Slide 1

Life Participation Approach to Aphasia

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Slide 2

Objectives

- Describe the Life Participation Approach to Aphasia
- Identify clinical tools to facilitate assessment of interests and values
- Identify resources to support meaningful conversations
- Identify six evidence-based language interventions

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Aphasia Defined

"Aphasia is a language problem that masks inherent competence and that has its most dramatic impact on conversational interaction (talking and understanding)…

Without the ability to participate in conversation, every relationship, every life role, and almost every life activity is at huge risk. With additional reading and writing difficulties the impact is devastating."

Kagan, A. & Simmons-Mackie, N.(2013). Changing the aphasia narrative. *ASHA Leader, Nov 18,* 6-8.
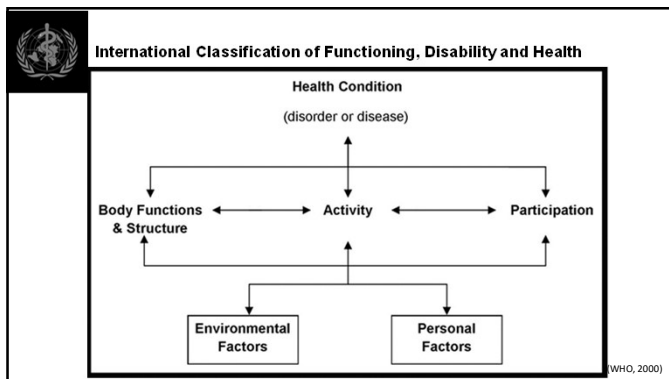
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Slide 4

Core Values

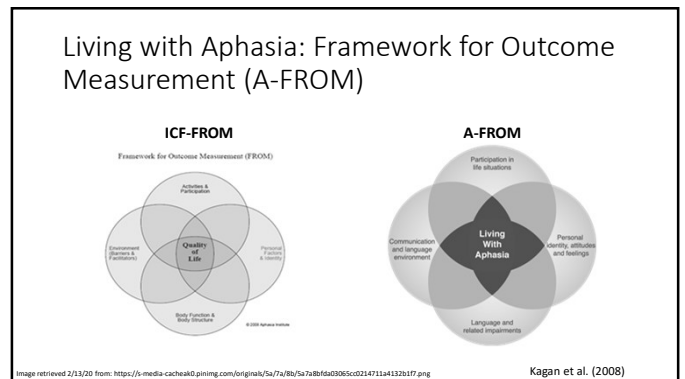Life Participation Approach to Aphasia

- Explicit goal is enhancement of life participation
- Services are available to all affected by aphasia
- Assessment and intervention targets personal and environmental factors
- Success is measured by documented life changes
- Services are available as needed at all stages

by the LPAA Project Group (in alphabetical order: Roberta Chapey, Judith F. Duchan, Roberta J. Elman, Linda J. Garcia, Aura Kagan, Jon Lyon, and Nina Simmons Mackie)

Chapey et al. (2000)

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International Classification of Functioning, Disability and Health

(WHO, 2000)

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Slide 6

Living with Aphasia: Framework for Outcome Measurement (A-FROM)

Image retrieved 2/13/20 from: https://s-media-cacheak0.pinimg.com/originals/5a/7a/8b/5a7a8bfda03065cc0214711a4132b1f7.png

Kagan et al. (2008)

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WHO-ICF

World Health Organization's International Classification of Functioning, Disability and Health

The ICF components include:
- **Body functions and body structures**
- **Activities and participation**
- **Personal factors**
- **Environmental factors**

Brown & Vickers (2000)

- Relationships
- Vocational responsibilities
- Social closeness
- Leisure activities
- Community activities

- Confidence
- Insight
- Self-esteem
- Identity and autonomy
- Expectations of PWA

Participation

Personal

What gets in the way — Environment — Your Life

What helps

Your Life

Your Aphasia

© 2008 The Aphasia Institute

- Social support
- Friends' attitudes and knowledge
- Therapist's perspectives/beliefs
- Supports and barriers to communication

- Language and cognition
- Strengths
- Meaningful vocabulary

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What Do Patients with Aphasia Want?

Study interviewed 50 participants with aphasia interviewed post-stroke 2011 study by Worrall and colleagues
- Return to pre-stroke life
- Communicate opinions, not just basic needs
- Information about aphasia, stroke, and available services
- More speech therapy
- Greater autonomy
- Dignity and respect
- Engagement in social, leisure and work activities
- Regaining physical health
- Help others

Linked to *Participation* domain of the WHO model

Worrall et al. (2011)

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Acute Care: What family members wanted to know at onset of aphasia

- What is a stroke?
- What is aphasia?
- Where can we get more information about aphasia?
- What is the best that we can expect?
- What can we do?
- What resources are available once we leave the hospital?

Avent, et al. (2005)

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Life Participation Approach to Aphasia

- LPAA is a therapeutic mindset
- LPAA prioritizes the person with aphasia and their life goals

"LPAA emphasizes the attainment of re-engagement in life by strengthening daily participation in activities of choice."

Chapey et al. (2000)

SLP can address how communication impacts life participation.

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Aphasia Therapy

- Approaches
  - Impairment-based
  - Functionally oriented

- Delivery methods
  - Individual
  - Group

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Where to begin…

- LPAA Assessment
  - What matters to the PWA?
  - Focus on participation outcomes
  - Beginning at the End

Kagan & Simmons-Mackie (2007)

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Assessment of Interests & Values

- Life Interests and Values Cards (Haley et al., 2010)
- Aphasia Needs Assessment (Garrett and Beukelman, 1997; revised 2006)
- Communication History Form (Kathryn Cann)
- Aphasia Topic Interest Inventory (tobii dynavox)

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Life Interests and Values Cards
Haley et al. (2010)

- LIV Cards are a nonlinguistic, picture-based instrument designed for communicating directly with PWA about their current and desired life activities
- Sort functional activities into "current activities" and "activity preferences"

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Aphasia Needs Assessment

- https://cehs.unl.edu/documents/secd/aac/assessment/aphasianeeds.pdf

Free Resource

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Slide 16

Aphasia Needs Assessment

- https://cehs.unl.edu/documents/secd/aac/assessment/aphasianeeds.pdf

Free Resource

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Communication History Form

Free Resource aphasiafriendly.com (Kathryn Cann)

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Aphasia Topic Interest Inventory

Free Resource tobii dynavox

Retrieved on 2/10/20 from: https://www.tobiidynavox.com/en-US/learn/user-conditions/aphasiastroke/

http://tdvox.web-downloads.s3.amazonaws.com/Snap/Training/Aphasia_Topic%20Interest%20Inventory.pdf

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Functional Vocabulary Inventory	• Have familiar communication partners list off:
	  • People – family, friends, neighbors, doctors, individuals in the community
	  • Pets
	  • Places around town (e.g. Walgreens, Publix, barbershop, place of worship, gym)
	  • Restaurants
	  • Work history
	  • Education
	  • Hobbies
	  • Preferred food and beverages (breakfast/lunch/dinner, snack, dessert options)
	  • Medical

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FOURC
- Choose Communication Goal
- Create Client Solutions
- Collaborate on a Plan
- Complete and Continue

Skills + Abilities
Intentional Strategies
Environmental Supports
Motivation + Confidence

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C.A.P.E.

CONNECTING PEOPLE WITH APHASIA

AUGMENTATIVE & ALTERNATIVE COMMUNICATION

PARTNER TRAINING

EDUCATION AND RESOURCES

(Elman, 2019)

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Educational Videos

Aphasia: The disorder that makes you lose your words

- Susan Wortman-Jutt

- Ted-Ed presentation
- 5 minutes total
- Initial 2 minutes 30 seconds describes non-progressive aphasia

https://www.youtube.com/watch?v=-GsVhbmecJA&feature=youtu.be

What is Aphasia?

- National Aphasia Association
- 1 minute, 30 seconds

https://www.aphasia.org/aphasia-definitions/

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Videos

It's Still Me
- "Heart to Heart" is a song for the *It's Still Me* video trailer
- Depicts how individuals experience aphasia
- 3 minutes

https://www.youtube.com/watch?v=e9_dpe9Rbvw

The Invisible Rain Cloud
- TBI and aphasia
- 5 minutes

https://www.aphasia.org/stories/traumatic-brain-injury-and-aphasia/

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Videos

What is Aphasia?

- Lingraphica
- 2 minutes, 16 seconds

What is aphasia

https://www.aphasia.com/aphasia-resource-library/what-is-aphasia/

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Educational Website

Aphasia Simulations

INTRODUCTION   WHAT IS APHASIA?   LISTENING   READING   WRITING   SPEAKING   SHARE

Overview   Simulation 1   Simulation 2   Simulation 3   Communication Tips

Simulating Phonological and Semantic Errors

Read the instruction and click on the picture that corresponds to the instruction.

Click on... neSe.

NEXT QUESTION

1 of 5

Aphasia Simulations | Voices of Hope for Aphasia (vohaphasia.org)

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Videos about Communication After Aphasia

What to expect when working with a speech-language pathologist
https://www.aphasia.org/stories/how-do-you-treat-aphasia/

Multimodal communication
https://www.youtube.com/watch?v=KWVoqM9jmEM

Communication Tips for partners
https://www.aphasia.org/aphasia-resources/communication-tips/
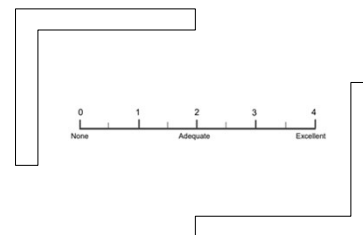
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Supported Conversation for Adults with Aphasia

- Acknowledge Competence

- Reveal Competence
  - Techniques to ensure the PWA
    - Can accurately comprehend messages
    - Express messages

- Verify

(Kagan, 1998)

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Rating Support and Participation in Conversation

0	1	2	3	4
None		Adequate		Excellent

- Measure of Skill in Supported Conversation
- Measure of Level of Participation in Conversation (for PWA)
  - Social Interaction
  - Transaction

Kagan, A. et al (2004)
Kagan, A., Simmons-Mackie, N., & Shumway, E. (2018)

Free Resource   https://www.aphasia.ca/home-page/healthcareprofessionals/resources-and-tools/mscpc/

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Conversational Coaching

- Teaching effective verbal and non-verbal strategies
  - PWA
  - Partner

- Measuring
  - Number of main concepts
  - PWA – Frequency of functional communication (multimodal strategy use)
  - Partner – Frequency of supportive techniques

(Hopper, Holland & Rewega, 2002)

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Partner Training Videos

Aphasia Etiquette
- UK Stroke Association
- How to communicate with someone with aphasia
- 2 minutes

APHASIA ETIQUETTE
ASK · WAIT · LISTEN

https://www.youtube.com/watch?v=hTh86NoQh7Q

Aphasia: Supported Communication
- Stroke 4 Carers
- Demonstrates supported communication techniques using AAC
- 7 minutes total
- Begin at minute 4:39

https://www.stroke4carers.org/?p=5390

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For Clinicians

TactusTherapy
How To:
Communication Partner Training (CPT) for Aphasia

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Aphasia Access: Resource for Clinicians

⇐ Fundamental Techniques

https://www.aphasiaaccess.org/

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www.aphasia.org/ aphasia-id-card

theaphasiacenter.com/ pocket-card

https://mari.umich.edu/wp-content/uploads/Aphasia-ID-Cards-Easy-Print.pdf

bestmedicalforms.com /aphasia-wallet-cards

Aphasia Wallet Cards

Free Resources

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No/Low-tech AAC in Aphasia

- Drawing
- Writing
- Word lists
- Scripts
- Communication book
- Communication boards
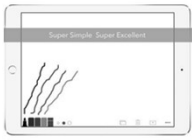- Picture dictionaries
- Gesture (universal)

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Writing and Drawing

Writing Tablet   Dry Erase board   Whiteboard App

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Word lists

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Scripts

Microsoft Office Immersive Reader
- Word
- OneNote
- Edge web-browser

I would like to make an ap·point·ment.

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Visual Scene Display (Print Materials)

University of Nebraska-Lincoln
Augmentative and Alternative Communication
Aphasia Templates

boardmakeronline.com

Free Resource
https://cehs.unl.edu/aac/visual-scene-resources/
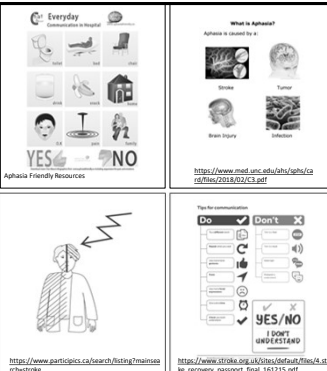
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Communication Book

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Aphasia Friendly Materials

- Aphasia Friendly Resources
  - aphasiafriendly.co (on Facebook)
- UNC- Chapel Hill
  Aphasia Friendly Print Material
  - www.med.unc.edu/ahs/sphs/card/resources/aphasia-friendly-printed-material/
- The Aphasia Institute
  - participics.ca
- UK Stroke Association
  - www.stroke.org.uk/what-is-aphasia

Free Resources

Aphasia Friendly Resources

https://www.med.unc.edu/ahs/sphs/card/files/2018/02/C3.pdf

https://www.participics.ca/search/listing?mainsearch=stroke

https://www.stroke.org.uk/sites/default/files/4.stroke_recovery_passport_final_161215.pdf

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High Tech AAC

Visual Scene Apps
- Scene and Heard (iOS) $84.99
- Snap Scene (iOS/Windows) $49.99
- Scene Speak (iOS) $9.99

(Brock et al, 2017)
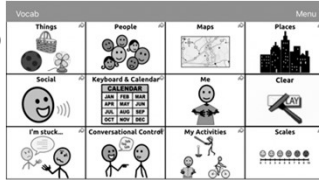
https://apps.apple.com/us/app/scene-speak/id420492342

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High Tech AAC

Communication Apps
- *Snap Core First* with Aphasia Page Set (iOS)
  $49.99
- *Touch Chat* - Communication Journey: Aphasia (iOS)
  $149.99
- *SpeechAssistant* (iOS/Android)
  Up to $14.99
- *EESpeech* (iOS/Windows)
- *AlphaTopics – AAC*
- *ChatAble*
  $99.99
- *SmallTalk* by Lingraphica (iOS)
- *Alexicom* (iOS/Android)
- *App2Speak* (iOS/Android)
  $179.99

Example of TouchChat – Communication Journey: Aphasia

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AlphaTopics – AAC by Tactus

- $4.99
- iOS/Android
- 3-in-1
  - Letter board
  - Topics grid
  - Whiteboard

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Acute/Inpatient AAC

Healthcare Communication App   Trach Tools App

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YoDoc App

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mytobiidynavox.com

Snap Core First with Aphasia Page Set

by tobii dynavox

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SGD: Lingraphica

TouchTalk   All Talk   Mini Talk

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https://www.aphasia.org/

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Evidence Based Language Treatment Protocols

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Treatment for Aphasia

American Speech-Language-Hearing Association (ASHA)
https://www2.asha.org/PRPSpecificTopic.aspx?folderid=8589934663&section=Treatment
- Treatment approaches
- Treatment options
- Treatment considerations

ASHA Scientific Evidence Maps
https://www2.asha.org/EvidenceMapLanding.aspx?id=8589936279&recentarticles=false&year=undefined&tab=all
- Systematic Reviews
- Guidelines
- Meta-analyses

Lingraphica
https://www.aphasia.com/aphasia-resource-library/aphasia-treatments/aac-device-therapy/
- Aphasia treatment options

Communication Therapies for Adults (blog)
https://communicationtherapyforadults.wordpress.com/about-communication-therapies-for-adults/

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Welcome to the ANCDS Aphasia Treatment Website

https://aphasiatx.arizona.edu/content/welcome-ancds-aphasia-treatment-website

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Sentence Production Treatment

- Response Elaboration Training
- Verb Network Strengthening Treatment
- Script training

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Response Elaboration Training

Who:
- Individuals with different types of aphasia
- Mild to severe aphasia cases
- PWA who also have acquired apraxia, with additional cues

Target:
- Increase number of content words in conversation
- Improve word retrieval in conversation
- Promote generalization of expanded utterances across contexts and conversational partners

Approach:
- Traditional - action pictures
- Modified – No pictures; uses personal recount topics chosen by PWA

(Bunker, et al. 2019; Wambaugh, et al. 2013)

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Am J Speech Lang Pathol. 2019 Mar; 28(1 Suppl): 321–329.
Published online 2019 Mar 11. doi: 10.1044/2018_AJSLP-17-0131

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Step 1: Patient's Response	# Content Words	Step 6: Patient's Response	# Content Words
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

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RET Protocol

Step 1: With 1 picture/topic, obtain a verbal response.
- SLP: What did you do today?
- Client: "Chicago Med."

Step 2: SLP reinforce, shape, model the initial response
- SLP: "Great. I watched Chicago Med. Would you repeat that?" "Watch Chicago Med."

Step 3: SLP use "WH" cue to elicit elaboration of the initial response
- SLP: "Who did you watch Chicago Med with?"
- Client: "Daughter."

Step 4: SLP reinforce, shape, model the 2 responses combined
- SLP: "Wonderful! I watched Chicago Med with my daughter."

Step 5: SLP provide a second model and request repetition
- SLP: "Try and say the whole thing after me. Say, ' I watched Chicago Med with my daughter.'"
- Client: "I watch Chicago Med and…daughter."

Step 6: After reinforcement, elicit delayed initiation of the combined response.
- SLP: "Great job. Would you try to say it one more time?" "I watched Chicago Med with daughter."

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RET Protocol

Step 1: With 1 picture/topic, obtain a verbal response.
- SLP: What did you do over the weekend?
- Client: Me and Lisa and some friends rented a boat, a uh… (client writes "Y")

Step 2: SLP reinforce, shape, model the initial response
- SLP: "Yacht?" Yes. "Nice. Me and Lisa and some friends rented a yacht. Would you repeat that?" "Me and Lisa and some friends rented a yacht.

Step 3: SLP use "WH" cue to elicit elaboration of the initial response
- SLP: "Where did you go?
- Client: "We went to lake uh.." (writes "Hic")

Step 4: SLP reinforce, shape, model the 2 responses combined
- SLP: "Old Hickory Lake? Yes Great! Me and Lisa and some friends rented a yacht on Old Hickory Lake."
- SLP: When did you go?
- Client: We went on Saturday for three hours.
- SLP: "Me and Lisa and some friends rented a yacht on Old Hickory Lake for three hours on Saturday."

Step 5: SLP provide a second model and request repetition
- SLP: "Try and say the whole thing after me. Say, 'Me and Lisa and some friends rented a yacht on Old Hickory Lake for three hours on Saturday.'"
- Client: "Me and Lisa and some friends rented a yacht on Old Hickory Lake for three hours on Saturday.'"

Step 6: After reinforcement, elicit delayed initiation of the combined response.
- SLP: "Great job. Would you try to say it one more time?"

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RET Protocol

Step 1: With 1 picture/topic, obtain a verbal response.
- SLP: What are you doing this week?
- Client: "Drive." Whispers, "Sunday, Monday, TUESDAY."

Step 2: SLP reinforce, shape, model the initial response
- SLP: You're driving somewhere on Tuesday? Great. "I am driving on Tuesday." Would you repeat that?
- Client: "I'm driving Tuesday"

Step 3: SLP use "WH" cue to elicit elaboration of the initial response
- SLP: "Where are you driving?
- Client: "Publix"

Step 4: SLP reinforce, shape, model the 2 responses combined
- SLP: "Great! I am driving to Publix on Tuesday"

Step 5: SLP provide a second model and request repetition
- SLP: "Try and say the whole thing after me. Say, 'I am driving to Publix on Tuesday"
- Client: "I am driving to Publix Tuesday"

Step 6: After reinforcement, elicit delayed initiation of the combined response.
- SLP: "Great job. Would you try to say it one more time?" "I drive to Publix Tuesday."

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GOAL

- To promote improved word retrieval and utterance length during conversation with his wife, children and caregiver, Pt will complete response elaboration training to describe at least 5 pictures/retell stories using sentences with 4 content words on average independently over three consecutive sessions.

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Home Practice: Advanced Naming Therapy

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Home Practice: Conversation Therapy

Spark **engaging discussions**

Get **thousands** of questions

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Verb Network Strengthening Treatment

Who:
• Adults with aphasia
• Moderate-severe to mild aphasia.
• Fluent and nonfluent types of aphasia
• No worse than moderate apraxia or no worse than moderate cognitive challenges.

Target:
• Improved word-finding (spoken or written)
• Improved sentence production
• Improved conversation/discourse

(Edmonds et al. 2009)

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VNeST Protocol

Who | What?

Step 1: Generate at least three scenarios around the trained verb
• "Who can/might (verb) something/someone?"
• "What do/might they (verb)?"
Step 2: PWA reads each triad aloud (Who-Verb-What)
Step 3: PWA answers 3 "Wh" questions about one of the triads
• Where?
• Why?
• When?
Step 4: SLP reads simple, active sentence containing the target verb. PWA decides whether each sentence is semantically correct.
3 correct, 3 incorrect subject, 3 incorrect object, 3 thematic reversal
Step 5: PWA is asked what verb/action they have been working on.
Step 6: Step 1 is repeated with no cues given.

(Edmonds, 2014)

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throw

Who | What?

Best man | bachelor party

Toddler | tantrum

Quarterback | football

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GOALS

• To promote improved word retrieval and syntactic structure during discourse with medical providers and caregivers, patient will generate 70% of "Who" nouns with min cues during Verb Network Strengthening Treatment with 3+ verbs over 3 consecutive sessions.

• To promote improved word retrieval and syntactic structure for communicating with friends and members in aphasia group, patient will independently complete oral reading of subject/verb/object triads during VNeST with 80% accuracy with some distortions over at least 3 trials across three consecutive sessions.

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Home Practice

Advanced Naming Therapy by Tactus Therapy

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Client completed a verb network strengthening task from 10:09 AM to 11:04 AM (active time = 00:53:09) on Aug 3, 2020 using Verb Set 4 in the Advanced Naming Therapy app. Client was asked to generate up to 3 agents and patients for each verb, read the sentence aloud, expand one sentence, read the expanded sentence, restate the verb, and create 3 sentences.

Levels of support for generating the response (either spoken or typed) and for reading aloud were judged during the activity. IND denotes the client performed independently; MIN means minimal assistance was provided; MAX indicates that maximal support was required.

MC indicates multiple choice options were selected.

SPLIT

Who:	Verb:	What:
The woodman	split	A tree
Friends (MC)	split	A bill
physicist (MC)	split	and atom

Expansions: Friends - split - A bill
Where: at home
Why: they both live there
When: at the end of the month
Recall: split
Compositions:
physicist split an atom

SHARE

Who:	Verb:	What:
two brothers	share	toys
husband and wife	share	A car
A doctor	share	A test

Expansions: husband and wife - share - A car
Where: at their home
Why: her cars in the shop
When: going to work
Recall: share
Compositions:
husband and wife share their car
Brothers share their toys
dr. shares the test

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Script Training

Who:
• Fluent and non-fluent aphasia
• Acquired apraxia of speech

Target:
• Improved total word production, accuracy and rate of speech
• Improved communication of information in a functional situation
• Improved confidence

(Hopper & Holland, 1998; Youmans G. & Youmans S., 2011)

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Script Training Protocol

Step 1: SLP models the target phrase

Step 2: SLP and participant produce the phrase in unison

Step 3: SLP and participant produce the phrase in unison with SLP fading participation

Step 4: Independent production by the participant with written cue cards

Step 5: Independent production with no cuing

(Cherney et al., 2008; Youmans et al., 2005)

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Script Training

• Good evening everyone.
• Welcome to _____'s.
• It's a pleasure to have you here.
• I'm _____.
• I have been singing at _____'s for 5 years.
• Tonight I am bringing you Rhythm and Blues.
• This song is called _____.

I want to thank my wife, _____, for helping me to coordinate this event. She did everything from making reservations, contacting our award recipients, reaching out and getting the auctioning items, and arranging the tables. Without her this event would not be possible this year.

I've had a stroke.
My comprehension is good.
But I have trouble saying the right word.
It's been six (6) weeks now.
I'm going to outpatient therapy...
...working with physical therapy, occupational therapy, and speech therapy.
I'm getting better every day.

Hi _____, this is _____.
I'd like to make an appointment.
When can you take me?

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GOAL

• Following script training, Patient will immediately verbalize 80% of a trained script with distortions, without reading it, with min cues across three consecutive sessions to promote increased communicative independence, initiation, and participation in conversations with medical providers, aphasia group and members on his community.

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Script for Conversation with SLP

• Hi, Jen.
• Hi, Bob.
• How are you?
• I'm doing well. How are you?
• Good. It is a beautiful day.

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Script for Conversation with a New Acquaintance

- Nice to meet you.
- Nice to meet you too.
- Where are you from?
- I'm from ___. Have you been there before?
- ___.
- Where are you from.
- Maryland. I live in Hermitage now.

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Script for Introducing Self to Aphasia Group

- I am Bob Smith.
- Hi, Bob.
- My stroke happened in 2015.
- Really.
- I have been coming to group for two years.
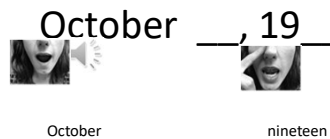- Great.
- I live in Hermitage.

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Appointment

- I am checking in.
- What is your name?
- John Doe
- What is your date of birth?
- October 10, 1963
- What insurance do you have?
- Aetna

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My birthday is…

October ___, 19___

October   nineteen

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Aphasia Script

- I have aphasia.
- Stroke in 2019.
- Trouble saying the right words.
- Sometimes, it's hard to understand.
- Aphasia does not affect my intelligence.

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AphasiaScripts®
Center for Aphasia Research and Treatment at the Shirley Ryan AbilityLab
- Software
- Virtual therapist
- PLAYER ($110)
  - 20 prerecorded scripts (10 basic and 10 more advanced)
- EDITOR ($299 including PLAYER)
  - Allows for the generation of personally relevant individualized scripts

(Mannheim, Halper, & Cherney, 2009)
Images retrieved on 2/14/20 from:
https://ricaphasiascripts.contentshelf.com/page?view=P13020300000003A

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Making an Appointment

Employee   You

I want to make an appointment

Dr. Kirshner

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Snap Core First App
Aphasia Page Set

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Home Practice

• Story Creator app **(*Free)**
• Honeycombsspeechtherapy.com
• Microsoft
  • Word
  • PowerPoint
  • One Note

Story Creator

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Reading and Writing Treatment Procedures

• Oral Reading for Language in Aphasia (ORLA)
• Multiple Oral Re-reading (MOR)
• Copy and Recall Treatment (CART)
• Phonological Treatment

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Oral Reading for Language in Aphasia

Who:
• Chronic non-fluent aphasia
• Mild to severe

Target:
• Written expression and discourse production
• Connected speech production
• Reading comprehension

(Cherney & Grip, 1986)

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Rehabilitation Institute of Chicago
#1 Rehabilitation Hospital in America

ORLA™ Version 1.0

Oral Reading for Language in Aphasia

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Level 1.
Simple 3-5 word sentences at a first grade reading level

Level 2.
8-12 words that may be single sentences or two short sentences, at a third grade reading level

Level 3.
15-30 words, divided into 2-3 sentences, at a sixth grade reading level

Level 4.
50-100 words comprising a 4-6 sentence simple paragraph, also at a sixth grade reading level

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ORLA Protocol

Step 1: SLP reads the sentence aloud and points to each word while the PWA watches and listens

Step 2: SLP reads the sentence aloud while the PWA points to each word.

Step 3: SLP reads the sentence with the PWA, while they point to and read each word together

Step 4: SLP says a word in each sentence aloud and the PWA identifies the word by pointing

Step 5: SLP points to a word in a sentence and asks the PWA to read the word aloud

Step 6: PWA independently reads the sentence aloud

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Data Collection

3-5 word sentences (slow)
Choral Reading: ___% accuracy (PICA)
Independent oral reading following rehearsal: ___% accuracy
Word ID (3 second delay): ___% accuracy
Verbalizing target word (3 second delay): ___% accuracy

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ORLA Sample Goals

- Pt will <u>identify</u> target words in 3-5 word sentences during ORLA tasks with at least 80% accuracy independently over 3 sessions.
- Pt will <u>verbalize</u> target words in 3-5 word sentences during ORLA tasks with at least 80% accuracy independently over 3 sessions.
- Pt will complete <u>choral reading</u> of 3-5 word sentences (normal rate setting) with at least 85% accuracy PICA over 3 sessions.
- Pt will independently read 3-5 word sentences following rehearsal/choral reading with at least 80% accuracy PICA over 3 sessions to promote improved reading of functional scripts during social/community conversations.

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Multiple Oral Re-Reading

Who:
- Adults with varying types of alexia

Target:
- Improved reading fluency rate
- Improved accuracy
- Whole-word recognition

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Multiple Oral Re-Reading

- Patient reads the text aloud multiple times.
- SLP can help as much as is needed (e.g. correct errors, read words of difficulty).
- SLP and patient may read in unison.

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MOR Stimuli

- Consider selecting something with common vocabulary from magazine articles, news reports, or novels based on the patient's interest.
- Consider passages between 100 and 300 words in length.
- Grade level 1-12
- Baseline: Patient reads the passage aloud for the first time while the clinician times them.
- Calculate the reading rate in words per minute (wpm) and accuracy (number of errors/number of total words).

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MOR Sample Goals

- Pt will increase oral reading rate (in wpm) of a paragraph-length passage by at least 10% from baseline implementing MOR over 3 passages.
- Patient will increase reading speed to ___+ wpm of a functional paragraph-length passage (i.e. The Apostles' Creed) following home across 2 sessions to promote increased participation in daily Mass. .
- Patient will increase reading accuracy to >90% accuracy given minimal cueing following home practice of target passage across 2 sessions.

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Data Collection

Pt participated in Multiple Oral ReReading (MOR) protocol with a chosen passage (The Apostles' Creed). This procedure involves a hierarchy of clinician verbal presentation, choral reading, then independent reading by the patient for improved whole-word recognition in sentence to paragraph-length contexts.

Performance was as follows:

- 1st trial: __/112 = __% accuracy at ___wpm
- 2nd trial: __/112 = __% accuracy at ___ wpm
- 3rd trial: __/112 = __% accuracy at ___ wpm

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Copy and Recall Treatment

Who:
- Adults with aphasia
- Has been used with adults with severe apraxia
- Best for those with some residual phonological skills and visual problem solving skills

Target:
- Improved writing/spelling of trained words
- Improved naming of trained words
- Improved texting of trained words

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CART Protocol

(Beeson, P, 1999; Beeson, Hirsch & Rewega, 2002; Beeson, Rising & Volk 2003; Beeson, P & Egnor, H 2006)

Step 1: Present picture to PWA (for example, 'baby')
Say: "What is this? Can you tell me the name?"
- Correct production: "Yes, it's a baby. Would you spell baby?"
- Incorrect production: "It's a baby. Say baby. Would you spell baby?"
- Correct spelling: Continue to the next word
- Incorrect spelling: Complete the following steps.

Step 2:
Present a written model of the word, either written by the SLP or from an example of the PWA's previous correctly written response.
Say: "Here is the word baby. Would you copy it?"
Encourage the participant to copy the word three times. Provide feedback about the accuracy of spelling on each attempt.

Step 3: Cover all written examples of the word. Present the picture, and prompt recall of the spelling three times.
Say: "Let's see if you remember it. Write the word baby."
Provide feedback and then cover the word two additional times, prompting recall.
- Correct: Continue to the next word
- Incorrect: Repeat steps 2 and 3.

Step 4: If the PWA cannot recall the correct spelling after several attempts, move on to the next word. Once all words are completed, if time allows, return to the difficult word again.

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Copy and Recall Treatment

Say and write:

Cover above this line and write each word from memory:

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CART Baseline Data

Set ___
- Writing: Patient was able to write ___% of pictured words independently.
- Naming: Patient was able to name ___% of pictured words independently.
- Repeat the spoken word: With one model from clinician, patient was able to repeat the spoken word with ___% accuracy (optional-PICA).
- Copy the written word: Patient was able to copy a written word independently with ___% accuracy.
- Write the word from memory: Without written cues, patient was able to recall and write the target words with ___% accuracy.
- Say the word: Patient independently recalled and verbalized the target word with ___% accuracy (optional-PICA).

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CART Home Practice

Another Example: CART Home Practice

Nashville

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CART Home Practice Continued

Say and write:

Other Examples of CART Targets

- Name
- Date of Birth
- Address
- Phone Number

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CART for Texting

Examples:
- Ready to go.
- Where are you?
- I'm outside.

CART for Typing Zip Code

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CART Sample Goals

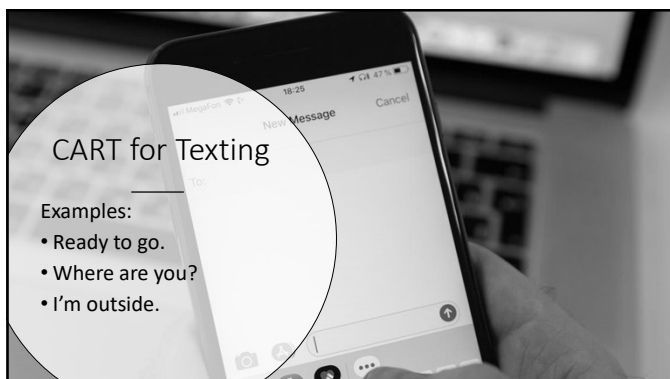- Following CART, Patient will type personally relevant number sequences (5-10 numbers) on a number pad (ie. zip code, phone number, etc) to promote increased independence for making purchases (e.g. at gas station, grocery store) with 100% accuracy independently over three consecutive sessions.
- Following Copy and Recall Treatment, patient will spell at least 20 personally relevant words (names of people, cities, stores, etc) with at least 80% accuracy over three consecutive sessions.
- Patient will complete Copy and Recall Treatment for texting (typing to dictation) three functionally relevant phrases on his smart phone (3-5 words) with 100% accuracy with min cues over three consecutive sessions.

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Phonological Treatment Protocol

- Establish a set of key words that begin with the initial phonemes to be trained
- May use words from the Aphasia Lab protocol or personalized words that are relevant to the patient
- Use CART to train a standard set of words for 20 consonants and 12 vowel sounds.
- It is helpful if the patient can also say the key word, but not necessary to move forward in the protocol
- Train 4 sets of 5 consonants

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Aphasia Research Project Key words by Phoneme:

Consonants:

Set 1		Set 2	
r	rug	k	cake
t	top	d	dog
s	safe	m	moon
n	net	f	fire
l	leaf	p	pie

Set 3		Set 4	
b	book	h	hat
sh	ship	th	three
v	van	w	web
g	goat	ch	chin
z	zoo	j	judge

Vowels:

Set 5

Trained Words		Possible vowel initial words
/i/	leaf, three	cat, eel
/E/	web, net	elk, Ed
/e/	cake, safe	ape
/ae/	hat, van	apple
/aI/	fire, pie	ice
/I/	ship, chin	it, inch

Set 6

Trained Words		Possible vowel initial words
/o/	goat, bone	oat, open
/a/	top, dog	on, off
/^/	rug, judge	up

https://aphasia.sites.arizona.edu/sites/aphasia.sites.arizona.edu/files/2018-10/Phonological%20Treatment.pdf

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Example of Personalized Key Words (Set 4)

Copy and Say Out Loud:

hat	thumb	wine	chicken	jen

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Moving from Set-to-Set

- Criterion is met when the patient can correctly write and say each set with 80% correct accuracy over two sessions (i.e., 80% on both sound-to-letter and letter-to-sound probes).

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Phonological Treatment Sample Goals

- Patient will write the target consonant graphemes of SET ONE of the phonological treatment program when provided with each phoneme with 80% accuracy over 2 sessions independently to promote improved oral reading skills and verbal ability.

- Patient will verbalize the target consonant phonemes of SET ONE of the phonological treatment program when presented with each grapheme with 80% accuracy over 2 sessions independently to promote improved oral reading skills and verbal ability.

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Phonological Treatment Protocol

Implement cueing hierarchy to train targeted graphemes/phonemes:
1. "Write the letter that makes the sound /**p/.**"
   1. If correct, proceed to the next sound.
   2. If incorrect, proceed to Step 2.
2. "Think of your key word for /**p/.** Try to write your key word."
   1. If correct, say, "Yes, *pie* is your keyword. *Pie* starts with /p/. Underline the /p/ sound in *pie*."
   2. If incorrect, go to Step 3.
3. Show picture and say, "Your key word for /**p**/ is *pie*. Write *pie*. Now underline the /**p**/ sound in *pie*."
   1. If incorrect, go to Step 4.
4. Provide written model for key word. "Your key word is *pie*. Copy *pie*. Now underline the /**p**/ in *pie*."

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Computer-Based Practice

- TalkPath Therapy **(*Free Resource)**
- TalkPath News **(*Free Resource)**
- Tactus Therapy
- Constant Therapy
- Virtual Speech Center

https://appsliced.co/app?n=lingraphica-talkpath-therapy

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Home Practice Example

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