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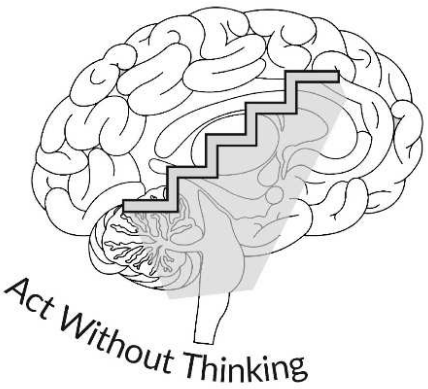
under CONSTRUCTION

A Quick Look at the Upstairs and Downstairs Brain

There is a simple way of understanding the brain that I hope makes it into every classroom, home, workplace, government office, and beyond. The "house model of the brain" was first introduced in the book *The Whole-Brain Child*. According to authors Siegel and Bryson, the brain has two main operating systems, the Upstairs Brain and Downstairs Brain.[1] They also highlighted a part of the brain that is sometimes known as the "alarm system," "traffic director," "watchdog," or emotional center of the brain: the amygdala. Let's look at how these important parts of the brain develop and what that means for you in the classroom.

The Downstairs Brain

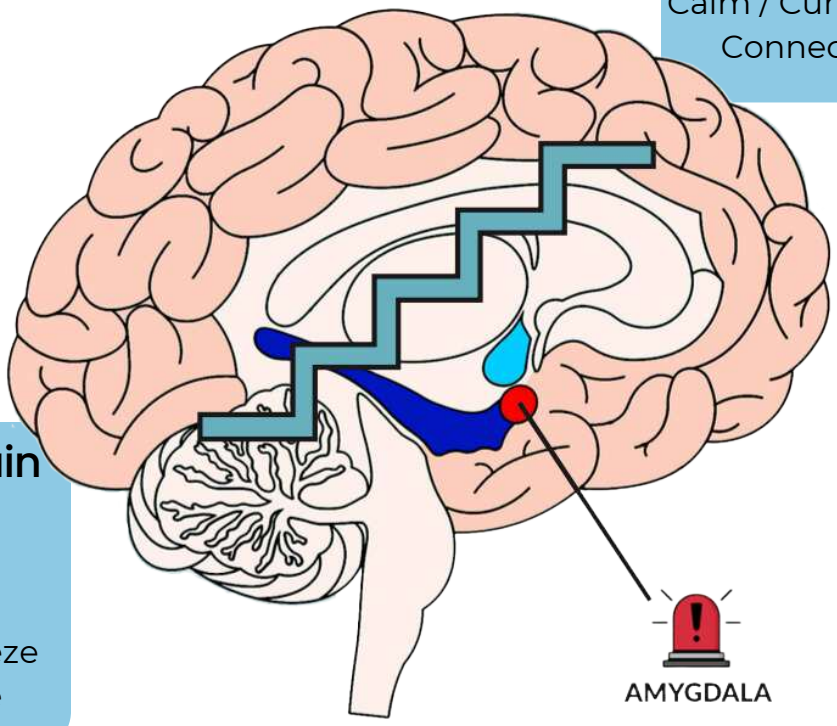
The Downstairs Brain is the operating system online at birth. It works hard to keep us alive. It is responsible for basic functions like breathing and heartbeat. You may have heard it called "survival brain," "defense mode," or "the reptilian brain." **The Downstairs Brain acts without thinking.** It is the home of primal emotions and instincts, as well as our fight-flight-freeze reactions. It favors power and control over cooperation.



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Upstairs Brain

Learning Brain
Social Brain
Thinking Brain
Calm / Curious / Capable
Connection Mode

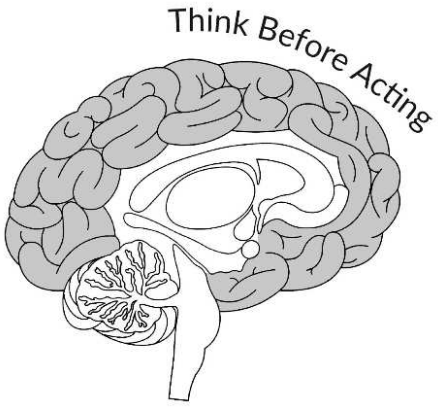


Downstairs Brain

Survival Brain
Defense Brain
Reptilian Brain
Fight / Flight / Freeze
Protection Mode

The Upstairs Brain

The Upstairs Brain is made up of the full outer portion of the brain called the cerebral cortex. Unlike its quick-responding counterpart, this advanced network of neurons develops slowly, not reaching full maturity (i.e. optimal connection) until the mid-twenties. It includes the most advanced portion of the brain, the prefrontal cortex, which helps us manage the planning, problem-solving, and perseverance required in adulthood. The Upstairs Brain is also where our "social-approach/engagement" system lives.[2] It lets us play, enjoy the company of others, share, create healthy community, and care for others.

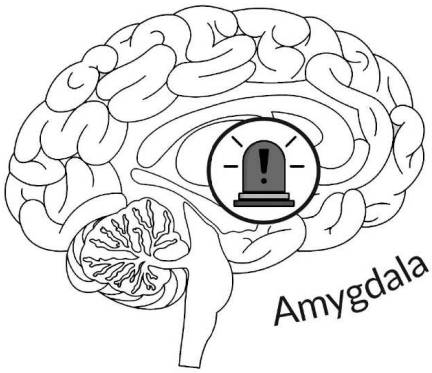


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The Upstairs Brain thinks before acting. It is the home of our calm, curious, collaborative choices. When the Upstairs Brain is in charge, we can make thoughtful decisions, regulate our big feelings, wrestle with complexity, develop insight, control impulses, and change habits. Teaching, parenting, and "adulting" in general requires a tremendous amount of Upstairs Brain power.

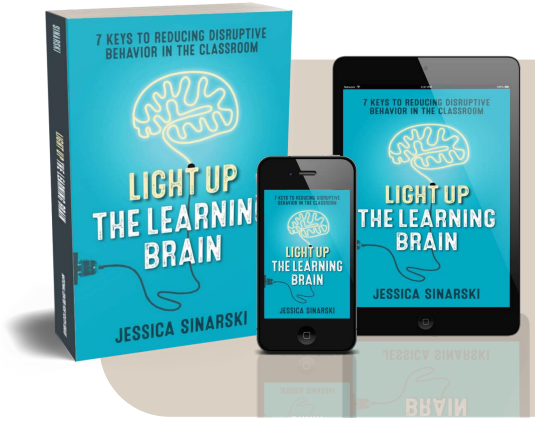
Amygdala: The Alarm System & Gatekeeper

Millions of tiny bits of information hit the brain every second, and the amygdala has to make a lightning-fast decision about each data point. **Its essential question is always Am I safe? -OR- Am I in danger (physically, emotionally, or relationally)?** The amygdala's answer to that question, in milliseconds, determines whether the Upstairs Brain can run the show or if that Downstairs Brain survival mode needs to be in control.



Genes provide the basic blueprint for brain development, but prenatal and early life experiences have a profound impact on what part of the "house" gets more attention.[3] For the amygdala to give the Upstairs Brain the "all-clear" signal it needs to grow and develop, we need to know that our cries and smiles matter. Learn more at **www.JessicaSinarski.com/brain-game**.

[1] *Siegel, Daniel J. and Tina Payne Bryson, The Whole-Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind (New York, NY: Delacorte Press, 2011).*
[2] *Baylin, Jonathan and Daniel A. Hughes, Brain-Based Parenting (New York, NY: W.W. Norton, 2012).*
[3] *"Brain Architecture," Center on the Developing Child at Harvard University, August 20, 2019, https://developingchild.harvard.edu/science/key-concepts/brain-architecture/*



Dig deeper into brain-based solutions with *Light Up the Learning Brain* (also available in Audiobook format)

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