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Introduction

Have you ever seen a child break down at school—running out of the room, crying, throwing things, or refusing to do an assignment? It happens! I was that kid sometimes, and I bet you were, too.

One day in first grade, my teacher held a race around the school, and I was determined to win. I told my friends all morning that I would take first place. We gathered outside and lined up, and my teacher shouted, “Go!” but I didn’t hear him. All the other students took off while I stood in disbelief, my feet stuck to the concrete. My teacher yelled, “What are you doing? Go, go, go! You are going to be last!”

Not only did I lose the race, but I also felt like I lost my dignity. Dysregulated, I started crying, then felt mortified when I couldn’t stop while my peers laughed at me. At that exact moment, a lunchroom staff member saw me crying. She took my hand and walked me to the warm kitchen. It smelled so good. She pulled out a coloring book and crayons, sat us at a back table, and colored with me quietly.

“Okay, time to go back to class,” she said when we had finished coloring a page together. I made it back in time for our weekly spelling test, which I aced. I am sure I wouldn’t have done as well if she hadn’t come to my rescue.

There were probably many other times before and after that experience when I was being co-regulated and didn’t know it. I certainly didn’t know it the day I colored with that kind woman working in the cafeteria, and maybe she didn’t either. She wasn’t a teacher or a part of the administrative staff, but she knew I needed to calm down before returning to class. She was a caring adult who made time for me, met me where I was emotionally, and guided me back to calm so I could do my best.

There is a link between student stress (which is what I experienced that day) and academic performance. Students struggle with attention, focus, and assignment completion when stressed. Alternatively, students perform better academically when their stress levels are tolerable. We can’t erase all stress, and not all stress is bad. However, we want to help buffer student stress so that the stress level is manageable. Stress and the feelings that surround it are contagious! You’ve seen it before, right? An entire classroom, lunchroom, or gym in complete chaos from a negative emotional contagion. We can fix these situations. Let me rephrase that.

We can *heal* them.

How do we do this? Safe relationships and positive connections. Academic success is more likely to be achieved when students feel safe, are connected to a trusted adult, and are emotionally regulated.

This book will teach you how to understand and work with the neurobiology of students and couple this knowledge with repeated compassionate responses. Together, this can positively change individual students and the whole school environment.

What Is Regulation, and Why Is It Important?

Regulation, or emotional regulation, is the ability to modify emotions and respond to situations with balance, calm, and control. Picture an alert, steady person who laughs, smiles, and is relaxed. These are signs that a person is effectively regulating. It's important to note that everyone is different, and regulation looks different for every student.

One of my favorite stories about different regulation presentations involves my son, Alec, who has the superpower of autism. In one of our family pictures, he stares into the camera with what many would describe as a grumpy face. This happens to be Alec's favorite picture. Every time he sees it, he says, "That was one of the best days of my life!"

Alec isn't thinking about the expression on his face; he remembers a gift he received earlier that day. It's important to know that we can't always tell a person's feelings by what their facial expression is or isn't showing. Alec appeared dysregulated but was quite regulated. Regulation is an individualized presentation on the outside and the inside. Learning what it looks like and feels like for ourselves and our students moves us closer to healing individually and collectively.

***Dysregulation happens
when an individual
doesn't feel safe.***

Dysregulation happens when an individual doesn't feel safe. Their ability to function is compromised, and they cannot meet the demands of the external environment. Imagine a clenched jaw, forced smile, expression of anger, fast and impulsive movements, aggression, closed or squinted eyes, a tense body, and crying. These obvious symptoms and

behaviors can be easy to spot, but what about the more subtle signs of dysregulation? Someone with glazed eyes and a blank face who is silent or speaking flatly. Someone who moves very slowly, slouches, and lacks curiosity. These are also signs of dysregulation.¹

Both children and adults experience dysregulation every day, sometimes more than once. Knowing this provides many opportunities to practice and master healthy self-regulation and co-regulation. Co-regulation looks like warm and responsive interactions between two people (two adults, an adult and a child, or two children). The key to these interactions is that one person is attuned and perceived as safe, which soothes the other.

Humans are born to connect. We come into this world vulnerable, needing care, and not meant to be alone. Sadly, not every child receives ongoing safe, stable connections and attachments. And when those don't happen at home, we have to stand in the gap. It only takes one safe, committed, stable adult to help a child heal and build resilience through co-regulation.

Neurodivergence and Learning Differences

As we learn more about regulation, I want to be mindful of neurodivergent students. Neurodivergent means someone's brain learns or processes information differently than what is considered "typical." This term includes Autism, Dyslexia, Dyscalculia, Epilepsy, Hyperlexia, Dyspraxia, ADHD, Obsessive-Compulsive Disorder, and Tourette syndrome.

Research shows neurodivergent individuals often have difficulty regulating their emotions, which can lead to problems with anxiety, depression, and impulsivity. It is essential for those who are neurodivergent to learn self-care and self-regulation techniques to manage their mental and physical health.² No student can do this alone, and some students need more co-regulation than others, which requires intuition and commitment on the part of the adults around them. Being aware of student strengths, personal views, social and ethnic background, gender, and orientation and making considerations related to how their brains work is a critical part of ensuring self-regulation is a part of the skills they learn.

Occupational therapist Kelly Mahler suggests significant shifts educators can make in their perspectives and practices to provide compassionate and practical support to neurodivergent students.

- 1. Become trauma-informed.** Consider the trauma experienced by neurodivergent students who live in a sometimes overwhelming world that can feel unsafe.
- 2. Move to a regulation-driven teaching model.** Compliance-based models condition students to please for reinforcers rather than listen to their bodies. Regulation-driven models help students feel safe and regulated in their bodies and environments through co-regulation.
- 3. Provide a sensory-safe environment.** Some students are extra-sensitive to sights, sounds, smells, and other input that impacts the senses. Noise-canceling headphones, flexible seating, weighted blankets, and dampening lights can help students who feel overwhelmed in sensory-rich environments.
- 4. Implement Interoception-based supports.** Yoga, Mindfulness, Meditation, and Breathing exercises can help students process what they feel inside their bodies and, in turn, help them manage and regulate their feelings.³
- 5. Avoid Labels.** Labels influence expectations. Does a student's atypical behavior need to be changed? We can answer that only if we understand what function a specific behavior serves for them. Behaviors in neurodivergent students (repetitive behaviors, hand-flapping, vocal tics, rocking, pen clicking, being inflexible with change, seeking sensory input) can help them manage their surroundings in a world where they may feel they don't belong. Once we appreciate a behavior's adaptive function, we can decide if and how to intervene, hopefully increasing autonomy and regulation. Differences aren't deficits.⁴

One of my all-time favorite quotes is Temple Grandin's, "Different, not less." When we take differences off a diagnostic checklist and see them as adaptations to process information, we may see many behaviors such as "stimming," averted gaze, and ritualistic routines as ways a child helps themselves feel more comfortable in the classroom. We can view behaviors

as personal accommodations. We would never consider taking away a child's wheelchair, right?

***...traditional IQ tests
often underestimate
intelligence in the special-
needs population.***

Lastly, we should never assume a child's test scores accurately reflect intellectual functioning in neurodiverse populations. Most testing was designed for neurotypical children with

neurotypical motor functions, meaning traditional IQ tests often underestimate intelligence in the special-needs population.⁵

One Size Fits One

This phrase, coined by Dr. Melissa Sadin,⁶ is a paradigm shift from most parenting and educational approaches that look at the behavior, not the child. Most responses to behaviors are focused on reasoning, requesting, or offering incentives, rewards, or consequences. These approaches are reactive and flawed. They provide a one-size-fits-all answer based on a generic version of children and assume a child is intentionally behaving a certain way, or if they try hard enough, they can gain control of themselves. Unfortunately, these generalized approaches fail to account for a child's unique needs and traits at any given moment.

The paradigm must shift to account for the behavior trying to communicate a delayed need or skill. No matter the behavior, there is more than meets the eye.⁷ We must take an individualized approach to truly meet a child's needs and respond in a way that will calm their nervous system and change their behavior. One size fits one.

***One size
fits one.***

There isn't a checklist for helping students feel emotionally safe and connected at school. There isn't a checklist for what makes all adults feel safe and connected, either. But there are best practices that can and should be tailored to each educator and each student. We shouldn't pressure children to conform to what we consider "normal" when their nervous system prompts them to do otherwise. Differences are not deficits, and co-regulation is never the wrong answer.

This book holds unapologetic hope for healing and is laced with not-so-subtle guidelines to help relationships come first. Bruce Perry, renowned psychiatrist, educational researcher, and author, says, “Relationships are the agents of change, and the most powerful therapy is human love.”⁸

Thank you for making space for this content. I can’t wait for you to experience positive changes in your classroom. As you implement strategies and embrace this new lens of thinking and responding, there will be a domino effect. Everyone in your life (including you) will benefit from co-regulation!

As we start, it’s helpful to be on the same page about the different facets of regulation and neuroplasticity. Here is a list of terms that we’ll be using throughout the book:

Glossary of Key Terms

Adrenaline: A hormone produced in the adrenal glands released into the body as a stress response. It prepares the body to take action for fight or flight.⁹

Amygdala: Regulates fear and alerts us to danger, keeps us safe, aware of our surroundings, and away from potential harm. The amygdala can send false alarms and can become faulty when it is overactivated.¹⁰

Attachment: Lasting psychological and emotional connectedness between human beings.¹¹

Attunement: Being able to tune in to a child’s emotional safety. Allowing them to feel seen, known, and understood emotionally. Providing nurture proactively rather than making the child earn it.¹²

Blocked Care: When an adult becomes emotionally unavailable because their repeated attempts to care for and support a child are rejected. When a teacher tries to comfort or connect with a student in the classroom, they might get a range of push-away behaviors. Being continuously rejected, no matter your approach, is exhausting and deflating, and your adult brain may react with Blocked Care. It is often referred to as compassion fatigue.¹³

Blocked Trust: When a child does not feel good enough about themselves to allow a safe connection.¹⁴

Co-Regulation: Warm, responsive, soothing interactions between two people (both adults and children). Attuned, communicative, and reciprocal exchanges.¹⁵

Cortisol: A stress hormone released during stress to alert the brain and body of a potential threat. High levels of Cortisol can cause brain fog, diminished memory, sleep deprivation, and dehydration, resulting in larger doses flooding the nervous system and creating more damage.¹⁶

Discipline: A response to behavior focused on strategies where students learn and grow from the experience. Not the same as punishment.¹⁷

Dopamine: The “reward chemical.” Provides a sense of motivation to continue pursuing a given reward or need. Requires reactivation once the need or reward has been achieved. A dopamine deficiency is linked to depression, fatigue, apathy, and boredom.¹⁸

Dysregulation: When an individual’s ability to manage and tolerate overwhelming emotions is compromised because the brain’s cognitive state and body’s emotional state are out of sync due to a real or perceived threat. Also called Emotional Dysregulation.¹⁹

Endorphins: A pain-relieving hormone that lessens the prediction of pain, reduces stress, triggers euphoria, and stimulates the immune system.²⁰

Executive Functioning: Cognitive skills that allow us to focus our attention, plan and prioritize, be self-aware, have flexible thinking, and use memory recall.²¹

Fawn: A response to trauma presenting as appeasement, approval seeking, offering help, attention (connection) seeking, validation seeking, and letting others dictate behavior.²²

Felt Safety: A subjective experience in which the brain and nervous systems feel genuinely safe and allow the child to relax and feel comfortable in a given environment. Just because the child is physically safe does not mean they truly feel safe.²³

Fight: A response to a trauma that presents as arguing, swearing, aggression, violence, challenging of authority, etc.²⁴

Flight: A response to trauma presenting as being distracted, hyperactivity, running, hiding, avoiding, and more.²⁵

Freeze: A response to trauma that presents as an inability to finish tasks, lack of motivation, withdrawal, “deer in the headlights,” inability to move or talk, daydreaming, etc.²⁶

Hippocampus: Part of the brain responsible for processing emotional information, as well as creating, consolidating, and maintaining memory. When the amygdala is activated, signals are sent to the hippocampus disrupting its ability to form memories. This part of the brain is critical for academic skills like memorization of facts and spatial memory.²⁷

Mirror Neurons: Neurons in the brain that reflect the behavior of others (i.e., the brain perceives emotions another person displays and mimics them).²⁸

Neurodivergent: A term used to describe someone with brain differences, such as Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), Obsessive Compulsive Disorder (OCD), Tourette’s Syndrome, Epilepsy, and Dyslexia.²⁹

Neuroplasticity: How the physical architecture of the brain adapts to new experiences and information, reorganizes itself, and creates new neural pathways based on what a person sees, hears, touches, thinks, practices, etc. Anything we give attention to or emphasize in our interactions creates new links in the brain. Where attention goes, neurons fire, and where neurons fire, they wire or join.³⁰

Neurotypical: A term used to describe someone with typical neurological functioning or development.³¹

Object Constancy/Object Permanence: The understanding that items and people still exist even when you can’t see or hear them. A blanket with a familiar smell, a picture, a plush, etc., can be used as tools for a child to keep/take with them to reinforce permanency and safety in a relationship when the adult is not near.³²

Oxytocin: The “love hormone” released through physical touch, proximity, or thinking about someone with whom we have an attachment, including pets.³³

Prefrontal Cortex: The part of the brain central to emotional regulation, reflective functioning, and executive functioning, including judgment and mood.³⁴ The lower regions of the prefrontal cortex are instrumental in the regulation of emotions emerging from the limbic system.³⁵

Punishment: A negative response to behavior focused on a consequence that may deter repeated behavior and inflict suffering. Not the same as discipline.³⁶

Regulation: Skills used to calm physiological stress response systems, promoting emotional and behavioral flexibility through self-soothing. We are in this state when we can effectively manage, identify, and respond to our feelings and return to a balanced, calm state. Also called Emotional Regulation.³⁷

Resilience: The developed ability to adapt to hardship and move forward.³⁸

Restorative Practices: An innovative, trauma-informed approach to discipline and student accountability that moves away from punitive measures and focuses on healing, accountability, and change. Strategies in this field include community conferences, restorative circles, and victim/offender dialogues in both community and school settings.³⁹

Rupture and Repair: The concept that healthy development depends on making mistakes and then offering the appropriate apology and repairing the situation.⁴⁰

Scaffolding: Giving just enough support to allow children to learn skills independently, which helps them gain confidence in themselves yet recognize the benefits of support.⁴¹

Serotonin: A mood stabilizing, “feel good” hormone contributing to mood regulation and happiness. Influences sleep cycles and digestion.⁴²

Stress: The neurological and physiological shift when someone encounters a stressor (threat). Not all stress is negative, but all stress causes a change within the body.⁴³

Stressors: Events that activate a person's stress response; can be external or internal circumstances.⁴⁴

Toxic Stress: Chronic, excessive stress which exceeds a person's ability to cope, especially in the absence of supportive caregiving from adults.⁴⁵

Trauma: A psychologically distressing event or pattern of events outside the range of everyday human experience. Impairs the proper functioning of the person's stress-response system, making it more reactive or sensitive and often involving intense fear, terror, and helplessness. Trauma isn't what happened to you but what happens inside of you as a response to what happened to you. The same event can happen to two people, but they may not experience it the same.⁴⁶

Trigger: A sensory/visceral stimulus or set of stimuli that evoke the memory of a stressful/traumatic condition, emotionally and physiologically returning the individual to the place or time of the initial trauma (whereas stressors cause an immediate state of stress, strain, or tension).⁴⁷ Also defined as anything that creates an unwanted feeling, which can be external or internal but is different for everyone.⁴⁸