

# Leveraging the Power of Connection to Mitigate Stress and Support Student Health

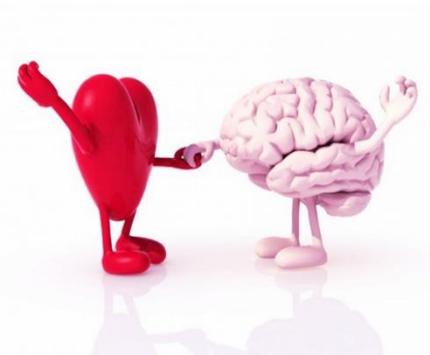
Mary Crnobori, PhD, BCBA  
Coordinator of Trauma-Informed Schools

MNPS ACEs and Trauma-Informed Schools Initiative  
In partnership with the Tennessee Building Strong Brains Initiative and  
Office of Criminal Justice Programs – Victims of Crime Act



METRO  
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PUBLIC  
SCHOOLS

# Who We Are

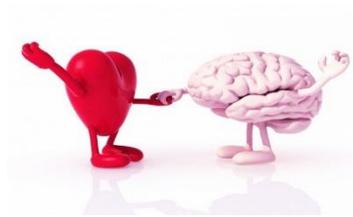


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## **Trauma-Informed Specialists:**

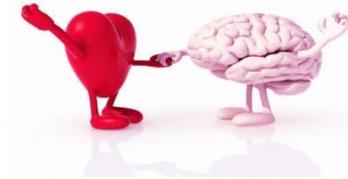
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# MNPS Trauma-Informed Schools Team



Our mission is to **prevent and mitigate** the impacts of **childhood adversity** and **promote resilience** and school success for all students through widespread awareness and **trauma-informed** school culture and practices.

# Trauma-Informed Schools Team: What We Do



Build district capacity through **widespread training** about healthy brain development, the impacts of childhood adversity, and trauma-informed school practices

- To date we've trained:
  - >11,770 MNPS faculty and staff
  - >4,300 MNPS stakeholders (students, parents, community)

Provide **consultation, technical support, and resources** to school staff to support implementation of trauma-informed school practices throughout MNPS

- School-wide
  - Including but not limited to 14 Trauma-Informed Focus Schools
- Class-wide
- Individualized

# Trauma-Informed Schools Team: What We Do



- Implement the **Handle with Care** notification system for all 169 MNPS and charter schools
  - 2017-18: 2,534
  - 2018-19: 2,841
  - 2019-20: 3,163
- **Collaborate** with a wide range of MNPS Teams/Departments and community organizations to support our district and leverage the power of **collective impact**
  - SEL Department, Exceptional Ed, EL/SIFE, Extended Learning, Community Achieves, Safe & Drug Free Schools, etc.
  - TCCY, TN DOE, ACE Nashville,, MNPd, PASSAGE, Juvenile Court, area universities, and many more

# Learning Objectives

- Today we will discuss foundational concepts about the impacts of toxic stress and trauma, and simple strategies to connect with students who are feeling unwell to:
  - Mitigate Stress
  - Support Student Wellness and Health
  - Promote Resilience and School Success



“If 20 million people were infected by a virus that caused anxiety, impulsivity, aggression, sleep problems, depression, respiratory and heart problems, vulnerability to substance abuse, antisocial and criminal behavior, and school failure, we would consider it an urgent public health crisis. Yet, in the United States alone, there are more than 20 million abused, neglected and traumatized children vulnerable to these problems. Our society has yet to recognize this epidemic, let alone develop an immunization strategy.”

- Bruce Perry, [childtrauma.org](http://childtrauma.org)

# Mindful Moment



- Take a second to reflect on the quote from the previous page.
- Was there anything that stuck out, or made you feel something?

# What is Trauma?

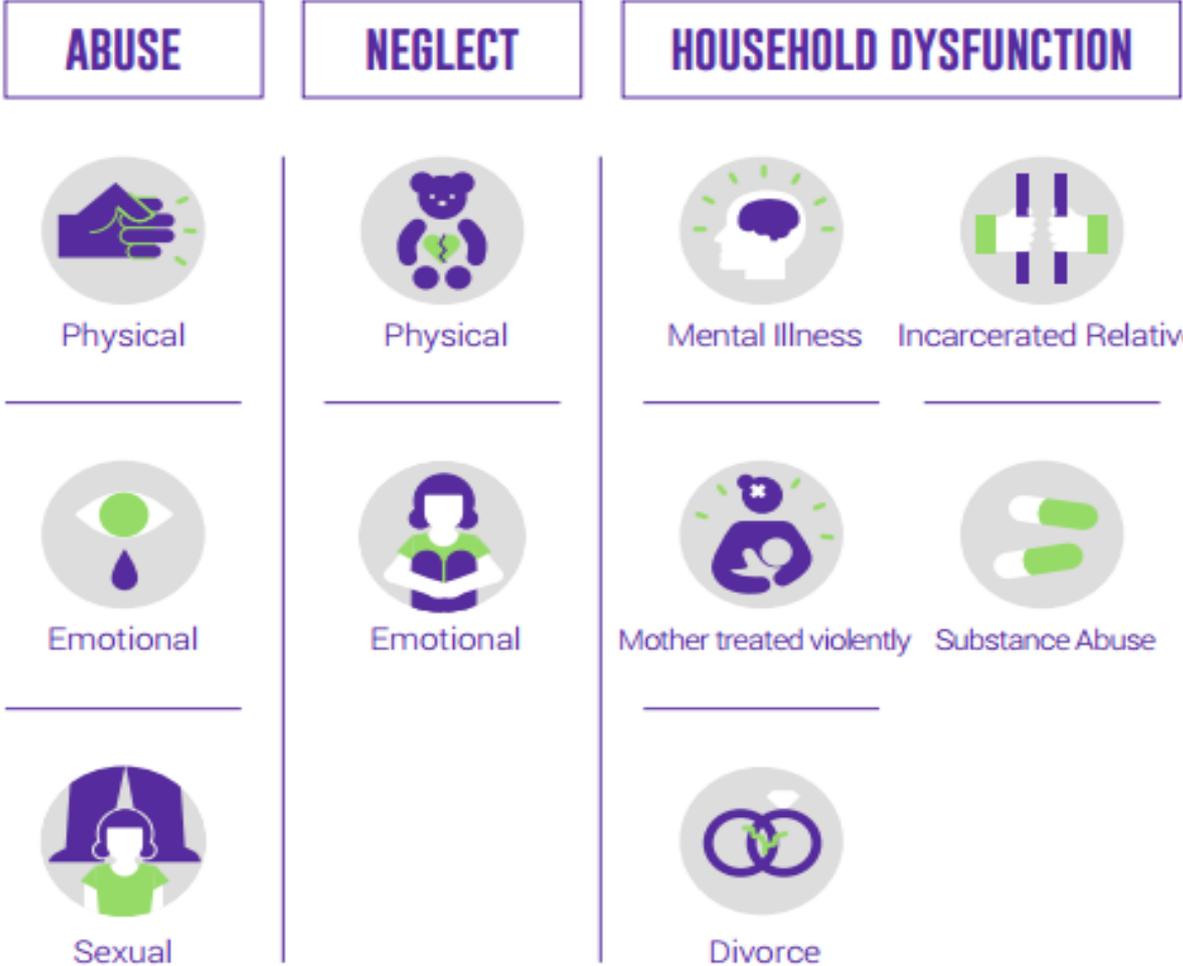
More stress and emotion than the brain can deal with

- Not an event itself, but rather a **response** to one or more overwhelmingly stressful experiences *without adequate protective factors* which dramatically undermines one's ability to cope
  - A natural biological response to unnatural events
  - One's perception or experience of the event is more important than the event itself

Typically:

- Does not happen in the short term, and thus cannot be healed in the short term
  - **No quick fix**
- Happens within the context of relationships, and therefore must be healed within repaired or newer, healthier relationships

# Adverse Childhood Experiences



(Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, et al., 1998)

# ....More Adverse Childhood Experiences

- Historical trauma
- Poverty
- Homelessness
- Community violence
- Drug culture
- Unstable or chaotic home life
- Refugee experiences
- Human trafficking
- Discrimination/Racism
- Bullying
- Illness of a loved one or friend
- Inconsistent presence of a caregiver
- Physical or other disabilities
- Medical problems and intrusive medical treatments
- Frequent changes in placements or schools
- Gentrification
- Gang culture
- Natural Disasters
- Serious accidents
- Media exposure
- Global pandemic
- Civil rights movement

# ....Digging Deeper into Common Adverse Childhood Experiences

- Racism and discrimination:
  - Personal
  - Structural
  - Systemic
  - Historical
- May appear as:
  - Implicit/unconscious bias
  - Microaggressions
  - Overt discrimination
- Examples of the many forms of discrimination in our world:
  - Racism
  - Sexism or Misogyny
  - Classism
  - Sexual orientation or gender identity discrimination
  - Ageism
  - Religious discrimination
  - National origin discrimination (e.g., Immigrants and Refugees)
  - Xenophobia

**The Pair of ACEs**

**Adverse Childhood Experiences**



**Adverse Community Environments**



Ellis W. & Dietz W. BCR Framework. *Academic Peds* (2017).

# Types of Traumatic Experiences



**Acute:** A single, isolated incident.



**Chronic:** Traumatic experiences that are repeated or prolonged.



**Complex:** Exposure to many traumatic events from an early age. Often, within the caregiving system or without adequate support.



**Historical:** Collective and cumulative trauma that are experienced by a group across generations.

# Neuroplasticity

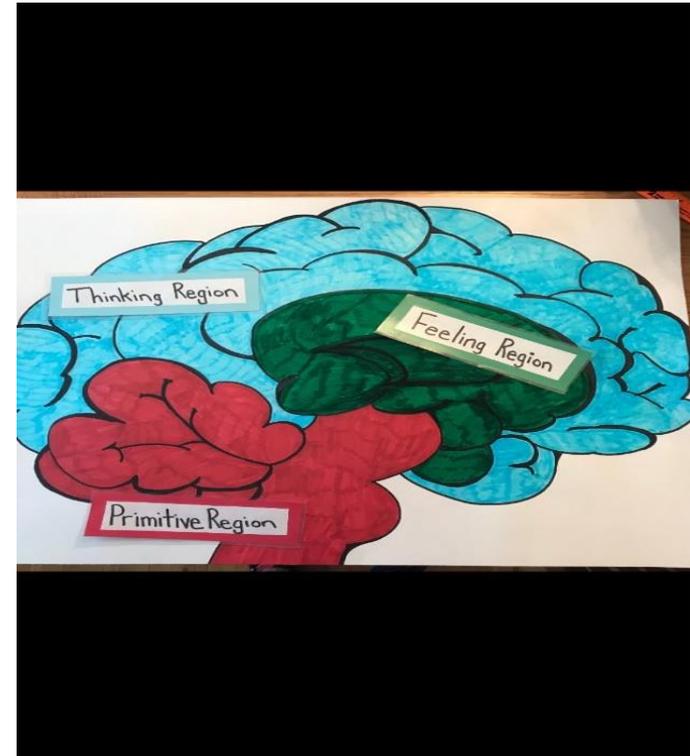
The brain changes in a variety of ways as a result of our experiences, for better or for worse.

- The brain is flexible or “plastic” and learns through experience and repetition
- **Nurture shapes nature**
  - Positive experiences build healthy, adaptive brains
  - Negative experiences can negatively impact brain development

(Siegel & Payne Bryson; Center on the Developing Child at Harvard University; Hansen, 2013; Sapolsky, 2004)

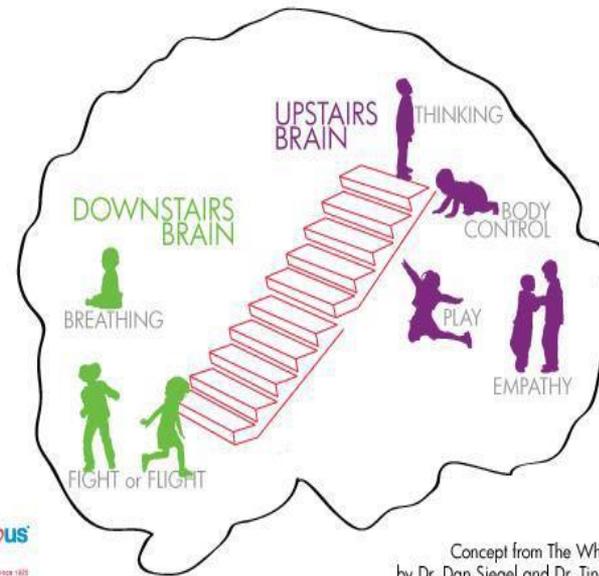
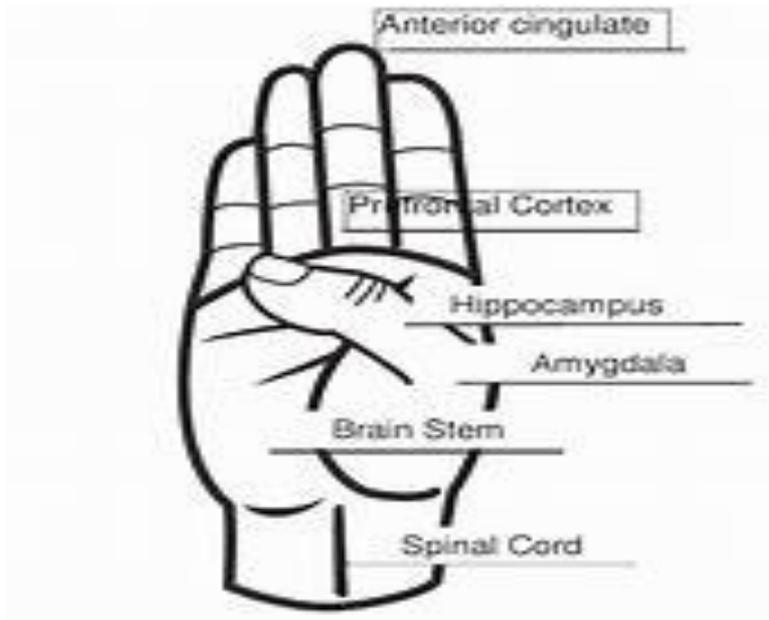
# The Regulated or Dysregulated Brain: Hand Model of the Brain

- Brain Stem
  - **Am I physically safe?**
- Midbrain/Limbic System
  - **Am I emotionally and relationally safe?**
- Prefrontal Cortex
  - **Am I able to reason?**
  - **Am I regulated?**
  - **Am I learning?**



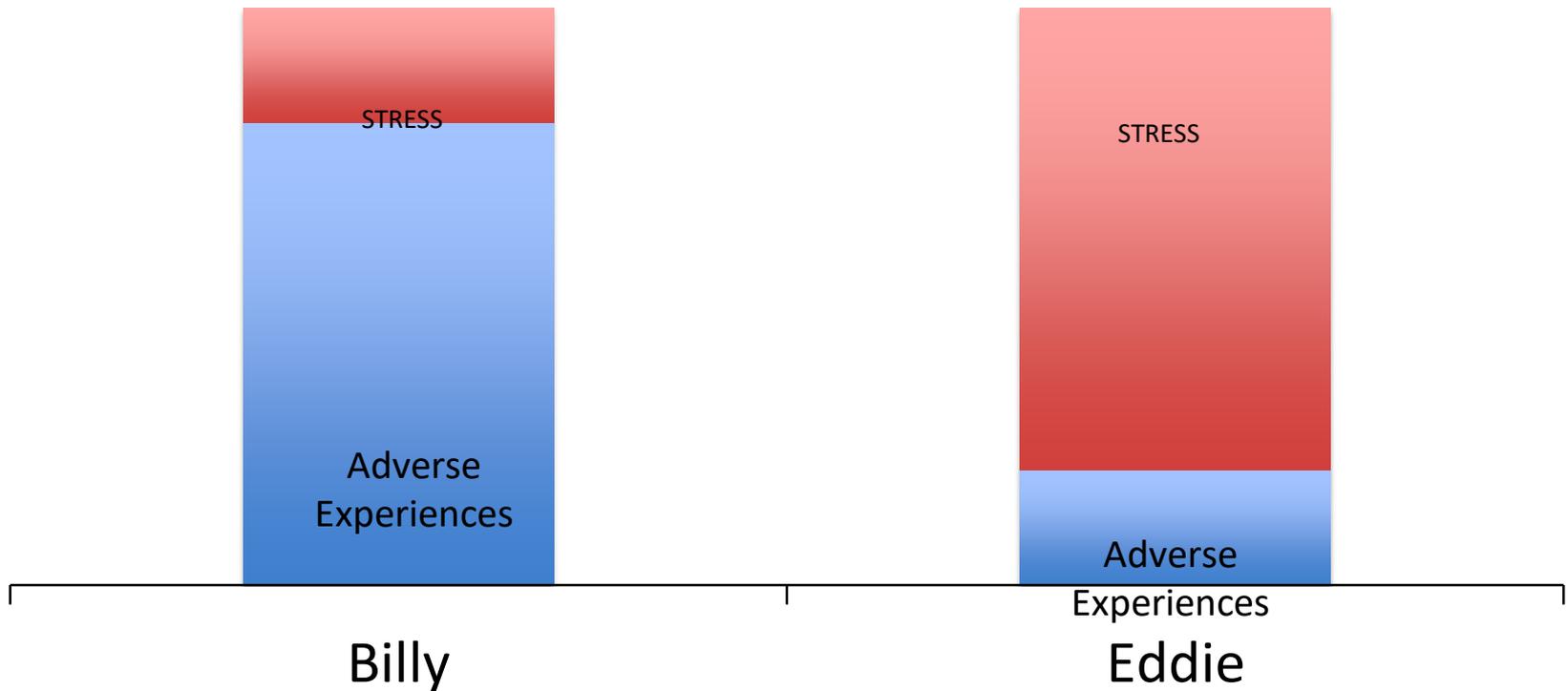
(Center on the Developing Child at Harvard University; Dan Siegel)

# Flipping Your Lid



Concept from The Whole-Brain Child  
by Dr. Dan Siegel and Dr. Tina Payne Bryson

# The Traumatized Brain is Highly Sensitized to Stress



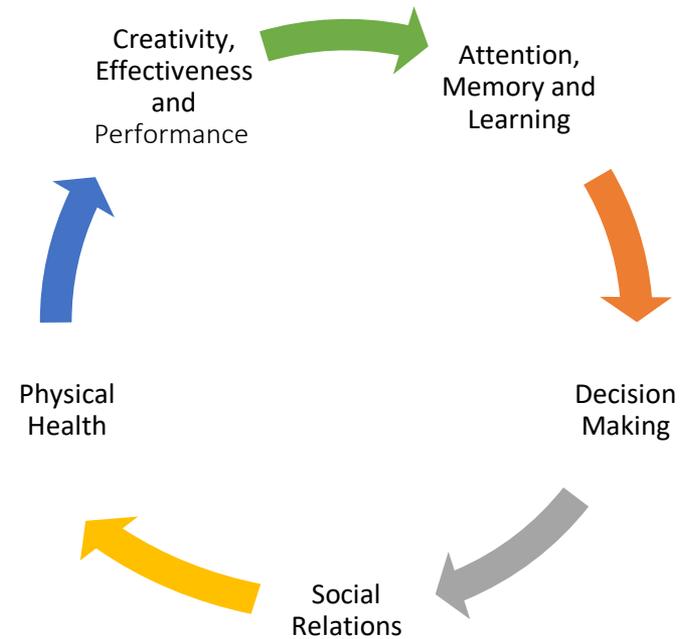
(Forbes, "Help For Billy: A beyond consequences approach to helping children in the classroom.")

# What Do We Know about Toxic Stress and the Brain?

- Stress in the absence of supportive relationships - or toxic stress - interferes with healthy brain development and wiring.
- A person who has significant toxic stress or trauma may have a brain that is highly sensitive to stress, habitually reactive, and prone to dysregulation:
  - Hyper-Arousal/Overstimulation
  - Re-Experiencing
  - Avoidance/Dissociation/Tuning Out

# Areas Most Impacted by Stress and Trauma (for students *and* ourselves)

- Ability to focus and pay attention
- Decision making
- Learning
- Relationship skills, including (but not limited to):
  - Threat response/perception of threats in the environment
  - Instinct to approach or avoid (self and others)
- Mental & physical health
- Ability to achieve hopes, dreams, and goals



# A Mindset Shift about Behavior

More often than not, behavior comes out sideways when kids are dealing with stress, trauma, or an unmet need.

In fact, **STRESS** in children often looks exactly like challenging behavior:

FLIGHT	FIGHT	FREEZE
Withdrawal	Acting out	Numbness
Running out of the classroom	Aggression	Refusal to answer
Daydreaming	Refusal and defiance	Refusal to get needs met
Appearance of sleeping	Silliness	Giving a blank look
Avoidance of others	Hyperactivity	Inability to move or act
Hiding or wandering	Argumentative	Answering "I don't know"

# Common Triggers/Sources of Dysregulation

- Rejection or disconnection
- Removal, separation, or isolation from others – especially adults
  - Ignored by adults or peers; student feels invisible
- Lack of control
- Transitions, especially new or unexpected
- Food scarcity, instability, or issues
- Personal characteristics or behaviors of others related to trauma history (e.g., gender or other attributes)
- School based triggers/immediate environment (for example peer interactions, academic failure/frustration)

**All of these may be unpredictable and counterintuitive.**

# Executive Functioning and Regulation: Our Great Superpower

Executive functions are a set of basic and higher order cognitive processes necessary for the **cognitive control or regulation of behavior.**

- Like air traffic control for the brain



“We must regulate people before we can possibly persuade them with a cognitive argument or compel them with an emotional affect.”

- Dr. Bruce Perry

# Resilience

- The ability of an individual or community to withstand or rebound in the face of adversity
- “Continuing to show up and move forward, even when we’re at our lowest.”
- A process that can be learned and supported
  - Highly dependent on context
  - Cultivated by social support - consistent, caring, positive, and empathetic adults who help make meaning of difficult things

You're BRAVE  
& BRILLIANT  
and OH-SO-  
RESILIENT.



(The Heart of Learning and Teaching, 2011; Center on the Developing Child at Harvard University; PeConga et al., 2020)

# Low Stress Physical Environments

Resilience is highly dependent on context and setting.

- Safe, predictable relationships, routines, and procedures
- Culturally responsive and inclusive décor
- Decreased sensory stimulation
  - Soft lighting
    - Lamps
    - Christmas lights
    - Colored covers on harsh fluorescent lights
  - Calming, lower stimulation or less décor
  - Low volume
    - Tennis balls on chairs
    - Calming music during independent work times or transitions
  - Materials
    - Fidget tools, calming visuals, stress reduction activities

You're BRAVE  
& BRILLIANT  
and OH-SO-  
RESILIENT. 

# Teaching, Practicing, and Supporting Regulation

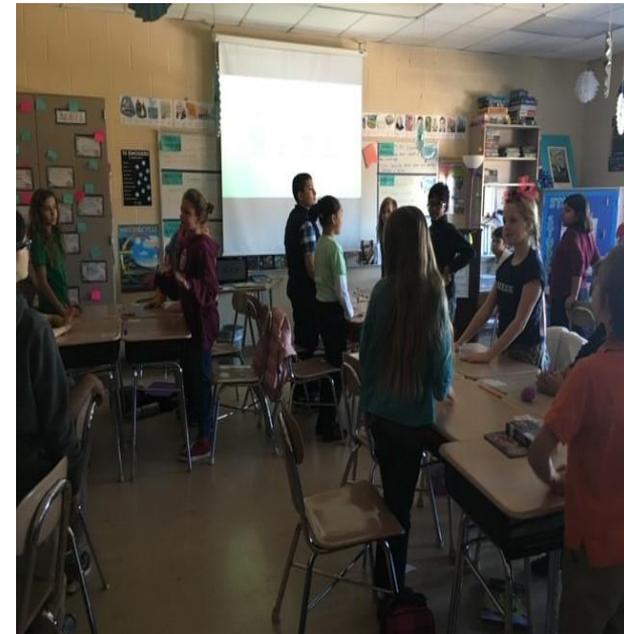
1. Teach Students about the brain, nervous system, and regulated vs. dysregulated states

- Upstairs brain vs. downstairs brain
- [Why Do We Lose Control of Our Emotions?](#)

2. Incorporate regulation and stress reduction/calming brain breaks to support regulation

- Patterned and repetitive
- Rhythmic, somatosensory activity elicits a sense of safety
- Movement and physical activity
- Ritualistically practiced

3. Provide access to a menu of regulating strategies/materials to use on the spot as needed (e.g., Peace Corners, non-contingent regulation tools)



(Bakosh et al., 2015; Benson et al., 2000; Perry, Graner, & The ChildTrauma Academy, 2007-17)

# The Critical Importance of Regulation

*Heading straight for the reasoning part of the brain cannot work if a child is dysregulated and disconnected from others.*

- Dr. Bruce Perry

**1) First *Regulate***

*then*

**2) *Relate/Connect***

*only then*

**3) *Reason/Redirect/Restore***

# Step 1: First Regulate

**When challenging behavior occurs, try what you traditionally use first.**

...but, be attentive to immediate STATE vs. typical TRAIT (Regulated vs. Dysregulated)

- Escalating behavior & inability to connect are strong signs of dysregulation.
- If the student is dysregulated, adults can help with:
  - **CO-REGULATION** from a highly regulated adult as needed
  - **SELF-REGULATION** strategies/materials as possible (according to student ability)

# Dysregulated Students Need Highly Regulated Adults

Do not allow students to pull you into their storm; instead, bring them into your calm.

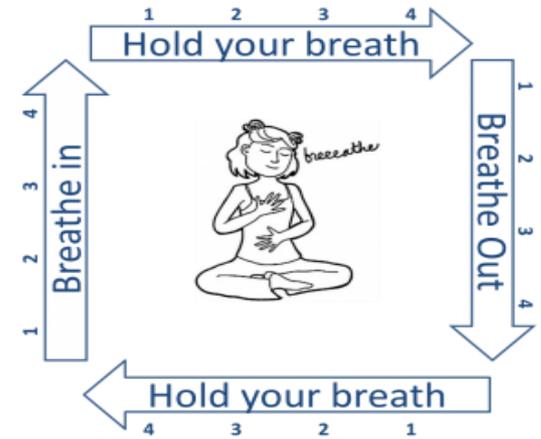
The adult is the most powerful determinant of the regulation level of a student/classroom!



# 1) First Regulate

## CALMING STRATEGIES to Promote REGULATION:

- Check our own Regulation Level
- Allow Ample Time and Space
- Empathetic Connections
  - if tolerated and *not* resulting in further escalation
- Mindful Breathing
- Movement (Stretching, Yoga, Wall Push-ups)
- Break in Regulation Space (e.g., Peace Corner)
- Regulation/Fidget Tools
- Take a Walk
- Drink of Water or Snack
- Mindful Coloring/Drawing/Journaling
- Listening to Music/Rhythm
- Calming Visuals or Mindfulness Apps



# Stress Reduction Practices to Support Regulation

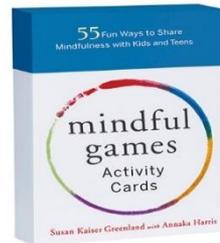
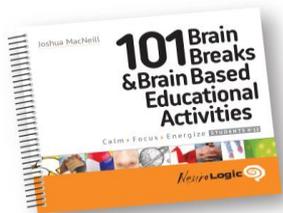
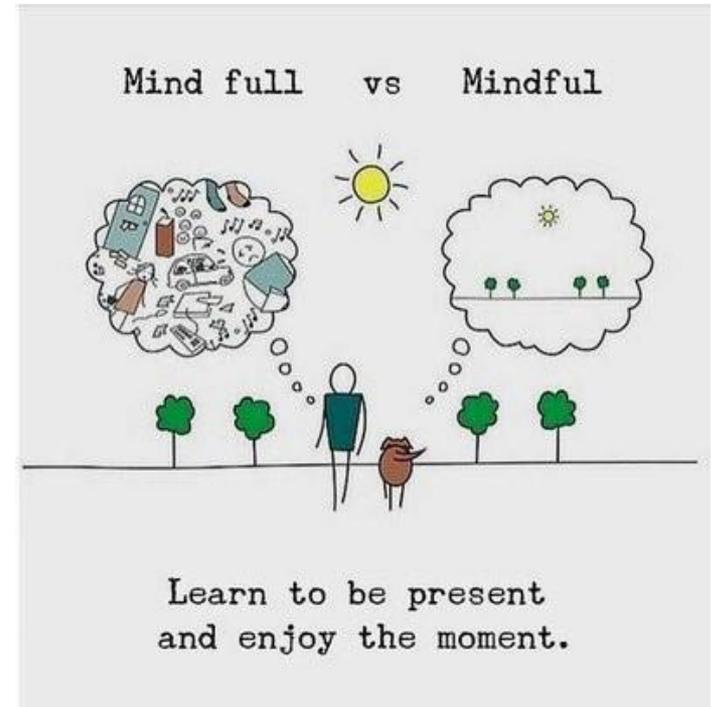
## Types of Regulating Brain Breaks



- Guided Breathing
- Rhythm & Repetition
  - Elicits a sense of safety.
  - The brain makes sense out of patterns and rhythms
- Movement & Physical Activity
  - Regulates the brain, helps to activate both sides of the brain
    - Crossing the midline
  - Provides open-ended, creative play
- Focused Awareness
  - Engaging the 5 senses
  - Strengthens neural connections for present-moment focus

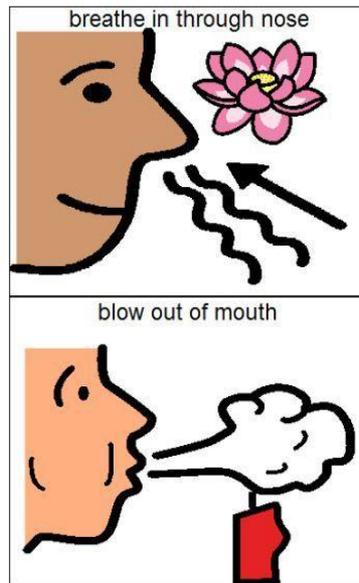
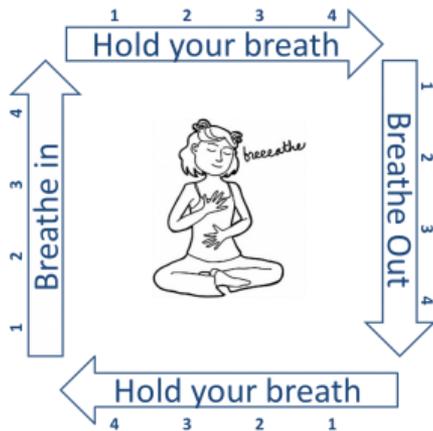
# Mindful Minutes

- Focused Awareness
  - Wiggle fingers & toes in shoe
  - Feel feet on floor, seat on seat, back on back
  - Raisin or Hershey's kiss
  - Identify the quietest sound
- Mindful games or brain breaks
- Regulation Tools & Materials
  - Use a prop such as a Hoberman's sphere or glitter jar

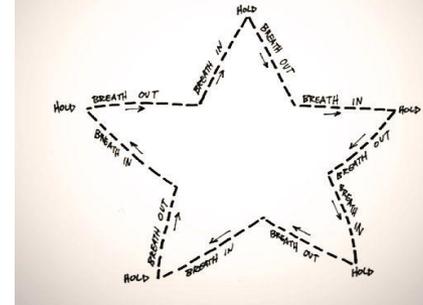


# Stress Reduction and Regulation Practices

Let's breathe!



## Five Count Breathing



# Mindfulness-based Social emotional Learning: Classroom Yoga

- Standing Sunrise, Sunset
- Chair Stretch with Interlaced fingers
- Seated Chair Twist
- Standing Seat
- Tree Pose
- Guided Rest



# Don't forget visual supports!

<p><b>My Calm Tools</b></p> 	<p>Smell the flower.</p>  <p>Blow out the candle.</p> 	 <p>Ask for and get a drink of water.</p>	 <p>Think about something that makes you happy.</p>	 <p>Close your eyes and count to ten slowly.</p>	 <p>Walk away.</p>
<p>Ask for and</p> 	 <p>Use positive self-talk. Say to yourself, "I am OK. I can stay calm!"</p>	 <p>Use a calm voice when talking to others.</p>	 <p>Take a deep breath. Blow it out SLOWLY. Do this 3 times.</p>	 <p><b>STOP!</b> (Ask yourself, is this a big problem or a little one?) <b>THINK!</b> (How can I solve my problem without getting in trouble?)</p>	 <p>Raise your hand and ask for help.</p>

# Video-based Mindfulness Resources

- [Why mindfulness is a superpower](#)
- [Why aren't we teaching you mindfulness?](#)
- [Just breathe](#)
- [Mindfulness meditation for children](#)
- [Time to calm down](#)
- [Let it go- think about it \(GoNoodle\)](#)
- [Sesame Street: Common and Colbie Caillat- "Belly Breathe" with Elmo](#)
- [Kobe Bryant on Oprah: Meditation Dictates My Day](#)

## Step 2: Then Relate/Connect

Recommendations from the CDCs  
(Centers for Disease Control and The Harvard Center on the Developing Child)

Safe

Stable

Nurturing



Relationships & Environments

# The Biochemical Cascade Beneath Positive Social Interactions



## Feel-Good Hormones

- ↑ Serotonin
- ↑ Dopamine
- ↑ Oxytocin

## Stress Hormones

- ↓ Cortisol
- ↓ Adrenaline
- ↓ Norepinephrine

- ↑ Learning
- ↑ Memory
- ↑ Motivation
- ↑ Self-Regulation (Behavior, Emotions, Attention)

# The Biochemical Cascade Beneath Negative Social Interactions

## Feel-Good Hormones

- ↓ Serotonin
- ↓ Dopamine
- ↓ Oxytocin



## Stress Hormones

- ↑ Cortisol
- ↑ Adrenaline
- ↑ Norepinephrine

- ↓ Learning
- ↓ Memory
- ↓ Motivation
- ↓ Self-Regulation (Behavior, Emotions, Attention)

# Empathy Fuels Connection

Defined as “feeling with people”

Remember, statements rarely make things better. What makes something better is connection.



- Perspective Taking- The ability of taking the perspective of another person or recognize their perspective as their truth
- Staying out of judgement
- Recognizing an emotion in others
- Communicating that you recognize that emotion

“Slowly I have come to see that ASKING, and LISTENING, and ACCEPTING are a profound form of DOING.”

- Vincent J. Felitti, M.D.

- Empathy

- Let go of the need to ‘fix’
- Remember the power of asking, **listening, and accepting**
  - “I know how you feel,” and “ I care how you feel.”
  - “I see you’re upset. What do you need?”
  - [Brene Brown on Empathy](#)
  - Always empower through empathy (never disempower)

# Step 2: Then Relate/Connect

## Verbal De-Escalation Questions

Use Empathetic statements such as:

- **“What do you need?”**
- **“How can I help?”**
- “What are you feeling (emotion)?”
- “What are you (emotion) about?”
- Ask “Who, What, When, Where, How” (but avoid asking, “WHY”)
- Say:
  - “I see you’re feeling (emotion), and I’m here to help. Let’s handle this together.”
  - “Would you like to try (calm down strategy)? Sometimes that helps me when I’m (emotion).”

# Effective Communication: Calm the Brain, Calm the Behavior

- Be authentic
- Body language
  - Sit on their level
  - Open and affirming body language
  - Neutral demeanor (poker face)
- Conversation
  - Model calm, regulated state
  - **Stop talking and give space to the student if they tell you to or if they are continuing to escalate**
  - Name it to tame it
  - Avoid power struggles
  - Listen without words
    - Allow expression of thoughts and feelings
  - Be supportive and offer praise

# Effective Communication: Calm the Brain, Calm the Behavior

- Avoid

- Criticism and negative statements (e.g., “don’t ask that,” “don’t be nosy,” “you ask too many questions”)
- Discouragement of talking
- Gender stereotyping (e.g., “boys shouldn’t cry,” “boys show their anger differently than girls,” “girls worry too much,” “girls are too sensitive”)
- Asking ‘why’ questions (instead focus on who, what, when, where)
- Telling them what to do (for feelings, or problems they can safely solve themselves)

# Step 3: *(only then)* Reason/Redirect/Restore

## Instill Hope and Help with Adaptive Meaning Making

- What happened?
- Do you feel ready to return to class?
- What is your plan to be successful for the rest of the day?
- What do you think you need to do (or need from others) to make this happen?

\*Be sure to assist in any way you can to ensure students have a **positive re-entry/welcome back** to the classroom.

- Call the teacher to share information
- Walk the student back to class if possible

# Adult Self Care and Collective Care

“Almost everything will work again if you unplug it for a few minutes...including you.” – Anne Lamott

- Continue to be explorative to expand your self-care toolbox.
- Set goals and practice routinely.
- Create time for your self-care.
- Set boundaries.
- Understand that it is a process.
- It looks different for everyone
- Should refuel you, and not take away from you.
- Be in tune to which five senses you're engaging (practice mindfulness).



# Supporting Wellness and Balance



# Concluding Thoughts

- Regulation is a fundamental biological need
- Don't forget the transformative neurobiological power of relationships
  - Show acceptance, compassion, and respect to students, families, and one another
- Tend to self-care and collective care
- Keep this dialogue going in your schools and daily work

Questions?

