

Judith Sekler
judithsekler.com
judithsekler@sbcglobal.net
323.610.0214

The “A” in Steam is Awareness: Meditation and Mindfulness in STEAM Education

Mindfulness means paying attention in a particular way: on purpose, in the present moment, and non-judgmentally. Paying attention to the mind, emotions and physical sensations. It is a time that we devote to sensory awareness and the full spectrum of direct experience. Time that is spent not pursuing nor avoiding particular thoughts, feelings, reactions, opinions, distractions, etc.

Mindfulness cultivates attention, emotional regulation, compassion and introspection. Mindfulness and meditation change the nature of our relationship to our experience by observing it. We can see thoughts as thoughts, feelings as feelings and physical sensations as sensations. We can move toward balance and equanimity.

Mindfulness strengthens 3 qualities that help girls “stretch” toward subjects and course material in STEM:

- 1. Non-judgment** - Mindfulness encourages nonreactive awareness. Girls who might be afraid or intimidated by STEM classes can recognize their feelings and still choose to move forward. Mindfulness teaches that, although fear and apprehension are present, they are transitory mental states. Mindfulness orients students’ attention to a broad range of choices, possibilities and “open doors.”
- 2. Compassion** - toward others and ourselves. Girls can “reach” toward STEM material with a patient and kind attention, hanging in with the uncomfortable and unfamiliar. They can allow learning and non-mastery to exist without being defeated by expectation and perfectionism.
- 3. Resilience** - the ability to begin again. Just as our attention wanders during meditation practice, we learn to begin again, focusing on the next breath, on being present. With STEM coursework (as with any curricula) our students may fail, and they may have to begin again, to rally their energy and focus and start over. Mindfulness meditation practice creates a template for resilience - girls know that they may fail or lose focus and still gather themselves to start anew.

Why is Mindfulness so popular right now?

The pace and rhythm of everyday life has changed. We are constantly “doing,” and have very little time to “be.” We feel disconnected, stressed, frustrated, pressed for time. Technology and social media benefit our lives tremendously, but they also represent an epidemic of distraction, in which we are constantly connected to a representational form of experience. This remove creates a ripe ground for exclusionary social behaviors and self-centeredness, where students can lose empathy and compassion for those who are different. Social media can encourage a judging and comparing mindset that leaves our

students feeling less than or more than others, anxious and worried. Mindfulness and meditation cultivate self-reflection and perspective, where we can find inner resources and well-being in the present moment.

Mindfulness Meditation benefits:

- * Calming, stress relief
- * Increased focus, concentration and attention
- * To bring more relaxation and ease to the self, to feel more present
- * To improve communication and interactions with friends, family, ourselves
- * Increased emotional regulation. To have better coping skills, be less judgmental to self and others, more able to process anger, resentment, disappointment.

Over time, mindfulness becomes a more organic part of our brain and automatic functioning. We don't always have to think about being mindful or reacting mindfully, so it is not a constant, conscious effort. The experience of feeling more relaxed, focused and present is one that is stored in mental and physical memory.

S.T.O.P. Practice

This brief and effective practice can be used anytime, anywhere: in the classroom, during an exam, walking across campus, driving, in the midst of a parent conflict, etc.

Stop for a moment (stop talking, walking, writing - stop whatever you're doing)

Take a breath (deliberate inhale, deliberate exhale)

Observe how you feel (physically, emotionally, mentally)

Proceed

The Stonecutter's Credo by Jacob Riss

This quote serves as the motto for the San Antonio Spurs basketball team, and it points to the intrinsic benefits of consistent and steady practice of any discipline.

"When nothing seems to help, I go look at a stonecutter hammering away at his rock, perhaps a hundred times without as much as a crack showing in it. Yet at the hundred and first blow it will split in two, and I know it was not that blow that did it, but all that had gone before."

Resources:

- . <http://news.harvard.edu/gazette/story/2010/11/wandering-mind-not-a-happy-mind/>
- . <http://www.washingtonpost.com/news/inspired-life/wp/2015/05/26/harvard-neuroscientist-meditation-not-only-reduces-stress-it-literally-changes-your-brain/>
- . <http://news.harvard.edu/gazette/story/2011/01/eight-weeks-to-a-better-brain/>
- . <http://www.sharonsalzberg.com/>

. Notice: This is work product exclusively copyrighted and reserved for Judith Sekler and Mindful Movement ©2015.