

# Brain in the Palm of your Hand: What Happens When You Flip Your Lid

From "Parenting from the Inside Out," by Daniel Seigel and Mary Hartzell

**Your Wrist and Palm: Brain Stem.** Responsible for survival instincts: fight, flight or freeze; Autonomic (automatic) functions - heartbeat, breathing, digestion, etc.

**Your Thumb: Limbic Brain.** The amygdala (our brain's safety radar), memories and emotions.

**Your Fingers over your Thumb: Neocortex** ("new bark"). Perception, motor action, speech, higher processing and what we normally call "thinking."

**Your Fingernails: Pre-frontal cortex.** A primary integration center for the brain. Almost like a "switchboard" that makes sure messages get where they need to go. Documented functions of the pre-frontal cortex are: attuned communication, emotional balance, response flexibility, fear modulation, empathy, insight, moral awareness and intuition. It begins developing in early adolescence and finishes around 25 years.

What happens when you are stressed, overwhelmed, or trying to deal with traumatic or painful memories? The pre-frontal cortex shuts down; it no longer functions. (This is temporary) **You have flipped your lid.** You can't use most of the eight functions above. And you can't learn without them. To engage, to learn, you need to calm down and bring the pre-frontal cortex back into functioning. Watch Daniel Seigel explain at <https://www.youtube.com/watch?v=gm9CIJ74Oxw>.

**Mirror Neurons:** The "see it, do it" neurons that play a key role in social interaction, connections and learning.

