

Living and learning in self-regulation.

Self-Reg and Literacy

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An Epidemic of Illiteracy?

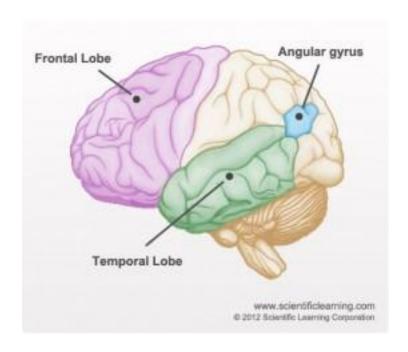
- The great paradox of the "information revolution" is the number children and adolescents who can't read at all, or have only limited literacy skills
- Over a third of early school leavers are functionally illiterate
- Problems showing up early and persisting, despite intensive efforts to reverse the trend
- We have seen dramatic results in our schoolbased Self-Reg initiatives



The Reading Brain: Neocortex

- Temporal lobe: phonological awareness and decoding/discriminating sounds
- Frontal lobe: reading fluency and comprehension
- Angular and supramarginal gyrus (Parietal lobe): "reading integrator," linking different parts of the brain together to read





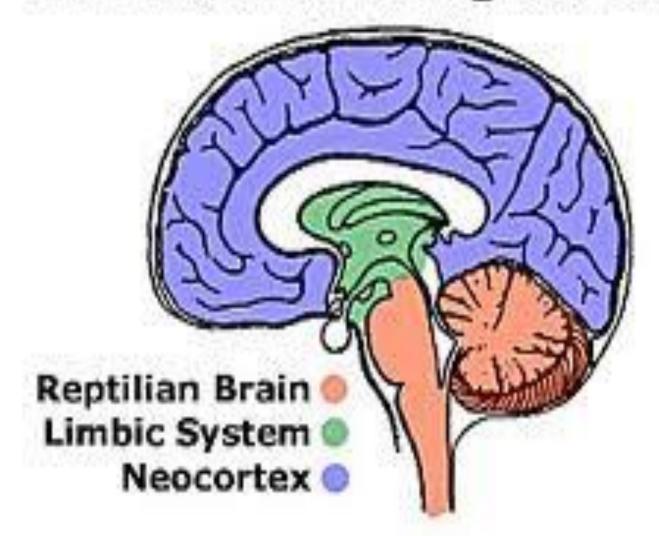


Going Deeper

- The illiteracy numbers have to be set against the explosion of problems seen in behavior, mood, and attention
- What we are really seeing is an epidemic of dysregulation
- To understand the roots of these problems we have to go deeper into the brain



The Evolution-Designed Brain





Neuroception

- "Reptilian brain" responds to "alarm signals" from mammalian (limbic system)
- Hierarchy of stress response:
 - Social Engagement
 - Fight-or-flight
 - Freeze



"Learning Brain" vs "Survival Brain"

- Term coined by Julian Ford; refers to "tropotrophic/ergotropic shift"
- In survival brain, energy shunted to deal with threat
- In learning brain energy directed to internal processes, growth and recovery, learning
- Hypothalamus acts as a "master control switch" regulating sympathetic/parasympathetic shift



Reframing Behaviour

- The difference between "misbehaviour" and "stress-behaviour"
- Classical behaviour management techniques designed to deal with misbehaviour
- BM ineffective with stress-behaviour, may even exacerbate the problem



The Difference between Self-Control and Self-Regulation

- Two distinct concepts, with different conceptual histories: self-control and self-regulation
- Self-control: Plato's view of resisting temptation
- Develop self-control in the same way as any muscle
- Child who lacks self-control is somehow weak
- •Self-regulation seeks to understand the causes of problematic behaviors, not suppress them!



What is Self-Regulation?

- How effectively and efficiently a child deals with stress and then recovers
- Brain responds to stress with processes that consume energy
- •This is followed by restorative processes to recover from this energy expenditure
- •Child with too much stress develops kindled stress reactivity, with profound impact on growth and restoration



Why Are We Seeing All These Problems?

- Children are under too much stress today
- Learning how to read is a stressor
- If children already under too much stress, they can't handle this added load
- Multiple stressors in children's lives today
- Hidden Stressors



What is "Stress": Five Domains

- 1. Physiological: Environmental stressors (e.g., visual, auditory)
- 2. Emotional: Strong positive as well as negative emotions
- 3. Cognitive: "Processing deficits," intrusive thoughts
- 4. Social: Master the skills of co-regulation
- 5. Prosocial: development of empathy, dealing with others' stress



Effects of Excessive Stress

- Disrupts development of the brain (hippocampus;
 HPA pathway)
- Child becomes chronically hypoaroused or hyperaroused
- Finds it difficult to stay focused and alert
- Poor awareness and self-awareness
- Heightened impulsivity or numbing



Literacy Programs have to be Embedded in Self-Reg

- Reading is one of the ultimate tools we can give a child to self-regulate
- But to acquire the skills the child has to be calmly focused and alert
- Our most effective literacy programs in our school-based work have been part of a universal Self-Reg initiative



SELF-REGULATION IN CHILDREN:

- **1** LEARN HOW TO READ THE SIGNS OF WHEN A CHILD IS OVER-STRESSED.
- IDENTIFY THE STRESSORS.
- **3** REDUCE THE STRESSORS.
- 4 HELP THE CHILD LEARN TO IDENTIFY WHAT IT FEELS LIKE TO BE CALM AND WHAT IT FEELS LIKE TO BE AGITATED.
- **5** HELP CHILDREN LEARN STRATEGIES FOR RETURNING TO BEING CALM WHEN THEY BECOME AGITATED.

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Readings

•Shanker, SG (2012) Calm, Alert and Learning: Classroom Strategies for Self-Regulation. Pearson.



Peersite Online Platform



Self-Reg Certificate



5 steps of self-regulation

Read the signs and reframe the behaviour

Identify the stressors

Reduce the stress

Become aware of when you're becoming over-stressed, and why

Figure out what brings you back to calm



5 domains of self-regulation

