

Move to Learn

Principles of a Brain Friendly Classroom

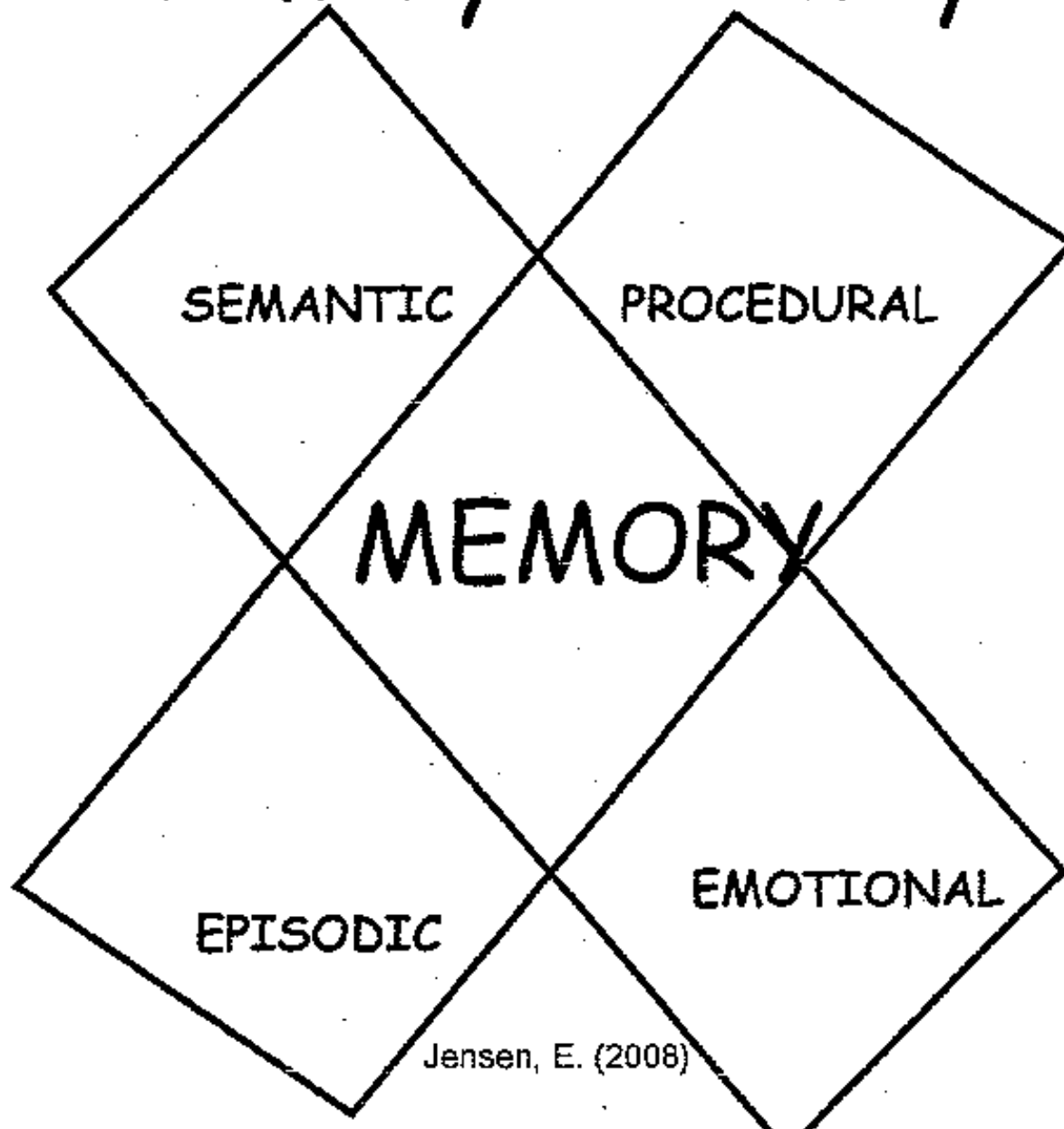
Common Household Items

1. Refrigerator
2. Toaster
3. Can Opener
4. Lamp
5. Frying Pan
6. Spatula
7. Laundry Soap
8. Toilet Paper
9. Vacuum
10. Radio
11. Television
12. Bed
13. Couch
14. Diamonds
15. Maid
16. Washing Machine
17. Dishwasher
18. Pencil
19. Microwave
20. Chocolate

Memory Pegs

1. Sun – Refrigerator
2. I See – Toaster
3. Triangle – Can Opener
4. Hot Stove – Lamp
5. Starfish – Frying Pan
6. Sticks – Spatula
7. 7-UP – Laundry Soap
8. Snowman – Toilet paper
9. Line – Vacuum
10. Hen – Radio
11. Fence – Television
12. Eggs – Bed
13. Black Cat – Couch
14. Love – Diamonds
15. 15 Minutes of Fame – Maid
16. Drive – Washing Machine
17. Magazine – Dishwasher
18. Vote – Pencil
19. Remote – Microwave
20. 20/20 Vision – Chocolate

Memory Pathways



Jensen, E. (2008)

Examples of Pathways

- Procedural: Gardening, driving, walks, sports, eating, playing an instrument
- Emotional: Being attracted to another, food poisoning, being scared, excited, trauma, fun, wedding
- Semantic: Reading, being read to, seeing signs, net surfing, seeing pictures
- Episodic: Field trip, changing locations, recalling something by location

Principles According to Eric Jensen

Too much, too fast, and it won't last

- ❖ Absence of threat
- ❖ Respecting the uniqueness of learners
- ❖ Engagement of emotions
- ❖ Understanding the brain's attention span
- ❖ Active, relevant choice-driven learning
- ❖ Utilization of patterns in learning
- ❖ Engagement of meaning
- ❖ Specific, immediate feedback
- ❖ Complex, real-life learning
- ❖ Eating proper foods

ROY G BIV

- ❖ R: Repetition
- ❖ O: Oxygen
- ❖ Y: Yearning for Meaning
- ❖ G: Glucose
- ❖ B: Bias their Attention
- ❖ I: Intense Emotion
- ❖ V: Variety of Word Tools

R: Repetition

- Do AFTER error correction
- The sooner the better
- The learner, NOT the teacher, does it
- 4 times in the first hour is optimal

Mnemonic Devices

- Mnemonics create links or associations between new information the brain is receiving and information already stored in long-term memory. (Wolfe, 2001)
- Mnemonics help activate the creation of stronger neuro-links in the hippocampus, which are essential to short-and long-term memory

O: Oxygen

- Oxygen from being active supports memory function
- Use the body to remember!
 - Drama
 - Role Play
 - Vocabulary in Motion

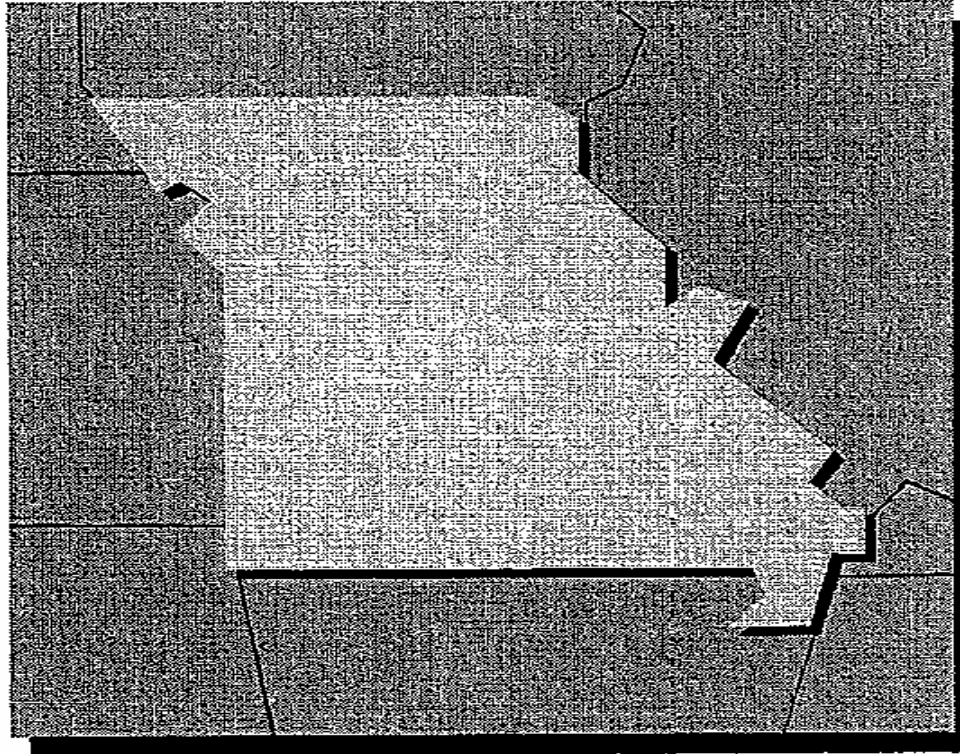
Provide Brain Breaks

Provide regular brief breaks to “wake up” the brain and nervous system.

Movement

- Movement involves more of a student's brain than does seatwork since movement accesses multiple memory systems. (Jensen,2001)
- Having students stand up, walk, jump, and clap as they review, understand, or master material will strengthen their procedural memories. (Sprenger, 1999)

In Illinois Kids Talk About OLD Karate Ninjas



Iowa, Illinois, Kentucky, Tennessee,
Alabama, Oklahoma, Kansas, Nebraska

Procedural Memory

- Learning by doing seems to last forever. That may be because it triggers glucose and engages far more neurons than cognitive tasks.
- Compound Word: Two little words, squish them together, compound word...let's do it.

Y: Yearning

- Meaning-making tells the brain, “This is worth saving!”
- Strengthen meaning by framing.
“This will change the way you think about memory, so listen carefully.”
- Tie it in personally.
- Make it rare.
“This is the only time...”

G: Glucose

Glucose levels, which support memory, are influenced by:

- Diet
- Emotions
- Movement

Glucose administration, at high doses, prevents the enhancing effect of emotion on memory. Low to moderate levels are best.

Humor

- Laughter and humor maintain students' attention, reduce mental and physical tension, relieve stress and make the school day shorter. (Burgess, 2000)
- Energizing cheers incorporate both aural and kinesthetic actions that help energize the body by sending more oxygen and glucose to the brain. (Gregory & Chapman, 2002)

B: Bias Attention

- An intentional bias tells them, “this might be important.”

Write this down even if it is the only thing you write down all day.

Look at your neighbors paper and if it is correct say “way to go.”

- Create Prior Attention:
 - Priming
 - Pre-exposure

Working Memory

- Working memory is short so consider these ideas:
 - Every few minutes, pause to let content sink in.
 - Chunk content into smaller chunks, then review.
 - Prime the learning to create an intentional bias to the content.

I: Intense Emotion

- Emotional events get preferential encoding.
- Use emotion to teach: it's a pathway for learning.
- Book: I'll Love You Forever

"Booger Love" by Brod Bagert (taken from his book *Giant Children*)

I love this little booger,
All shiny, green, and black.
You can hold it for a minute,
But I want my booger back.

It stays right where I put it,
It sure knows how to stick.
And if it gets too dry...?
It just needs a little lick.

I can hold it on my finger,
I can flick it in the air,
I can stick it underneath a desk,
Or underneath a chair.

I can make a ball and roll it
Just to see which way it goes.
I love this booger anywhere...
Except inside my nose.