Pat Wolfe Brain Research Summary

“...new research offers educators an unparalleled opportunity for building a scientific foundation for educational practice which will allow us to make more informed decisions.”

www.patwolfe.com

Research Key Points

- Experiences shapes the brain
- Memory is not stored in a single location in the brain
- Memory is not static
- Memory is not unitary
  - Declarative memory and Procedural memory
- Emotion is a primary catalyst in the learning process

What educators should do to make brain research a foundation rather than a fad:

- Become literate in the general structure and function of the brain
- Learn how to determine whether a study is valid or not
- Be cautious when making applications of research findings to the classroom
- Marry findings from neuroscience with other fields
- Begin to incorporate in our classrooms and schools what we have learned about the brain

The parietal lobes can be divided into two functional regions. One involves sensation and perception and the other is concerned with integrating sensory input, primarily with the visual system.

The occipital lobes are the center of our visual perception system.

The cerebellum is involved in the coordination of voluntary motor movement, balance and equilibrium and muscle tone.

The frontal lobes are involved in motor function, problem solving, spontaneity, memory, language, initiation, judgment, impulse control, and social and sexual behavior.

The temporal lobes are involved in the primary organization of sensory input.

The brain stem plays a vital role in basic attention, arousal, and consciousness.

Source for map of the brain and description of each part of the brain: http://www.neuroskills.com/cns.shtml