A Brain-Based Approach to Preschool Using a Language Lens: A Look at Action Research

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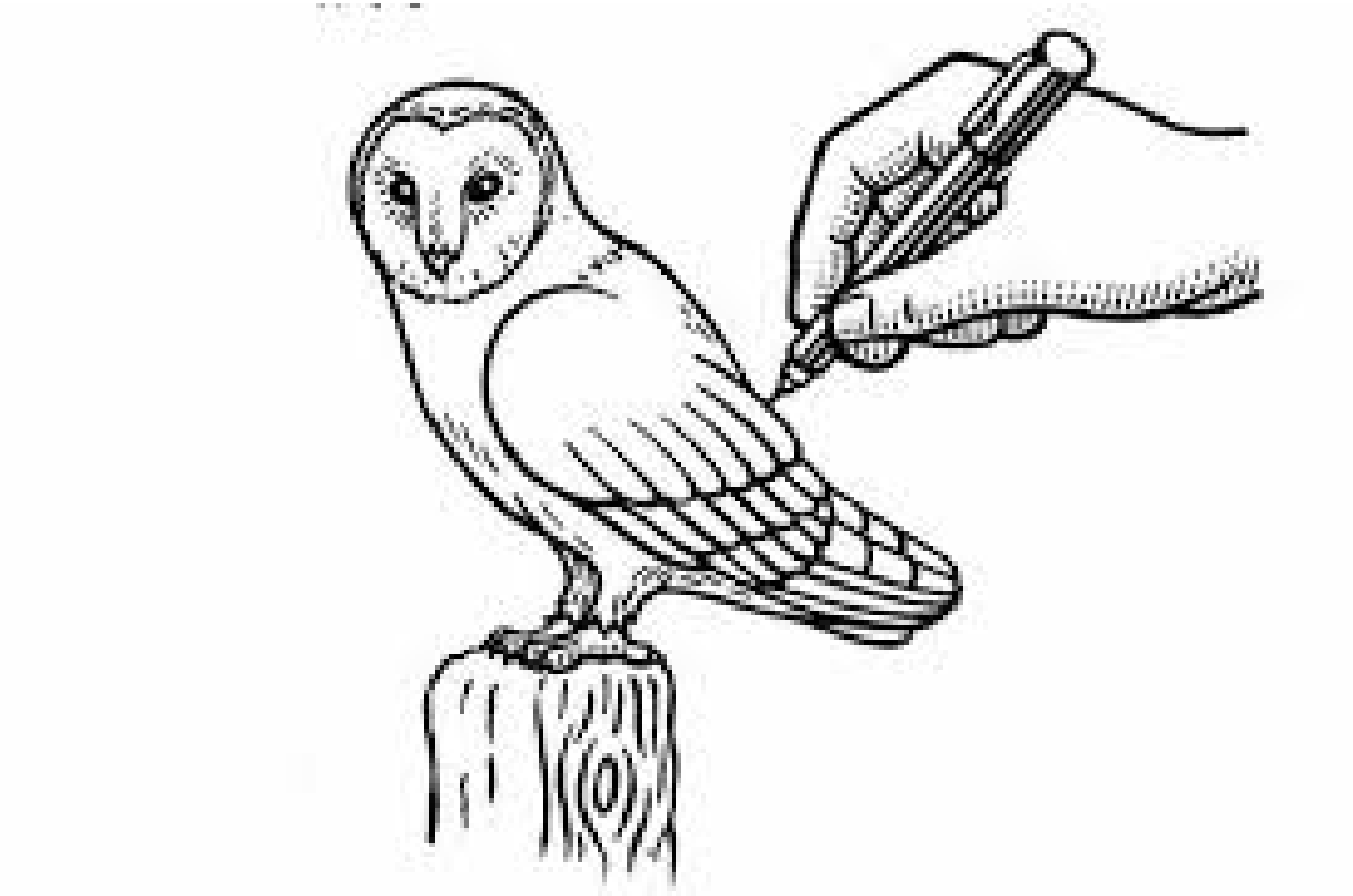
Get out your paper and pencils….



Focus Concepts (Learning Objectives)

After today's learning session, participants will:

- Describe the relationship of the theoretical frameworks of neuroscience, cognitive psychology, and the Neurosemantic Language Learning Theory
- Understand one or two elements of a brain-based approach to teaching and learning in early childhood settings using a language function lens
- Understand that drawing stick people isn't as simple as it looks

rdc/lw/mk;10.23.19

How do you define learning?

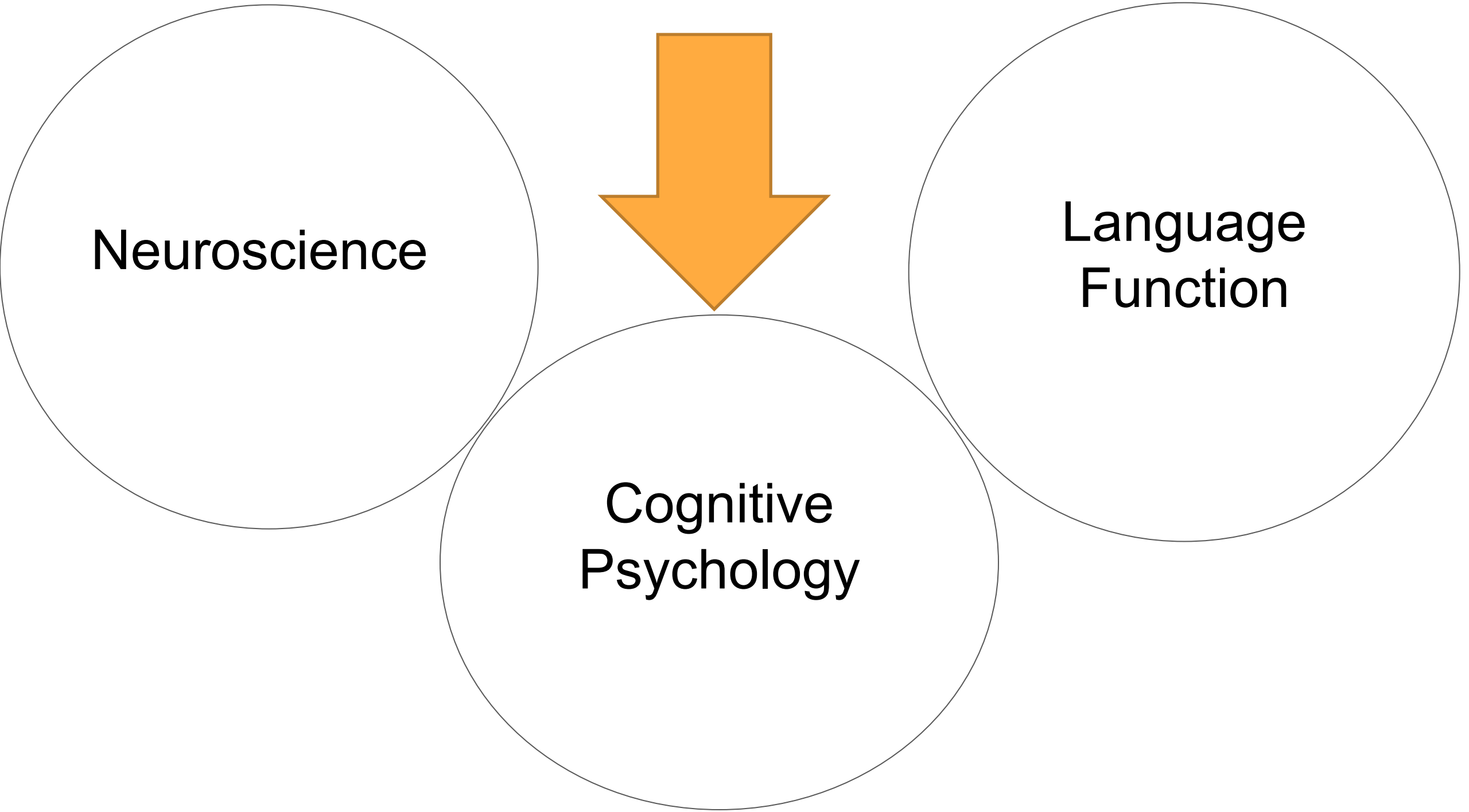
What is Brain-Based Learning?

Caine & Caine, 1991: “Education practice examined in light of findings of brain researchers”

Methods and practices that are created with an understanding of how the brain learns

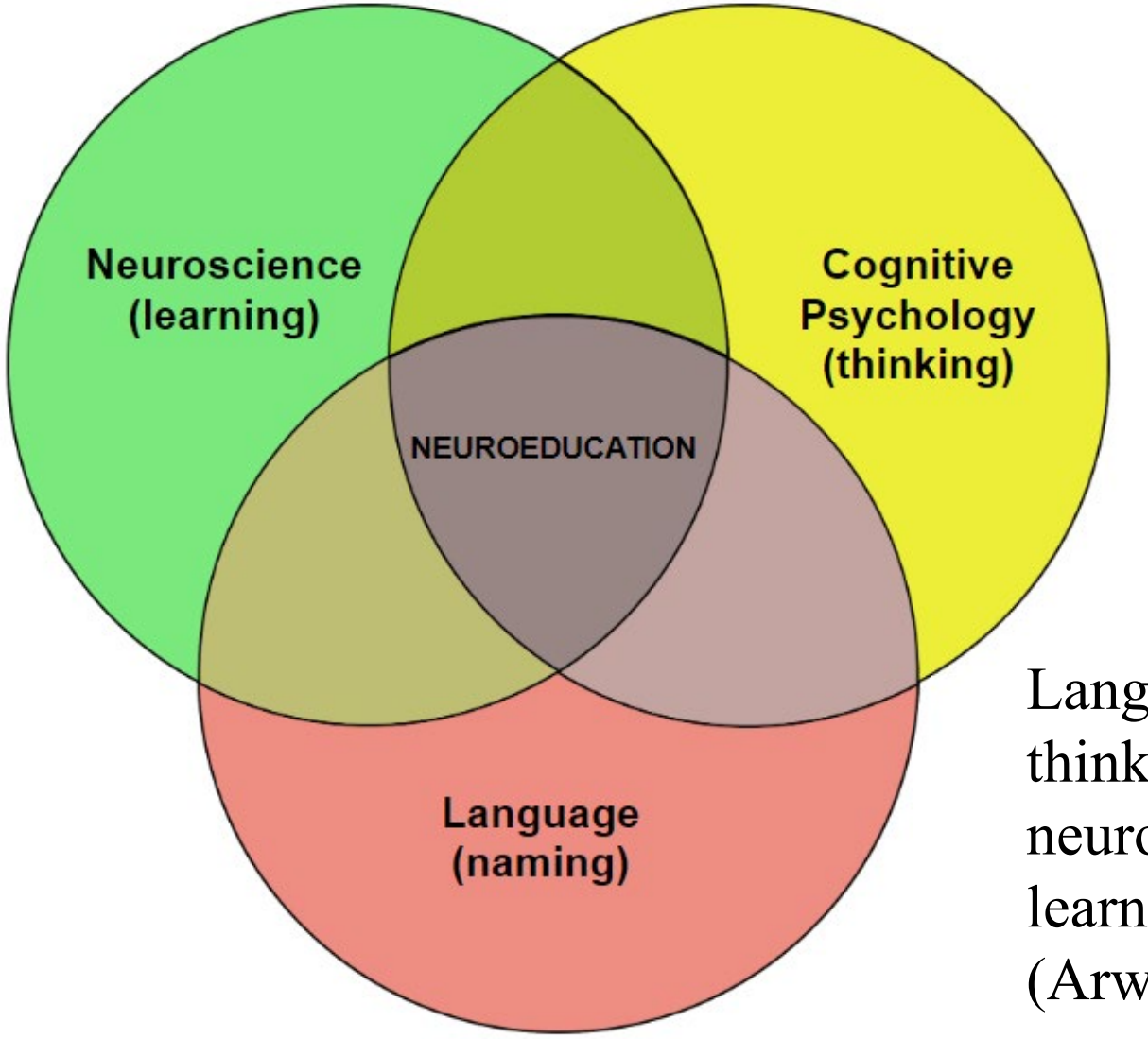
Draws from multiple fields of study

Theoretical Frameworks


Neuroscience
Language Function
Cognitive Psychology

How do we learn?

Learning begins with neural firing, causing change at the cellular level (Baars, 2010)



Learning is acquired through practice of patterns & replicating adult products (Anderson, 2014)

Language is learned to express thinking and access neurologically stored concepts; learning is conceptual (Arwood, 2011)

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In short….

Learning is neurobiological

Why is language important?

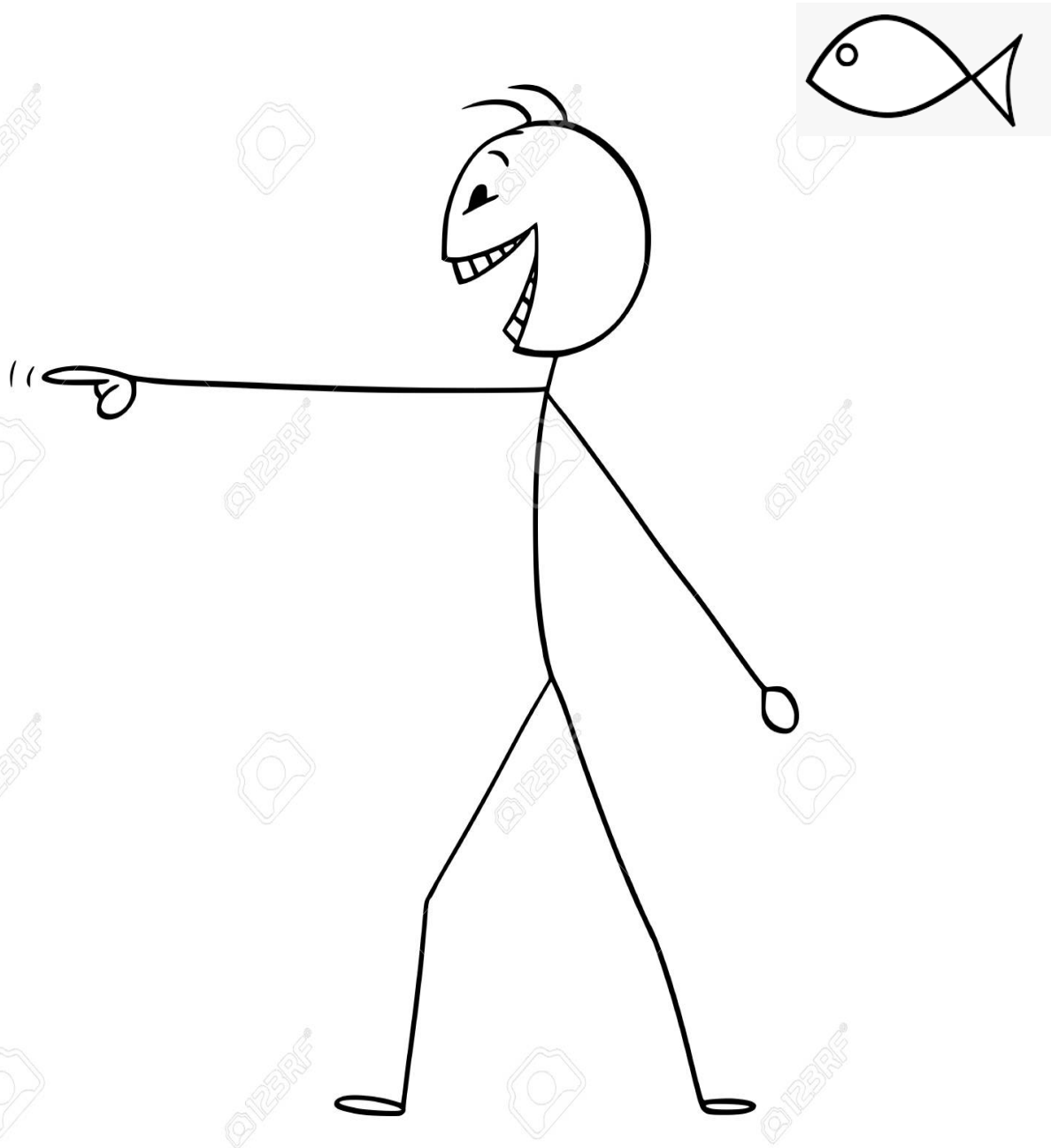
- A child needs language to mediate literacy
- We can’t expect children to acquire literacy without adequate language
- WHO, what, when, where, WHY, how

A conundrum….

Brain imaging and research leads us to conclude that 85%-95% of all learners have a visual learning system.

English is an auditory, time-based language.

What can we conclude from this?



Melissa Clip 1

“I Story”: Birds

Leslie Clip 1

Cartooning Journal Time

Leslie Clip 2

Rocking Chair

Leslie Clip 3

Story/“Can you see?”

Melissa Clip 2

Turn and Talk/Share the News

Melissa Clip 3

Students' Language and Thinking About Birds

Melissa Clip 4

Students Drawing, Hair = Feathers

Melissa Clip 5

Students Drawing, Language and Thinking

Interested in learning more about brain-based learning?

- www.apricotclinic.com
- MEd in NeuroEd: https://education.up.edu/graduate-programs/med-neuro.html
- Post Master's program Neuroeducation Certificate: https://education.up.edu/graduate-programs/pmc-neuro.html
- EdD: https://education.up.edu/graduate-programs/doctor-of-education-portland.html

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Notes

- Neuroeducation is a translational field that takes information from multiple disciplines (Cognitive Psychology, NeuroScience, and Language) to bridge the boundaries of the individual disciplines and provide greater insight into how learning happens.

- The principles of the Neurosemantic Language Learning Theory can allow us to help students learn better so they can do better.

- Tommerdahl article

Handouts

- Tommerdahl article
- Want to improve your kids’ writing? Let them draw article
- Apricot, Inc. and UP info

“I Story”: NsLLT and Racial Equity/Social Justice; What Is Learning?

- James K.
- Tuntutuliak

- Assigning meaning is the key! How we do this.

DEATH BY PPT!