UNDERSTANDING THE BRAIN

The brain is malleable. The brain seeks patterns. The brain responds to suggestion. Learning is influenced by the environment. The brain needs processing time. The brain and the body are connected. Memory can be improved.

Brain-based teaching is simply good teaching. TPRS teaching is simply good teaching. TPRS teaching is brain-based teaching. There is nothing mysterious about it, but many of the insights that arise from brain-based producer little “Aha!” moments.

For example:

The brain seeks patterns. When we tell stories in (for example) the third person past tense, students catch on to the pattern of how to form past tense. We don’t have to spend time explaining and doing worksheets on the past. The brain seeks patterns and figures it out! When we change perspective, they seek the pattern.

The brain responds to suggestion. That’s why a positive learning environment is important. That’s why we take the time in stories to make everyone in class look good and feel good, make sure everyone understands, and we teach to the eyes. It suggests that we care about the learning of every student. That’s why we begin class with enthusiasm. Each of these suggestions (non-verbal communication) sends a message to the learner’s brain. Positive suggestions can overpower much of student’s negative self-talk! For this
reason, I suggest that we should aim for at least twenty positive suggestions per hour.

**The environment affects learning.**
That’s why it is helpful to keep posters in the room that support the content. That’s why using color makes learning more efficient. That’s why it is crucial to ensure that the atmosphere is a positive one, with absolutely NO negative attitudes on the part of students or the teacher. That’s why playing music helps to create a good learning atmosphere.

**Processing time is required in order for learning to settle in.** That is why we move slowly through a story. That is why students seem to “drift off-task” -- they may actually be giving their brains time to process information! That is why we use “circling” questions. That is why we sometimes need to pause while speaking. That is why we need a variety of “processing time” activities such as:
- students retell to a partner
- students draw while the teacher narrates
- students all act together as teacher retells
- teacher writes key words on the board teacher pauses and points to words teacher asks for a quick translation

**The body affects the brain.** That is why TPR is such a powerful teaching technique. That is why learning is reduced when the body is distressed. That is why learners need to stand up and stretch every twenty minutes or so. That is why using actors enhances learning.

**General concepts:**
Learning is enhanced by using the stuff of everyday life: contrast, emotion, novelty, context, relevance. A common teaching mistake is to try to enhance learning by breaking down the language into sequential linguistic parts. These parts are explained and then practiced. Such isolation of grammatical features seems like a good idea to the teacher (who already understands the totality of language and how each part contrasts to and relates to other parts) but it is meaningless to students!

**Thoughts to ponder:**
Brain-based learning advocates a brief presentation, a chunk of time for discussion, a reflection exercise, and a confirmation of learning. (*Brain-based Learning*, Eric Jensen, p 191)


The brain rarely learns in a sequential format... We learn best by immersion; by jumping into the fray, then thinking our way out of it. (*Brain-based Learning*, Eric Jensen, p 307)

**My favorite brain books:**
- *Brain-based Learning*, Eric Jensen
- *How the Brain Learns*, David Sousa

**Memory can be improved.**
The following outline is from Eric Jensen’s *Brain-based Learning Workbook*:

**Strategies to Strengthen Memory**

I. Make information unique
   - Personalize
   - Imbue with emotion
   - Assign spatial location

II. Encode stronger
   - Use movement
   - Make meaningful
   - Group and regroup
   - Use rhyme, chant or song

III. Promote careful recognition
   - Visualize key ideas
   - Rehearse chronologically
   - Focus on one feature
   - Analyze or critique

IV. Create interest
   - Ask many questions
   - Change perspectives
   - What’s in it for me?

V. Revisit
   - After an hour, day, week
   - Match the states and context
   - Error correction with feedback