

- **Our brains have the lifelong ability to adapt and build.** No matter how old we get, our brains are always finding new and better ways to reorganize neural pathways (information highways, if you will) and even build brand new ones.
- **These neural "information highways" form the basis of our cognitive skills.** Cognitive skills not only make up IQ, they also determine how efficiently we're able to process information in every area of our lives.
- **No matter how old we get, our mental abilities (and even IQ!) are never "set in stone."** Because the brain is always adapting and building, our ability to think, remember and learn is never static—it can always be upgraded and improved!

The brain's ability to adapt and grow—reorganizing neural pathways and even creating new ones—is called "neuroplasticity."

- See more at: <http://www.learningrx.com/brain-training-101.htm#sthash.hB0JbGvj.dpuf>

The Brain based learning principles are:

1. The brain is a complex adaptive system.
2. The brain is a social brain.
3. The search for meaning is innate.
4. The search for meaning occurs through patterning.
5. Emotions are critical to patterning.
6. Every brain simultaneously perceives and creates parts and wholes.
7. Learning involves both focused attention and peripheral attention.
8. Learning always involves conscious and unconscious processes.
9. We have at least two ways of organizing memory.
10. Learning is developmental.
11. Complex learning is enhanced by challenge and inhibited by threat.
12. Every brain is uniquely organized.

The Brain Stem (Reptilian Brain)

The oldest and most critical part of the brain for survival is the basal ganglia – sometimes called the reptilian brain as birds and other non mammals also primarily driven by this structure. It is responsible for the four F's – flight, fight, freeze...and reproduction, to quote my Newfield Coaching colleague Chris Balsley (Google "triune brain Newfield" for his excellent video on the three brains and stress). The reptilian brain works quickly and simply and takes care of the basics. When things get tricky it also takes over from the other brains to ensure survival.

The Limbic System (Midbrain)

The limbic system – or midbrain. This part of the brain is responsible for the tricky, juicy, wonderful, annoying emotional elements that make us what we are, as well as memory and other aspects of learning. Any trainer worth her salt is both engaging with this part of their delegate's brain and making sure it doesn't "hijack" the whole show and disable the neocortex.

The New Brain

The neocortex, found only in certain “higher” mammals is associated with functions such as language, abstraction, planning and logical thought. This is the newest and very human part of the brain that has allowed us to make I-phones, design innovative training courses and enables delegates to day-dream about other things while we’re boring them with slide-shows. The neocortex is also slower under pressure than other parts of the brain and when stressed can be effectively turned off leaving other more “primitive” parts to take over.

The majority of training out there is designed by clever humans using this part of the brain, and involves addressing this part of the brain only.

http://website.lineone.net/~bryn_evans/Site_Map/site_map.htm

