of Communication Apps
						✓ TouchChat : 'Aphasia – GF Strong & CAYA' pageset Available for free through iShare - Public Folders – Adult- General Communication
						✓ TouchChat app w/ Multichat 15

			SYMBOL ☐ Recognize personally relevant symbols /photos	• Determine visual discrimination in a field of 2, 4, 6 + • *TASP, AAC Evaluation Genie or informally, with symbols or other visual supports*	9. Practice telling simple stories by activating sequential messages on an SGD.	✓ TouchChat app w/ Wordpower 20 ✓ Sounding board app ✓ Talk Rocket app ○ Customize/simplify lay-outs so that there are not too many levels/pages
			PRAGMATIC ☐ Signal communication partner to initiate communication ☐ Signal a communication breakdown ☐ Take turns in conversation ☐ Shift modalities	• Observation		
			LINGUISTIC OPERATIONAL CONSIDERATIIONS ☐ Working memory ☐ Level of cueing required (phonemic, word lists, drawing, gesture, symbols) ☐ Navigation ability - Number of levels on a display	• Observation		
			COGNITIVE COMPONENT	• Assess Attention/ Memory/ Sequencing/ Social Communication		

Independent Communicators

Communicator Type	Skills	Challenges	Target Skill required for AAC	Assessment Ideas	Therapy ideas	AAC Options – low tech / high tech
Stored Message Communicator	☐ Initiates communication without support ☐ Independently locates messages that have been stored in advance by others ☐ May occasionally produce meaningful spoken words or phrases, ☐ May occasionally communicate portions of ideas by writing or using symbolic gestures ☐ Aware of communication breakdowns but unable to repair successfully	☐ May require support to effectively complete a communication message ☐ Attempts to utilize alternate modalities to augment unintelligible speech are not always effective ☐ Attempts to clarify or elaborate stored messages are usually unsuccessful ☐ Cannot independently spell or combine words to generate novel messages	**EXPRESSIVE (*Multimodal)** ☐ Communicative intent (motivation to communicate a message) ☐ Compositional ability ☐ Categorization ability	• Can they combine 2-3 symbols with support? • Informal observation (are they motivated to communicate?) • *TASP, AAC Evaluation Genie*	1. ORLA (transition to phrase and sentence level). May be able to manage 'homework' 2. Constraint Induced Language Therapy (e.g., S + V + O) 3. Practice sentences with visual supports in the form of text or symbols 4. Conversational scripts (personally relevant, contextually rich vocabulary to support utilization). Use communication book/board/system to assist (with cueing) 5. Response Elaboration Training (ERT) 6. Melodic Intonation Training (MIT) 7. Communication Group	**Low-Tech** **Communication book/board** ✓ with or without Core Vocabulary to work on sentence composition ✓ categorically organized pages with symbols and a label/phrase **Wallet-communication book with key vocab for daily contexts** **Mid to High-Tech** **Static displays i.e. Tech Talk, Go Talk 9, Bluebird** **iPad/tablet: Supported use of Communication Apps** ✓ TouchChat : 'Aphasia – GF Strong & CAYA' pageset Available for free through iShare - Public Folders – Adult- General Communication ✓ TouchChat app w/ Multichat 15 ✓ TouchChat app w/ Wordpower 20-42 o Customize/simplify lay-outs so that there are not too many levels/pages **Lingraphica speech generating devices** http://www.aphasia.com/products/lingraphica-speech-generating-devices Dynavox Compass - Stroke and Brain Injury Persona pageset: http://www.mydynavox.com/DynaVoxCompass#StrokeAndBrainInjurySolution
			RECEPTIVE (*Multimodal) ☐ Comprehension of verbal information	• Informally: following commands, following a conversation • *WAB, TASP (understanding directions)*		
			READING/ WRITING ☐ Ability to read at the word /phrase / sentence level ☐ Ability to supplement message with writing occasionally.	• Assess Reading Comprehension : complexity, comprehension of text with/without a symbol • phrase/sentence-word matching		
			SYMBOL ☐ Symbolic knowledge – size, word classes (nouns, verbs, etc.)	• informally, with symbols or other visual supports • Determine how many symbols/words the client can manage per page (e.g., 6, 8, 12, 24 +) • *TASP, AAC Evaluation Genie*		
			PRAGMATICS ☐ Signal topic of conversation ☐ Signal communication breakdown and need for assistance to repair it	• Observation		
			LINGUISTIC OPERATIONAL CONSIDERATIIONS ☐ Ability to locate stored phrases (in the appropriate category) ☐ Ability to navigate levels of a device (2/3 levels) ☐ Ability to navigate a communication book (through colour coding or words /symbols on tabs)	• Ability to learn and remember navigational patterns to find stored phrases		
			COGNITIVE COMPONENT	• Assess Attention/ Memory/ Sequencing/ Social Communication		

Independent Communicators						
Communicator Type	**Skills**	**Challenges**	**Target Skill required for AAC**	**Assessment Ideas**	**Therapy ideas**	**AAC Options – low tech / high tech**
Generative Message Communicator	☐ Independently combines a variety of modalities and/or message components to create new messages ☐ Independently navigates to multiple locations in a communication system to retrieve appropriate messages ☐ May utilize several steps to produce a single message (e.g., symbol sequences, word prediction, spells series of letters) ☐ Uses stored messages independently in predictable situations when rapid communication is needed ☐ Can sometimes communicate by drawing schematics, maps, objects ☐ Recognizes errors and breakdowns and is sometimes successful at repair	☐May require training to learn when to use AAC strategies effectively ☐ May require more time to complete communication attempts ☐May require training on the use of voice-output device or other symbolic communication mode ☐ Communication breakdowns continue in highly demanding or unfamiliar communication contexts	**EXPRESSION** ☐ Ability to code-switch between modalities, and use a variety of means to get message across **COMPREHENSION** ☐ Ability to understand conversation between 2+ people, ☐ Ability to understand questions that are out of context **READING / WRITING** ☐ Recognize items through whole-word or phonological strategies **PRAGMATICS** ☐ Communicating in unfamiliar or stressful situations ☐ Reliable recognition of breakdowns and repair of breakdowns **SYMBOL** ☐ Able to use variety of symbol types/sizes **LINGUISTIC OPERATIONAL CONSIDERATIIONS** ☐ Ability to navigate multi-level layout ☐ Ability to link 5+ items independently ☐ Ability to link items in grammatical order, but not necessarily including grammatical morphemes ☐ Ability to use categories	• Informal: ability to communicate in unexpected situations • *WAB: Spontaneous Speech/AAC use* • *WAB: Picture Description task* • Informal: ability to follow conversation in small group • *WAB: Auditory Verbal Comprehension* • *WAB: Sequential Commands* • APAR: phonological or whole-word reader • Informal: observe ability to recognize/repair breakdowns • Informal: Able to identify new symbols on a display • *TASP: Symbolic level* ☐ Informal: Picture Description task (N+ V+O, Adj + N+V etc) ☐ *TASP: Sentence Construction* ☐ *AAC Genie: Picture Description* ☐ *MCTS-A*	1. Role play demanding situation for communication 2. Practice using AAC in real-life contexts, with a new person or new situation 3. Role play – the communication partner purposely sabotages the conversation to create a breakdown. 4. Teach skills for repair: request for repetition, rephrasing, addition of context/gestures. 5. Identifying correct vs incorrect sentence structure (verbally? using device?)	**Low-Tech** **Tabulated communication book with core and fringe vocabulary** **PODD-36 or 48 (Modified for adults)** **Mid to High-tech**: **iPad/tablet: Supported use of Communication Apps** ✓ TouchChat : 'Aphasia – GF Strong & CAYA' pageset Available for free through iShare - Public Folders – Adult- General Communication ✓ TouchCHat w/ MultiChat 15 ✓ TouchCHat w/ Wordpower20+ ✓ TouchCHat w/ iEssence ✓ Predictable App ✓ Verbally App o Customize/simplify lay-outs so that there are not too many levels/pages **Lingraphica speech generating devices** http://www.aphasia.com/products/lingraphica-speech-generating-devices Dynavox Compass - Stroke and Brain Injury Persona pageset: http://www.mydynavox.com/DynaVoxCompass#StrokeAndBrainInjurySolution
			COGNITIVE COMPONENT	• Assess Attention/ Memory/ Sequencing/ Social Communication		

AAC-Aphasia Categories of Communicators Checklist Adapted from Garrett, K. & Lasker, J. (2005). Adults with severe aphasia. In D.R. Beukelman and P. Mirenda (Eds.) Augmentative and Alternative Communication: Supporting Children and Adults with Complex Communication Needs, 3rd edition. Baltimore: Brookes Publishing Co. Available at: http://aac.unl.edu.

Independent Communicators						
Communicator Type	**Skills**	**Challenges**	**Target Skill required for AAC**	**Assessment Ideas**	**Therapy ideas**	**AAC Options – low tech / high tech**

Specific Need Communicator	☐ Has indicated a need to perform a specific communication task more efficiently
	☐ In specific contexts or life situations, selectively uses AAC systems/strategies to communicate messages
	☐ May fall into either independent or dependent classifications
		☐ May require emotional and linguistic support to participate fully in unfamiliar situations as a communicator with aphasia	**EXPRESSION**
			☐ Manages communication effectively in most situations using speech/gestures/writing
				• Identify specific desired participation context/communication need
				• Assess requirements of specific communication task and communicator's ability to manage
					1. Identify specific situations and specific messages.
					
					2. Develop a script for that situation. If unable to verbalize the script move to a basic stored message device.
					
					3. Identify level of cueing needed
					
					4. Teach use of tool/strategy for specific context through role play
					
					5. Provide opportunities to use the AAC system developed for each specific component.
					   • Practice with situational questions and role play for the specific situation
					   • Accompany to the specific situation to model / cue.
					
					6. Identify key partners who can assist with identifying specific needs and developing message inventory
					
					7. Involve partner for support if needed
						Low-Tech
						
						Augmented input as needed:
						✓ Written Choice Conversation
						✓ Communication boards/books
						✓ Lists/wallet size cards for specific situations (eg. Grocery shopping, bank transactions, medical appts)
						✓ Partner-training on question-asking and conversation strategies
						
						Scaffolded writing supports (E.g. email, letters, greeting cards)
						✓ Multiple choice letter format
						✓ Blank letter format
						✓ List of phrases
						✓ Cue cards
						
						Mid to High-tech:
						
						Basic stored message device, i.e. Go Talk 9
						✓ Create page overlays for specific context, i.e. phone conversation
						✓ Train partners to ask questions that allow for a response available on the overlay
						
						Lingraphica speech generating devices
						http://www.aphasia.com/products/lingraphica-speech-generating-devices
						
						iPad/tablet: Supported use of Communication Apps
						✓ TouchChat app with pages made to convey a sequence of messages i.e. as required during community transaction or phone call
						  o simplify layouts to minimize levels/pages
						
						Dynavox Compass - Stroke and Brain Injury Persona pageset:
						http://www.mydynavox.com/DynaVoxCompass#StrokeAndBrainInjurySolution

			COMPREHENSION ☐ Ability to select a target response from an array of choices.	• Determine minimum size of button for choices • Determine maximum # of items per page.		
			PRAGMATICS ☐ Demonstrates awareness of situations where AAC is needed	• Assess whether communicator needs partner support to utilize AAC strategy		
			LINGUISTIC OPERATIONAL CONSIDERATIIONS ☐ Ability to navigate to the target overlay for the specific situation on a dynamic screen. ☐ Ability to navigate to the target area for a specific situation on a sliding screen (iPad). ☐ Ability to select the target wallet size card to present in a specific situation.	• Determine how many layers can be managed to navigate to the target i.e., how many hits? • Determine whether label or picture or label/picture combination is needed to locate target area. • Determine how many choices are managed. • Determine whether label or picture or label/picture combination is needed to assist with selecting the target wallet card for a specific situation		
			COGNITIVE COMPONENT	• Assess Attention/ Memory/ Sequencing/ Social Communication		

List of Resources

1. J.P. Lasker, K. L, Garrett, & L.E. Fox (2007). Severe Aphasia. In D.R. Beukelman, K.L. Garrett, & K. M. Yorkston, *Augmentative Communication Strategies for Adults with acute or Chronic Medical Conditions*, (p. 163-206). Baltimore, Maryland: Paul H. Brooks Publishing.

2. K.L. Garrett & J. P. Lasker (2013). Adults with Severe Aphasia and Apraxia of Speech. In D.R. Beukelman & P. Mirenda, *Augmentative and Alternative Communication – Supporting Children and Adults with Complex Communication Needs*, (p. 405-445). Baltimore, Maryland: Paul H. Brooks Publishing.

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4. K.L, Garrett, & J. Lasker.   The Multimodal Communication Screening Task for Persons with Aphasia, MCST-A, 2005. http://aac.unl.edu/screen/picture.pdf

5. H. Goodglass, E. Kaplan, B. Barresi.   Boston Diagnostic Aphasia Examination – 3rd Edition, 2000.

6. T. Iacono, & L. Cupples.   Assessment of Phonological Awareness and Reading (APAR), Version 1.14, 200-2002. http://www.elr.com.au/apar/

7. A. Holland, C. Fratali, D. Fromm (1999).   Communication Activities of Daily Living (CADL)

8. Pragmatically Organized Dynamic Display (PODD) communication books, by Gayle Porter.   https://www.spectronicsinoz.com/product/pragmatic-organisation-dynamic-display-podd-communication-books-direct-access-templates

9. L. Cherney. Oral Reading for Language in Aphasia with virtual therapist (ORLA). http://www.bltek.com/virtual-teacher-side-menu/orla.html