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## **Five Fresh Perspectives on Applying LPAA Principles to Treatment for Neurogenic Communication Disorders**

Guest Editor: Audrey Holland,  
PhD, CCC-SLP, BC-ANCDs

continued<sup>®</sup>  
ONLINE CONTINUING EDUCATION FOR THE LIFE OF YOUR CAREER

## **The Role of the Environment: Supporting language, communication and participation**

Thomas Sather, PhD, CCC-SLP

Moderated by:  
Amy Hansen, MA, CCC-SLP, Managing Editor, [SpeechPathology.com](http://SpeechPathology.com)

continued<sup>®</sup>



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- Two opportunities to pass the exam

continued

## The Role of the Environment: Supporting language, communication, and participation

Tom Sather, PhD/CCC-SLP  
University of Wisconsin – Eau Claire  
Mayo Clinic Health System – Eau Claire

continued

## Learner Outcomes

After this course, participants will be able to:

- Identify at least five components of the environment as addressed by the World Health Organization's International Classification of Functioning, Disability and Health (WHO-ICF).
- Identify at least three barriers and three facilitators to a participation-rich environment among individuals with aphasia.
- Identify at least three concrete strategies for aphasia rehabilitation that enhance the environment in order to support communication and participation among individuals with aphasia.

**M**ONDAY  
ORNING

continued

continued

## Disclosures

Financial: I received a paid honorarium by SpeechPathology.com for this presentation

Nonfinancial: I serve on the following boards:

- Wisconsin Hearing and Speech Board
- Aphasia Access
- Chippewa Valley Aphasia Group
- Chippewa Valley Aphasia Camp.

Content Disclosure: This learning event does not focus exclusively on any specific product or service.

continued



Hearing and Speech Examining Board



continued

continued

### **Life Participation Approach to Aphasia: A Statement of Values for the Future**

Roberta Chapey, Judy Duchan, Roberta Elman, Linda Garcia, Aura Kagan, Jon Lyon (2000). Life Participation Approach to Aphasia: A statement of values for the future. ASHA Leader, 5, 4–6



In R. Chapey, et al. (Ed.), Language intervention strategies in aphasia and related neurogenic communication disorders (5th ed., pp. 279– 289). Baltimore: Lippincott Williams & Wilkins.

## **Core Values**

of the  
**LPAA**

---

The explicit goal is enhancement of life participation

---



---

Everyone affected by aphasia is entitled to service

---



---

Success measures include documented enhancement changes

---



---

Both personal and environmental factors are intervention targets

---



---

Emphasis on availability of services as needed at all stages of aphasia

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continued

continued<sup>ed</sup> [www.aphasiaaccess.org/videos](http://www.aphasiaaccess.org/videos)

The screenshot displays the AphasiaAccess website interface. At the top left is the 'continued<sup>ed</sup>' logo. To its right is the URL 'www.aphasiaaccess.org/videos'. Below the logo is the 'AphasiaAccess' logo with the tagline 'Until Every Voice is Understood'. The main content area features a grid of video thumbnails. On the left, there's a section titled 'LPIA 101: 26 ACTIONS' with a list of topics like 'Adapting Your Talking', 'Group Facilitation', and 'Helping to Express - Help To Get The Message Out'. On the right, there's a section titled 'LPIA CORE VALUES' with a list of five values: 'The Explicit Goal is Enhancement of Life Participation', 'Everyone Affected by Aphasia is Entitled To Service', 'Changing the Physical Environment', 'Both Personal and Environmental Factors are Intervention Targets', and 'Emphasis is on Availability of Services as Needed at All Stages of Aphasia'. Below the grid is a 'MONDAY MORNING' banner.

continued<sup>ed</sup>

Life participation approach to....early intervention

Life participation approach to....dysarthria

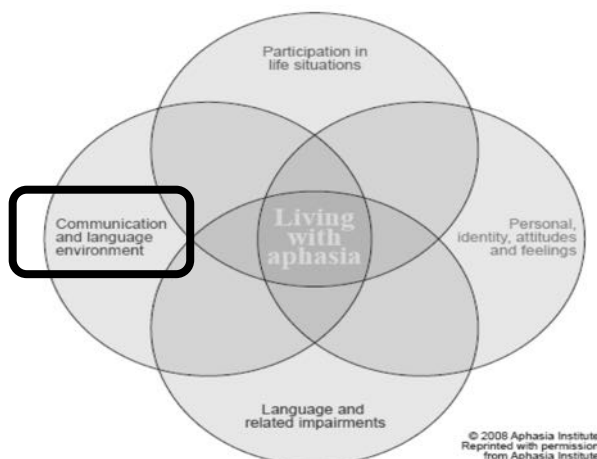
Life participation approach to....apraxia

Life participation approach to....



continued

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



© 2008 Aphasia Institute  
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Kagan, A., Simmons-Mackie, N., Rowland, A., Huijbregts, M., Shumway, E.,  
McEwen, W., Threats, T., & Sharp, S. (2007). Counting what counts: A  
framework for capturing real-life outcomes of aphasia intervention.  
*Aphasiology*, 22(3), 258-280.

continued



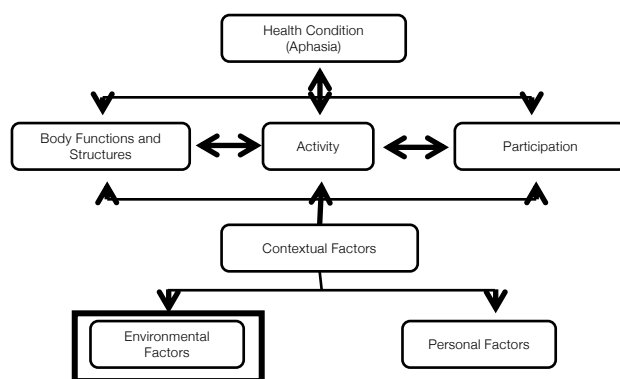
## The World Health Organization

International Classification of  
Functioning, Disability, and  
Health



continued

World Health Organization –  
International Classification of Functioning (WHO –ICF)



## 5 Components of the Environmental Factors of the WHO-ICF

1. Products and Technology
2. Natural environment and human-made changes
3. Support and Relationships
4. Attitudes
5. Services, systems and policies

### Environmental Factors

1. Products and Technology
2. Natural Environment and Human Made Changes to the Environment
3. Support and Relationships
4. Attitudes
5. Services and Policies

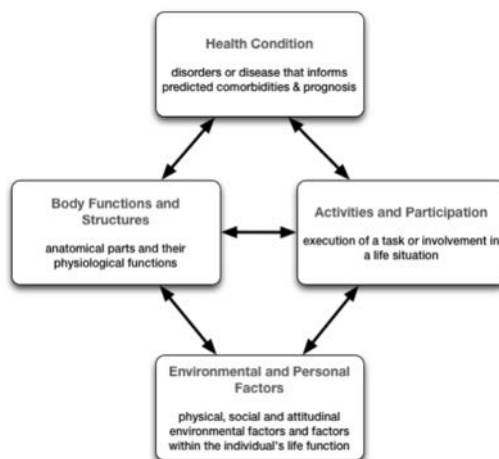
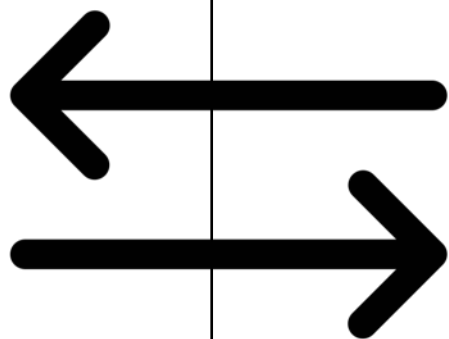


Chart adapted from ICF Framework of Health and Disability (WHO, 2001)

[http://www.asha.org/PRPSPspecificTopic.aspx?folderId=8589935365&section=Key\\_Issues](http://www.asha.org/PRPSPspecificTopic.aspx?folderId=8589935365&section=Key_Issues)



Barriers and/or Facilitators

## World Report on Disability

World Health Organization  
The World Bank

“Disability arises from the interaction of health conditions with contextual factors – environmental and personal factors...”

World Disability Report, 2011, p. 5

[https://www.who.int/disabilities/world\\_report/2011/report.pdf](https://www.who.int/disabilities/world_report/2011/report.pdf)

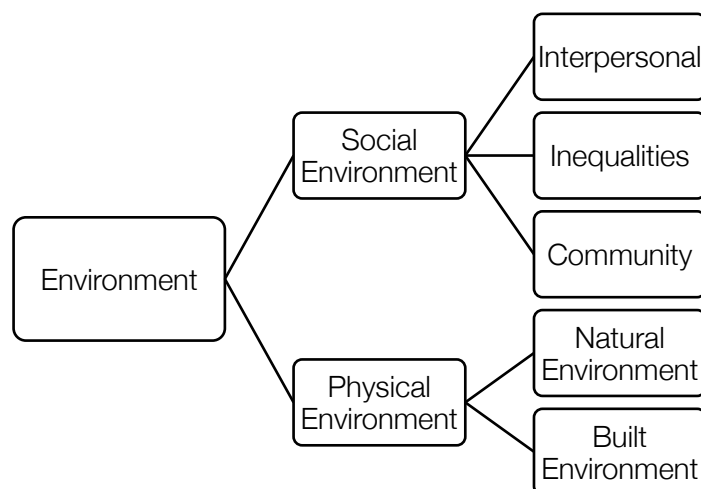
“The political notion that disability is as much the result of environmental barriers as it is of health conditions or impairments must be transformed, first into a research agenda, and then into valid and reliable evidence.”

“This evidence can bring genuine social change for persons with disabilities around the world.”

---

**WHO, 2001, p. 243 in Threats, 2007, p. 70**

A different look at the environment (Engel et al. 2016)



Engel et al., 2016 in Terrell, Sather, Hoepner, Kaldjian 2018 unpublished Master's thesis

## Therapeutic Landscapes

“Physical and built environments, social conditions and human perceptions that combine to produce an atmosphere which is conducive to healing” (Gesler, 1992)

Framework for analyzing the role of the Physical, Social and Symbolic environments and relationship to physical health and well being in specific places (Curtis, Gesler, Fabian, Francis & Preibe, 2007).



Tom Sather

Terrell, Sather, Hoepner, Kaldjian (2018) unpublished Master's thesis

continued

## Perspectives of the environment...from people with aphasia

continued

## What people with aphasia report about environmental preferences

Dalemans et al. (2010)

1. Quiet, familiar place:
  - a. Part of a group
  - b. Motivated to get out of the house
  - c. Express feelings, thoughts, troubles
  - d. Recurring theme of familiarity\*

Social participation through the eyes of people with aphasia  
Dalemans, deWitte, Wade, and van den Heuvel  
International Journal of Language and Communication Disorders

continued

## What people with aphasia report about environmental preferences

Howe, Worrall & Hickson (2008)

Interviews regarding environmental factors:

1. Awareness of Aphasia
2. Opportunities for Participation
3. Familiarity
4. Availability of Extra Support for Communication
5. Communication Complexity
6. Message Clarity
7. Time Available for Communication

continued

Howe, Worrall & Hickson (2008)

10 participants with aphasia were observed in multiple environs

Six themes (44 barriers/59 facilitators):

1. Referents
2. Interaction
3. Familiarity
4. Communication Complexity
5. Time Available for Communication
6. Availability of Extra Support for Communication

Blue themes observed across both Interviews AND Observations of individuals with aphasia Howe et al. 2007 and 2008 studies

continued

## What people with aphasia report about environmental preferences

Le Dorze et al. 2014

- 17 PWA;

Among the environmental factors that were identified as facilitators for participation with people with aphasia included:

- Family/friends that adjusted to the aphasia and/or willing to help
- Opportunities within local aphasia organizations for relationships and participation
- Strangers who took on a positive attitude and tolerance for the presenting aphasia difficulties

continued

## Environmental Assessments

The Role of Assessing the Environment

continued



continued



## The Shirley Ryan Ability Lab Rehabilitation Measures Database

<https://www.sralab.org/rehabilitation-measures>

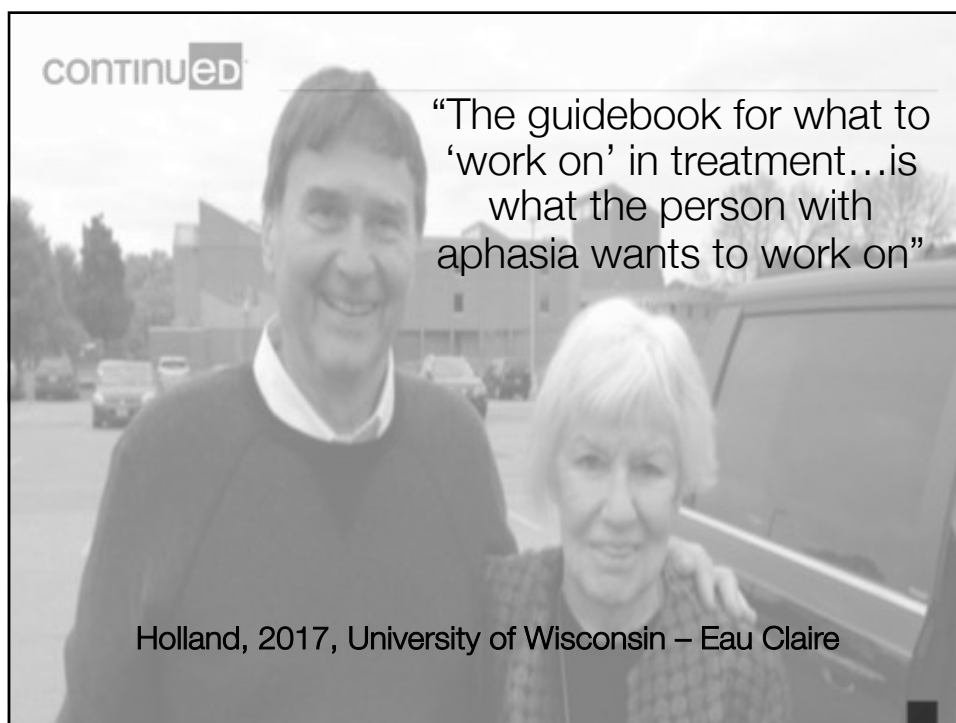
continued

(Potential) Problem in assessment...

## The Tool Determines the Problems We Find

(Kagan, AphasiaAccess January 2016)

continued



continued

## Inpatient Functional Communication Interview

(IFCI; O’Halloran, Worrall, Toffolo, Code, & Hickson)

In-depth look at the effectiveness of communication by inpatients in acute/medical contexts – as determined in part by patients’ perceptions of importance

IFCI Staff Questionnaire – patients and nurses interviewed (O’Halloran, Coyle, & Lamont, 2016).



## The Assessment for Living with Aphasia Toolkit (ALA) – 2<sup>nd</sup> edition

Available via the Aphasia Institute of Toronto –

Per their website:

- Corresponds with WHO-ICF
- Psychometrically sound assessment tool
- Provides quantitative and qualitative results from the perspective of people living with aphasia
- Captures real-life issues for planning and evaluating aphasia treatments and making funding decisions

<https://www.aphasia.ca/shop/assessment-for-living-with-aphasia-toolkit/>



## COMACT and SOCACT (Cruice, 2001; Aujla et al., 2016)

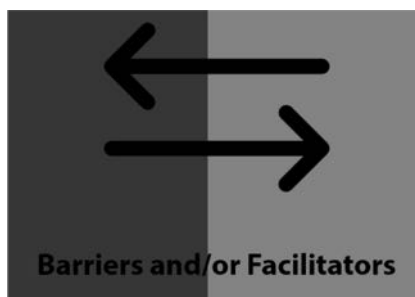
The Communicative Activities Checklist (COMACT) – Activities of reading, writing, communicating in various contexts (jokes, formal groups, etc.) rated in frequency of occurrence of activity

The Social Activities Checklist (SOCACT) – rating frequency of occurrence of a variety of activities – visiting community places, working on hobbies, playing with kids/grandkids, etc.

continued

Communication Confidence Rating Scale for  
Aphasia – CCRSA (Babbitt & Cherney, 2010)

Communication Effectiveness  
Inventory (CEI) (Lomas et al., 1989)



continued

The Activity Card Sort (Baum & Edwards)

89 Photographs  
4 categories  
Instrumental  
Low physical demand  
leisure  
High physical demand  
leisure  
Social activities

Sorting task

"Done PTA; Not done PTA"  
"Do more of; same; Less of; Given  
up"

continued

continued

# THE L!V CARDS

## The Life Interests and Values Cards

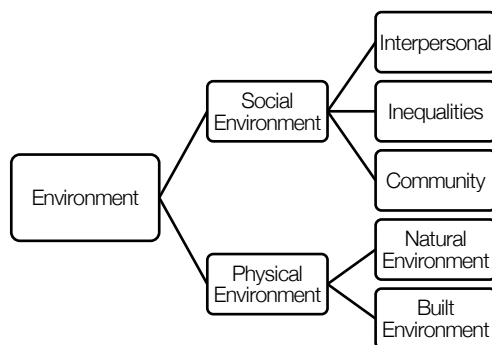
Home and Community  
Creative and Relaxing  
Physical  
Social

Haley, KL, Womack, JL, Helm-Estabrooks, N, Caignon, D, McCulloch, KL, (2010). The Life Interest and Values Cards. Chapel Hill, NC: University of North Carolina Department of Allied Health Sciences.(SLPs, OT and PT)

continued

### Environmental Factors

1. Products and Technology
2. Natural Environment and Human Made Changes to the Environment
3. Support and Relationships
4. Attitudes
5. Services and Policies



Engel et al., 2016 in Terrell, Sather, Hoepner, Kaldjian (2018) unpublished Master's thesis

continued

continued



Experience Sampling Method



MONDAY MORNING

Data provided by Tom Sather

continued

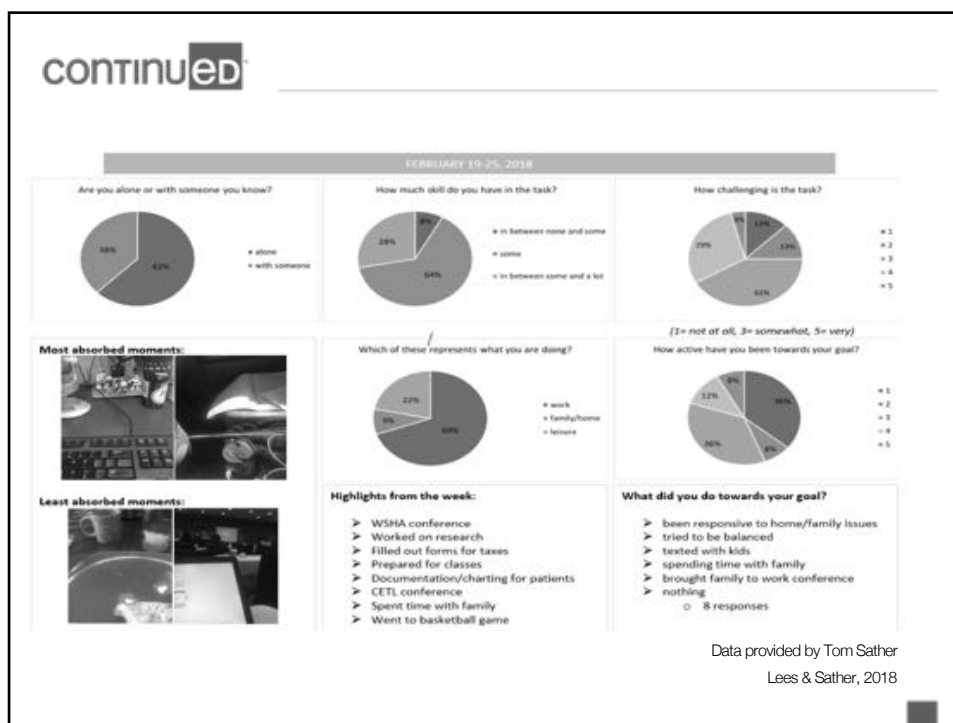
Daily Data Visualization- 2/22/18

	Day 4 sample 1 8:11 AM	Day 4 Sample 2 7:00 PM
How absorbed were you?		
Where are you?	Home	Basketball game
Skill vs. Challenge		
Were you alone or with someone?		
What did you do towards your goal?	Played chess with Zak last night	Family time
Image		
Daily Values:		

Data provided by Tom Sather  
Lees & Sather, 2018

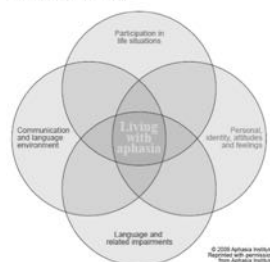


continued



# The Environment and LPAA

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



Kegan, A., Simmons-Mackin, N., Rowland, A., Hochberg, M., Shannon, E., McEwen, W., Thoren, T., & Sharp, J. (2007). Counting what counts: A framework for capturing and life outcomes of aphasia intervention. *Aphasiology*, 22(3), 278-280.

## Core Values of the Life Participation Approach to Aphasia

- The explicit goal is enhancement of life participation
- Everyone affected by aphasia is entitled to service
- Success measures include documented enhancement changes
- Both personal and environmental factors are intervention targets
- Emphasis on availability of services as needed at all stages of aphasia

continued

## Return to Dalemans et al. (2010)

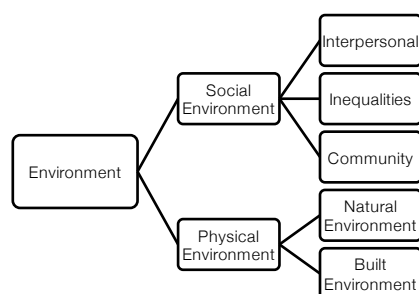
“In this study it becomes clear that they do not necessarily want to do more, but that they want their interactions to be more satisfying.” (p. 545)



## Creating and Enhancing Environments Supporting People with Aphasia

### Environmental Factors

1. Products and Technology
2. Natural Environment and Human Made Changes to the Environment
3. Support and Relationships
4. Attitudes
5. Services and Policies



continued

Environmental Factor(s) can be addressed in any environment by any person.

Addressing Environmental Factors can be done in any setting, and can be part of billed assessments and interventions

**M**ONDAY  
MORNING

continued

Environmental Factor(s) can be addressed in any environment

Meaning...this isn't just for aphasia groups...or just for academics...or just for aphasia camps...

Ad  
S

any  
nd

It's for any setting....

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continued

**continued**


# Clinical Examples

Environmental Factors


1. Products and Technology
2. Natural Environment and Human Made Changes to the Environment
3. Support and Relationships
4. Attitudes
5. Services and Policies

Human interest neuro-related book

+



→



←

**continued**

## “Three Voices at the Table”

The Journal of Humanities in Rehabilitation

T. Riske & C. Zorn (2018)

<https://www.jhrehab.org/2018/11/08/three-voices-at-the-table/>

Patient Voice + Care Partner Voice + Clinician/Provider Voice

Environmental Factors

1. Products and Technology
2. Natural Environment and Human Made Changes to the Environment
3. Support and Relationships
4. Attitudes
5. Services and Policies

**continued**

Environmental Factors

1. Products and Technology
2. Natural Environment and Human Made Changes to the Environment
3. Support and Relationships
4. Attitudes
5. Services and Policies

➔

**1st Annual Regional Aphasia Group**

FOR INDIVIDUALS WITH APHASIA AND THEIR CARE PARTNERS

**MAY 11-12, 2018**  
EAU CLAIRE, WISCONSIN

FOR MORE INFORMATION - GO TO  
[WWW.APHASIAGROUP.ORG](http://WWW.APHASIAGROUP.ORG)

BROUGHT TO YOU BY THE CHIPPEWA VALLEY APHASIA GROUP

**continued**

## Authentic opportunities

Speech in front of the group



Proofing the flyers and brochures



Negotiation and planning



Making phone calls for room blocks; filling out paperwork; emails with hotels



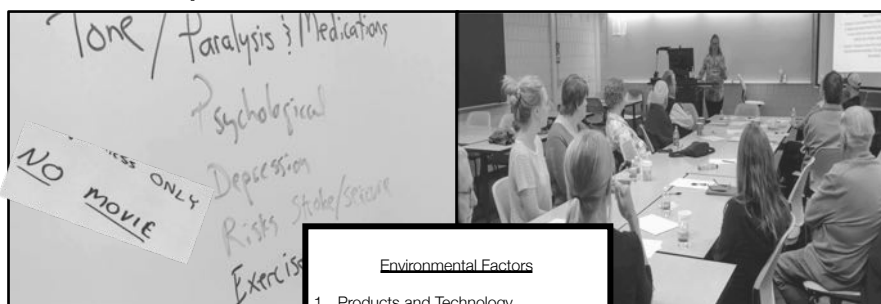
Using technology in-the-moment



Chippewa Valley Aphasia Group;  
Capo, Hart, Hoepner & Sather, 2019

CONTINUED

## Driven by the person with aphasia...not the clinician



Photos courtesy the  
Chippewa Valley Aphasia Group

### Environmental Factors

1. Products and Technology
2. Natural Environment and Human Made Changes to the Environment
3. Support and Relationships
4. Attitudes
5. Services and Policies

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CONTINUED

## Training Communication Partners

Systematic Review (Simmons-Mackie, Raymer & Cherney, 2016)

Communication partner training can be effective in supporting communication, and should be a part of environmental support

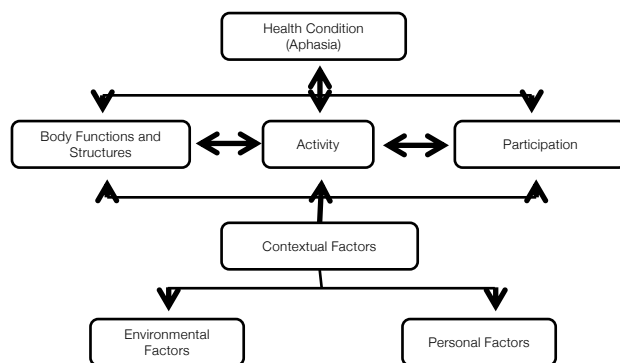
Simmons-Mackie, N., Raymer, A., Cherney, L. (2016). Communication partner training in aphasia: An updated systematic review. *Archives of Physical Medicine and Rehabilitation*. 97(12), 2202-2221.

**M**ONDAY  
ORNING

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CONTINUED

World Health Organization –  
International Classification of Functioning (WHO –ICF)



## 5 Components of the Environmental Factors of the WHO-ICF

1. Products and Technology
2. Natural environment and human-made changes
3. Support and Relationships
4. Attitudes
5. Services, systems and policies

continued



Chapter 1 – Products and Technology  
“Better because of bike riding available”



Chapter 2 – Natural environment and human-made changes to environment “Beautiful – it was like finding a calm place in the crazy hectic life.”



Chapter 3 - Support and Relationships “A great connection with others we identify with. A feeling of inclusion”



Chapter 4 – Attitudes “Everyone (especially the staff) is always friendly and helpful.”



Chapter 5 – Services, Systems and Policies  
“Knowing someone else is watching out for my husband’s interests.”

Sather, Hoepner, Clarke, Clark & Knutson, 2015



continued

The importance of  
challenge...



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continued

continued

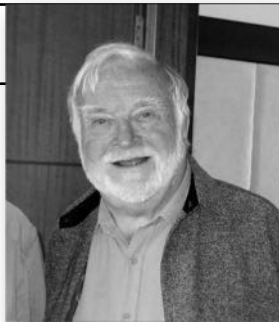
The importance of challenge...but mitigated with support



Photos courtesy Chippewa Valley Aphasia Camp

<https://pxhere.com/en/photo/929019>

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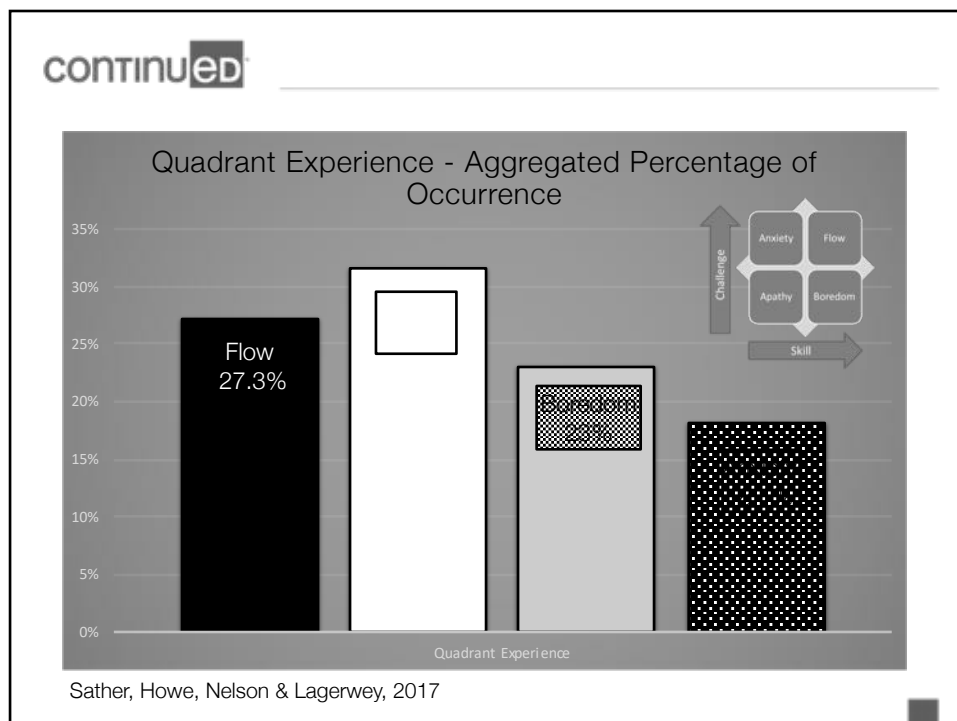
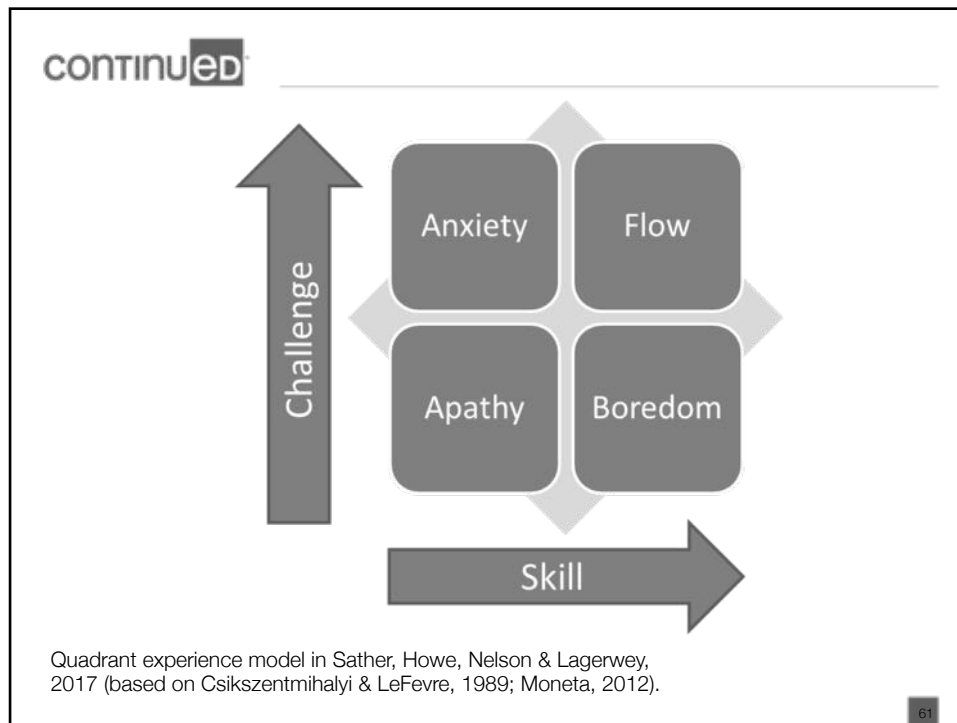
Mihaly Csikszentmihalyi

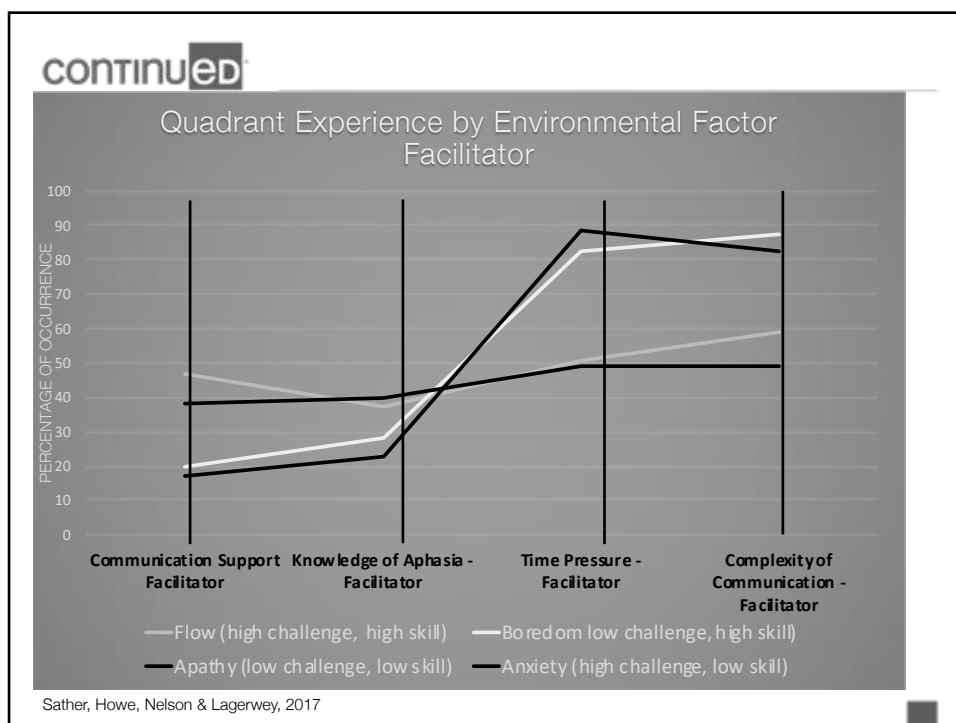
The concept of “flow” – being so absorbed in something you lose track of time, forget what was on your mind, and are feeling a sense of control

[https://commons.wikimedia.org/wiki/File:Mihaly\\_Csikszentmihalyi.jpg](https://commons.wikimedia.org/wiki/File:Mihaly_Csikszentmihalyi.jpg)

continued







continued



<https://pxhere.com/en/photo/542565>

Extraordinary Landscapes –  
enduring reputations for  
healing, but typically shorter  
duration, ↑difficulty w/ access  
(English, Wilson, Keller, etc.)

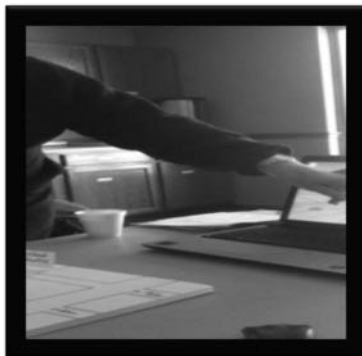


Tom Sather

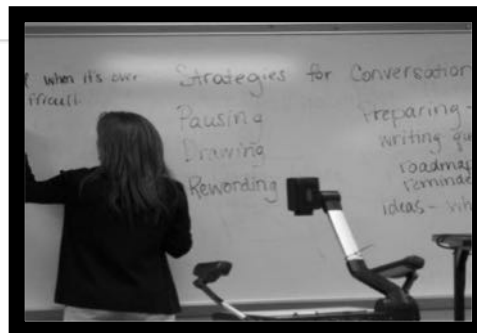
Ordinary Landscapes – landscapes  
regularly encountered that promote  
healing/peace/wellbeing

Importance of social supports and  
meaningful activities as contributors to  
building of these landscapes.

continued



Photos courtesy Chippewa Valley  
Aphasia Group



continued

continued

Enriching communicative environments: Leveraging advances in neuroplasticity  
for improving outcomes in neurogenic communication disorders  
Hengst, Duff, & Jones (2018)  
AJSLP

"We caution against the assumption either that clinical environments are categorically restrictive or that so-called "naturalistic" environments (home, community, and work-place) are by contrast, rich, supportive, and nondirective or egalitarian." (p. 226)

**M**ONDAY  
MORNING

Hengst, Duff, & Jones (2018)

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continued

## A few takeaways

Enriching the environment

continued

continued

MONDAY  
MORNING

## Facilitating environments rich for participation

1. Use an environmental framework: WHO-ICF, Engel, others.... This will guide your assessment and intervention
2. Approach the environment to enhance facilitators and/or reduce barriers
3. Addressing the environment IS assessment/intervention. Make it a part of your intervention, not an adjunct to your intervention.
4. The individual with aphasia and care partners drive the environmental assessment and interventions
5. To assess the environment – ask the individual with aphasia and care partner; Use a structure that addresses the environment (not just impairment-based measures)
6. Embed and emphasize the importance of CHALLENGE
7. ANY Environment / ANY time / by ANY person/s

continued

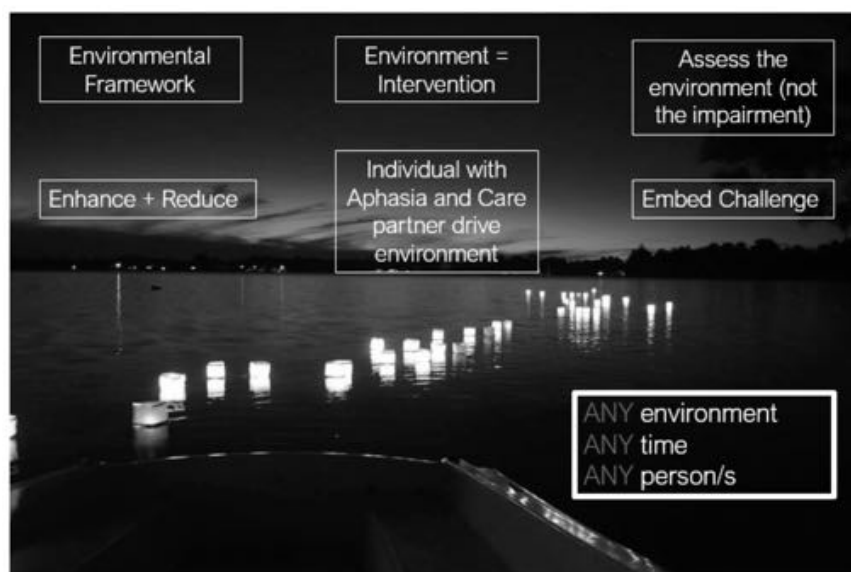


Photo courtesy Chippewa Valley Aphasia Camp

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continued

continued

Questions and discussion

continued

Thank you!

Tom Sather PhD/CCC-SLP

[sathertw@uwec.edu](mailto:sathertw@uwec.edu)

 @TomSatherSLP

continued

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