MIND, BRAIN, AND EDUCATION IN THE LANGUAGE CLASSROOM

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MBE + CI

Mind, brain, and education + Comprehensible Input, or Comprehension Based Language Teaching
COMPREHENSIBLE HAWAI‘I HALT SUMMER SUMMIT

June 3-4, 2018

UH Manoa Campus
AGREE | DISAGREE
We only use 10% of our brains at any point in time.

Scientific American, Mar 8, 2004
Do we really only use 10 percent of our brains?
AGREE

DISAGREE

Boys and girls learn differently.

#NEURO

MYTH
Your brain today is different from your brain yesterday.

After watching this, your brain will not be the same. | Lara Boyd | TEDxVancouver
https://www.youtube.com/watch?v=LNHBMFCzznE
Sleep is important for learning.

The Importance of Good Sleep Hygiene, Dr. Jacques Hebert, Montreal (Longueuil), Canada
https://www.youtube.com/watch?v=aE2Jv5_0kM4
Some are visual learners, some are auditory learners, some are kinesthetic learners.

The Myth of Learning Styles, The Atlantic, Apr 11, 2018
Each brain is differently prepared to learn different tasks.
Use it or lose it.


Myths and Misconceptions about Second Language Learning: What Every Teacher Needs to Unlearn by Barry McLaughlin https://people.ucsc.edu/~mclaugh/MYTHS.htm
Emotions affect learning.

We Feel, Therefore We Learn: The Relevance of Affective and Social Neuroscience to Education
Mary Helen Immordino-Yang & Antonio Damasio,
Learning Landscapes Vol. 5, No. 1, Autumn 2011
Left-brained people are more analytical; right-brained people are more creative.

Right brain/left brain, right?
POSTED AUGUST 25, 2017, 6:30 AM
Robert H. Shmerling, MD
Harvard Health Blog
https://www.health.harvard.edu/blog/right-brainleft-brain-right-2017082512222
I’m “brained.”
Not left brain, right brain.
I have a brain.  

NEIL DEGRASSE TYSON
Human brains are as unique as human faces.
Challenges boost learning.

Threats boost learning.

Anxiety and Cognitive Performance: Attentional Control Theory
Social interactions influence learning.
After a certain age, there are some things you cannot learn to do.

AGREE

DISAGREE

#NEURO

MYTH

After watching this, your brain will not be the same | Lara Boyd | TEDxVancouver https://www.youtube.com/watch?v=LNHBMFCzznE
Lecturing is ineffective.

Don’t Give Up on the Lecture
ABIGAIL WALTHAUSEN
NOV 21, 2013

New learning is influenced by past experiences.
BRAIN BREAK

Find a partner and share 3 neuromyths from the presentation.
MBE FOR LANGUAGE

• search for meaning is innate
• pattern recognition
• novelty
• input versus recall
• contextualized
• engaging mind and body
花
草
樹
木
森林
花 huā
草 cǎo
樹 shù
木 mù
森林 sēnlín
花 huā
草 cǎo
樹 shù
木 mù
森林 sēn lín
EXAMPLE

花 HUĀ
草 cǎo
樹 SHù
木 Mù
森林 SĒNlín

TOP: tonally orthographic Pinyin Romanization system by Terry Waltz, Ph.D.
But, is it communicative?
But, is it communicative?
MBE FOR LANGUAGE

- search for meaning is innate
- pattern recognition
- novelty
- input versus recall
- contextualized
- engaging mind and body
BRAIN BREAK

Find a new partner and list in Chinese the members of one’s immediate family
MBE

search for meaning is innate & occurs thru pattern recognition

CI

stories/narratives checking for comprehension, questioning semantic chunks chunking/grouping
perceptive language and expressive language use very different pathways

MBE

+ focus on input

wait to push output

Cl
emotions affect learning; learning affects emotions

+ affective filter hypothesis/anxiety
engage the mind and body

brain breaks
readers’ theater
TPR (total physical response)
classroom jobs
MBE            CI
frequent quizzing  +  re-tell stories
spaced learning (sleep)  free writes
passwords/exits
be explicit

focus on meaning

Chinese Word Order Rule! #43

**Prepositions:** are placed in front of nouns or pronouns to form prepositional phrases expressing the exclusion, comparison, being acted on, mode, cause, object, direction, place, or time of an action.
TAKEAWAYS

• role of language education
• bilingual brain
• multiple pathways
TAKEAWAYS

- transparent learning goals
- feedback, correction, repeat
- 3 sources of feedback
- flipped classroom
TAKEAWAYS

• context
• writing in another language: complex cognitive task
• explicit instruction/metacognition
• group by complexity of task
TAKEAWAYS

Universal Design for Learning
- multiple ways to access
- multiple ways to express
- multiple means of engagement
Universal Design for Learning

**Recognition Networks**
The "what" of learning

- How we gather facts and categorize what we see, hear, and read. Identifying letters, words, or an author's style are recognition tasks.

**Strategic Networks**
The "how" of learning

- Planning and performing tasks. How we organize and express our ideas. Writing an essay or solving a math problem are strategic tasks.

**Affective Networks**
The "why" of learning

- How learners get engaged and stay motivated. How they are challenged, excited, or interested. These are affective dimensions.

- Present information and content in different ways
- Differentiate the ways that students can express what they know
- Stimulate interest and motivation for learning

- More ways to provide Multiple Means of Representation
- More ways to provide Multiple Means of Action and Expression
- More ways to provide Multiple Means of Engagement
The Myth of 'Learning Styles'

A popular theory that some people learn better visually or aurally keeps getting debunked.

Tracey Tokuhama-Espinosa

Neuromyths

Debunking false ideas about the brains in your classroom

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