Brains in Pain Cannot Learn

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Educators want nothing more than for our students to feel successful and excited to learn, and the importance of their education. We want our students' attention and respect to match our own. I believe that most if not all of our students desire the same, but walking through our classroom doors are beautifully complex youth who are neuro-biologically wired to feel before thinking.

Educators and students are carrying in much more than backpacks, car keys, conversations, partially-completed homework, and outward laughter. Buried deep in the brain's limbic system is an emotional switching station called the amygdala, and it is here that our human survival and emotional messages are subconsciously prioritized and learned. We continually scan environments for feelings of connectedness and safety. I am learning that the students who look oppositional, defiant, or aloof may be exhibiting negative behavior because they are in pain and presenting their stress response.

Over 29 percent of young people in the U.S., ages 9-17, are <u>affected by anxiety and depression</u> <u>disorders</u> (PDF). The thinking lobes in the prefrontal cortex shut down when a brain is in pain.

What helps?

- **1. Movement** <u>Movement is critical to learning</u> while calming the stress and fear response and relieving the irritation of the amygdala (which controls our emotions). Physical activities such as push-ups, jogging in place, jumping jacks, and yoga movements help to calm the limbic brain and bring the focus back to learning and reasoning.
- **2. Focused Attention Practices** <u>Focused attention practices</u> teach students how to breathe deeply while focusing on a particular stimulus. When we take two or three minutes a few times each day or class period and teach students how to breathe deeply, we are priming the brain for increased attention and focus. The focused attention increases an oxygenated blood and glucose flow to the frontal lobes of the brain where emotional regulation, attention, and problem solving occur.

3. Understanding the Brain

<u>Teaching students about their amygdala and fear response is so empowering.</u> When we understand that this biology is hardwired to protect us, so <u>our minds begin to relax through knowing that our reactions to negative</u> experiences are natural and common.

By naming the amygdala "Amy G. Dala," we personify this ancient, emotionally-driven structure in our brains, and we and the <u>students are better able to befriend their fear responses and learning how to lessen negative emotion</u>. We cannot always control the experiences in our lives, but we can shift how we respond.