




ASHA CEUs

Information and Notes Pages

“EBP in Principles of Neuroplasticity for AAC Device Use ”

<p>APPROVED PROVIDER</p>  <p>ASHA CONTINUING EDUCATION AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION</p>	<p>LingraphiCARE America is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology and audiology. See course information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.</p>
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This course is offered for 0.1 ASHA CEUs (Introductory level; Professional area).

www.aacdevice.com

888-274-2742

Complete a 0.1 ASHA CEU Course

Speech-language pathologists (SLPs) are invited to participate in a one-hour ASHA-approved course offering, “EBP in Principles of Neuroplasticity for AAC Device Use ” To be eligible to receive 0.1 ASHA CEUs (Introductory level), please see the guidelines below.

For more information about ASHA's most up-to-date eligibility criteria, go to the FAQ section of the ASHA CE website: <http://www.asha.org/CE/FAQs/>.

Course Description:

This course reviewed the research behind the 10 principles of neuroplasticity and demonstrated how these principles, when considered; provide an approach that allow the SLP and communication partners to break through difficult challenges when training for communication device use.

Learning Outcomes:

By completing this course, participants will be able to:

1. Identify and describe the principles of neuroplasticity.
2. Describe three research-based techniques for incorporating the principles in rehabilitative treatment.
3. Incorporate principles of neuroplasticity into evidence-based practice for AAC device use.

Additional courses in the Evidence-Based Practice track include:

- Bridging the Gap: Quality of Communication Partner Training in AAC
- Improvements in Chronic Global Aphasia With Advanced Therapy and Home Practice
- Improvements in Chronic Conduction Aphasia With Therapy and Online Home Practice
- AAC Technology Design for Persons with Aphasia
- Maximizing Patient Outcomes by Leveraging Clinical Data from Online Therapy

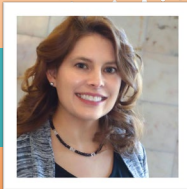
Processing:

Online course completions are reported to ASHA quarterly. Please allow eight to ten weeks for processing. Lingraphica will issue a certificate of participation to each SLP who completes a CEU course.

For more information, or to start a device trial, contact: continuinged@lingraphica.com



EBP in Principles of Neuroplasticity for AAC Device Use



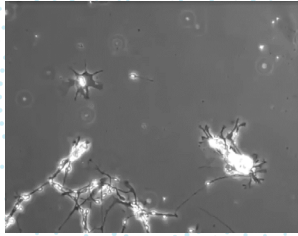
Faye Stillman, M.S., CCC-SLP/ATP
CE Manager, Lingraphica
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Financial Disclosure

All Clinical Instructors for today's course are full-time, salaried employees of Lingraphica and thereby receive financial compensation from the Lingraphica Company.



Neuroplasticity in Motion



Learning Objectives

- Identify and describe the 10 principles of neuroplasticity.
- Describe three research-based techniques for incorporating the principles in rehabilitative treatment.
- Incorporate principles of neuroplasticity into evidence-based practice for AAC device use.



Agenda

- Defining neuroplasticity and the 10 principles
- What the research tells us
- Communication partner support
- Device customization: salience and LPAA
- Device demonstration
- Questions and answers
- Getting your ASHA CEUs




Neuroplasticity Defined

The ability of the central nervous system (CNS) to adapt in response to changes in the environment or lesions.

This property of the CNS may involve modifications in overall cognitive strategies...

...the recruitment of new/different neural networks...

...or changes in strength of such connections or specific brain areas in charge of carrying out a particular task.

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(Sharma, Classen & Cohen, 2013)

(Sharma, Classen & Cohen, 2013)

10 Principles of Neuroplasticity

Use it or lose it	Time
Use it & improve it	Salience
Specificity	Age
Repetition	Transference
Intensity	Interference

Impairments → ***Improvements***



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(Kleim & Jones, 2008)

(Kleim & Jones, 2008)

What the Research Says

“Neural plasticity is believed to be the basis for both learning in the intact brain and relearning in the damaged brain that occurs through physical rehabilitation.”

(Kleim & Jones, 2008)

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(Kleim & Jones, 2008)

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What the Research Says

“An AAC device could be employed as a dual-purpose tool to augment language recovery and compensate for deficits.”


(Dietz, et.al., 2018)

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Lingraphica's AAC Devices

Stimulation through different modalities

- **Visual**
- **Auditory**
- **Verbal**
- **Kinesthetic**



A black Lingraphica AAC tablet is shown. The screen displays a colorful interface with a top bar containing icons for home, search, and settings. Below this is a grid of 12 icons, each representing a different communication option or function. The tablet is mounted on a stand.




The Lingraphica logo, featuring a stylized blue and green icon to the left of the word "Lingraphica" in a bold, sans-serif font.


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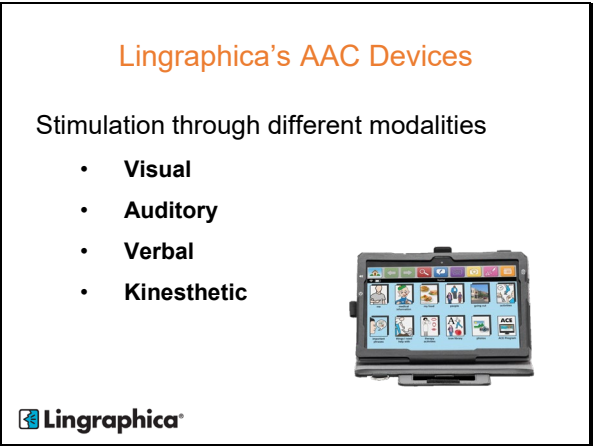


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Lingraphica Device Candidacy



- Moderate-severe or severe expressive impairment
- Supportive family member or communication partner

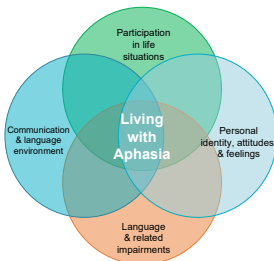


Benefits of Communication Partner Training

- Carry-over; repetition, intensity, time matters
- Increases functional communication; salience
- Improves the relationship between communication partner and PWA
- Increases motivation
- Decreases frustration
- Improves outcomes



Five Core Values of LPAA



1. Enhanced life participation
2. Entitled to services
3. Documented changes
4. Personal and environmental factors
5. Availability of services



(Chapey et al., 2019)

The diagram illustrates five categories: Family, Travel, Religion, Hobbies, and Home. Each category is represented by a colored circle with an icon and a corresponding colored box below it. Dotted lines connect the 'Religion' box to the 'Hobbies' box, and the 'Home' box to the 'Religion' box.

(Fried-Oken et al., 2015)

Consider Your Own Life Participation Goals



- Which activity would you want to return to most?
- What vocabulary would you need to access?

The screenshot shows a mobile application interface for finding restaurants. At the top, there is a navigation bar with icons for home, back, forward, search, chat, keyboard, camera, location, and a menu. Below the navigation bar, there are three restaurant options displayed as cards. The first card is for 'let's eat at', featuring a cartoon illustration of a restaurant with a sign that says 'EAT'. The second card is for 'the capital grille', featuring a photograph of the restaurant's entrance, which is highlighted with a red border. The third card is for 'dunkin' donuts', featuring the Dunkin' Donuts logo. Below each card is the restaurant's name in a large, bold font.

Personalization, Salience, Neural Link



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Neural Link



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Language Task - Repetitions



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Neuroplasticity at Work

Patient 1

Speech therapy goal: targeting receptive language; identify pictures of objects on the AAC device, when named with 80% accuracy.



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Experience-Dependent Neuroplasticity

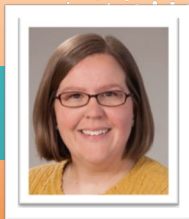
Patient 2

Speech therapy goal: Addressing expressive communication; utilize an AAC device to request preferred items without adverse behaviors, 4/5 opportunities.



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Start a Device Trial

Visit aphasia.com/trial



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