Connecting the Dots: Building an Aligned and Sustainable Self-Regulation Project for Your School and Community

Where Neuroscience and Education Meet; and Where What We Know Impacts What We Do

Bringing 21st Century Knowledge to 21st Century Classrooms
Self-Regulation & the Brain

Neocortex: Rational or Thinking Brain
Limbic Brain: Emotional or Feeling Brain
Reptilian Brain: Instinctual or Dinosaur Brain
The Evolution of Man

Our brain hasn’t kept pace with our environment
Thayer’s Self-Regulation Tool:

Three core systems for responding to stress:

1. Social Engagement
2. Fight-or-Flight
3. Freeze
The Schools Our Kids Need for a World That Needs Our Kids

The era of a compliance & control factory model has mercifully passed.

One of these elements makes all the others possible.
Aerobic exercise primes the brain for optimal learning

Average composite of 20 students brains taking the same test

20 min of aerobic exercise indicates higher levels of:

- **BDNF** (aka Miracle Gro) — Brain cells function, growth
- **Serotonin** - Learning
- **Norepinephrine** - Alertness, attention
- **Dopamine** – Attention, cognition, motivation

Scan compliments of Dr. Chuck Hillman, University of Illinois
Signs of Excessive Stress (When the Survival Brain Overrides the Learning Brain)

1. Chronic hyper-arousal
2. Chronic hypo-arousal
3. Heightened stress reactivity
4. Increased sensitivity to pain (physical and emotional)
5. Reduced ability to regulate negative emotions
6. negative bias
7. reduced ability to read affect cues, show emotions
8. Reduced ability to hear human voice
9. Blunted reward system
10. Increased immune system problems
Strategies to Support Children’s Return to Calm

- Decrease power/authority relationships
- Give children choice
- Increase activity time
- Change the classroom design
- Recognize “dysregulating” variables
- Introduce classroom tools
- Teach self-regulation
- Up-regulate/down-regulate as needed
Impact on Learning: A Teacher’s Voice

…”I am starting to look at the reasons behind problem behaviors, rather than just giving consequences for students’ poor choices. It is less about what I need them to do and more about what they need from me”…

…”I see more clearly what my students bring to the classroom with them (both gifts and challenges) and have an understanding of how these issues impact their learning time with me. I have also had to take a hard look at myself and my teaching. The piles of paper, the stacks of books here and there, the chaos is adding to the visual clutter. The disorganization of the “stuff” is unsettling for some of my kids”…
Why we care

We believe all kids can learn and thrive in their schools and communities. We also believe that self-regulation is an essential capacity for learning and healthy human development.

Working together to foster self-regulation in students and the adults that support them, we can change lives and build healthier, more sustainable communities.
Meet Life’s Challenges

• Respond to stressors, and
• Return to a calm and alert state, ready to deal with new circumstances

Rise to Life’s Potential

• Respond to our innate drive to thrive ...
• Supported by optimal conditions for learning, mental health & wellbeing, positive, productive social engagement & relationships, and healthy human development

Self-Regulation
I’m the Boss of Me!
Jordan

- Can’t sit still
- Is easily distracted
- Has meltdowns when he’s frustrated
- Is a loner on the playground
- Has a reputation as a bully
Jordan

- I have that ‘sinking feeling.’ Everyone else knows what’s going on ... but I don’t.
- I’ll never catch up.
- I just get so mad!
- The other kids hate me.
- I don’t care what they think ... they’re just dumb!
Old School

- Sit quietly in your seat.
- Nothing on your desk but your pencil & notebook
- Lose marks for bad behaviour
- Solo projects; ‘winner-takes-all’ games
- Mind your own business; keep your hands to yourself

New School

- Classroom designed for movement & engagement
- Kids can opt to use sensory tools to help them focus
- Mindfulness, emotional & resilience capacities taught
- Team learning; cooperative and competitive games
- Acts of kindness and contribution are acknowledged
Old School

- We run a tight ship here; bad behaviour is punished.
- Some kids are born smart; others will never catch up.
- Feeling worried? ... don’t be so sensitive; Feeling sad? ... soldier on.
- Life’s a struggle, you have to be a ‘winner’ to do well.
- Don’t worry about Freddy ... you’re responsible for yourself.

New School

- Challenging behaviour is linked to lagging skills.
- It’s never too late – all kids can learn; we can promote a growth mindset.
- Emotional competencies are just as important as math competencies.
- Learning can happen when you’re having fun with others.
- The capacity for empathy is an important developmental milestone.
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In his new school, Jordan ...

• Feels calm more often than not ...

• Knows that there are many things he already knows, and that he will continue to learn.

• Is proud that his teacher noticed how he was feeling a big emotion, but didn’t act on the impulse to kick his chair.

• Is aware that he feels happier during the day when he’s played hard at recess.

• Can see that other people have thoughts, feelings, & preferences that are different than his, and wants them to feel good too.
In his new school, Jordan ...

- Knows he can take a ‘stretch break’ when needed, or climb on a spin bike.
- Is working on a project that draws on his passionate interest in astronomy.
- Is learning about emotions, and uses the Hoberman ball in the classroom to practice mindful breathing.
- Asks if he can join the game at recess; helps other players sort out the rules.
- Comforted a classmate who was feeling sad and left out; invited her to join him in a game.
A Self-Regulation Approach Allows Us to Engage With Dysregulating Situations Very Differently

Rather than responding with reward/punishment & harsher sanctions, we begin to consider:

- What is causing this behavior?
- Why is it happening now?
- How often?
- What strategies work in returning to a more regulated state?
Self-Regulation Matrix: 5 Domains & 6 Levels

We have all been in each one of these situations. Understanding self-regulation allows us to consider:

- Why?
- Why Now?
- How often?
- How do we maintain or get back to a more regulated state?

Based on the work of Dr. Stuart Shanker
Thank you

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