

Principles of Brain-based Teaching

1. Stimulation is key to brain growth & development

- active, focused engagement on clear goals
- stretch capacity via challenging problems & creations. In the Flow Zone where the difficulty level is calibrated to skills
- scaffold and support incremental progress via timely feedback, clear rules
- more areas of brain activated = more growth
- move from chaos/confusion to organization / understanding

2. Emotion influences attention, memory , risk taking & motivation

- provide variety, options, choices & independent opportunities
- provide challenges but not threat
- safe, tolerant environment
- "mistakes" = learning opportunities
- build in periods of rest & reflection opportunities
- teach emotional self regulation
- enthusiasm increases learning
- emphasize personal recognition

3. Patterns enhance recall & understanding

- connect new learning to previous knowledge/experience
- connect ideas across the curriculum and across the intelligences
- learning equals "meaning making"

4. Memory = emotion, attention, processing, organization, connections & long term consolidation

- emotion
- attention
- processing (multiple pathways)
- shift to long term memory
- Why? put it to use
- patterns

5. Understanding is more powerful than mere memorization

- apply knowledge to solve novel & meaningful (to self and others) problems
- personal connection to topic
- reality consequences
- responsibility for own actions
- real world / community connections
- in-depth pursuits of own choosing