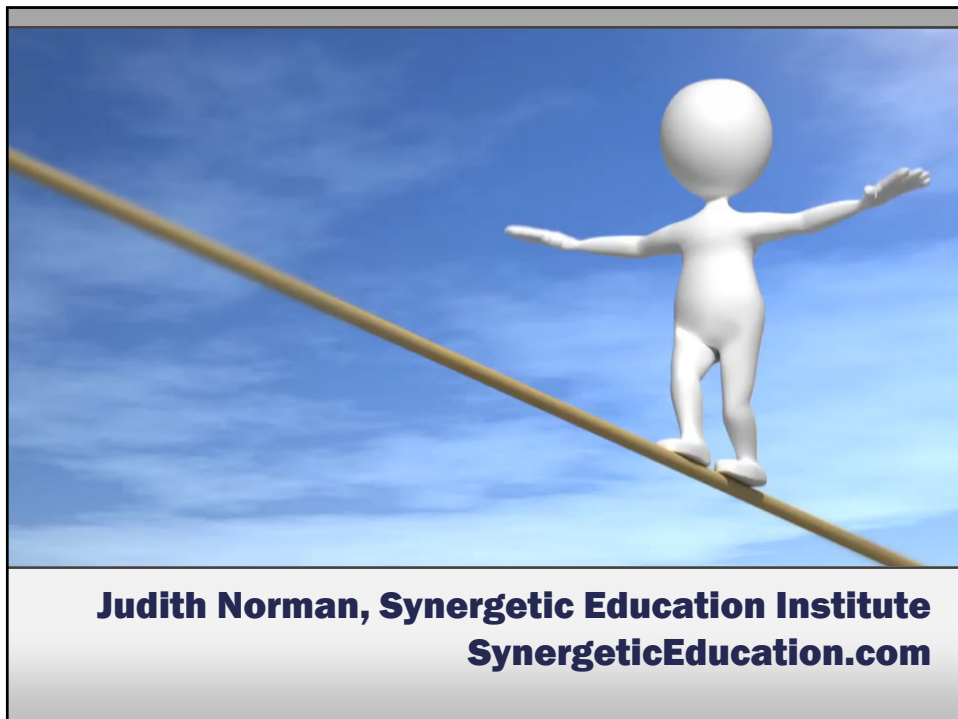





# SYNERGETIC EDUCATION INSTITUTE™

**Taking Trauma-Informed, Social-Emotional Learning to the Next Level**

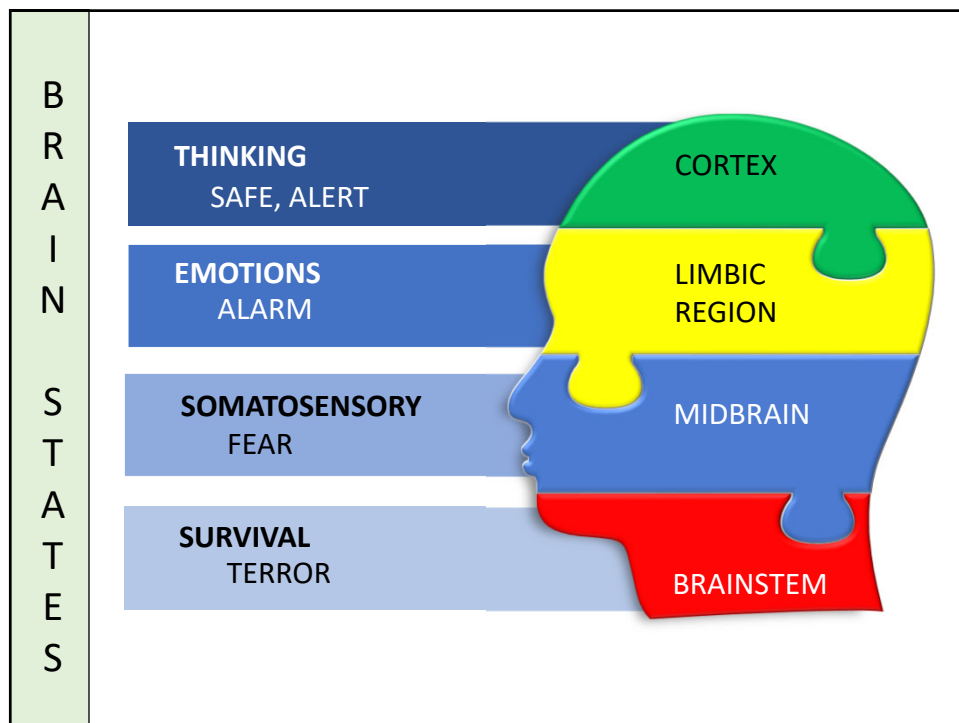


**Judith Norman, Synergetic Education Institute**  
**[SynergeticEducation.com](http://SynergeticEducation.com)**

**Jeffco Public School Parenting Series, January 2022**

✓	<b>1</b>	<b>BRAIN STATES &amp; STRESS RESPONSES</b> The neuroscience behind actions	
✓	<b>2</b>	<b>BODY STATES</b> Nervous system states of regulation and dysregulation.	
✓	<b>3</b>	<b>TIMELINE APPROACH</b> Before, After, and In The Moment	
✓	<b>4</b>	<b>STRATEGIES &amp; SUPPORT</b> Putting it all together	

FLIPBOOK:



BRAIN STATES



What's possible in each state?

Question 1: Were they able to process what I was asking them to do?

Brain State		Functional IQ	Sense of Time	Sphere of Concern
Cortex - Safe	●	110-100	Future	World
Cortex - Alert	●	100-90	Week or Day	Community
Limbic - Alarm	●	90-80	Hours or Minutes	Family or Close Peers
Midbrain - Fear	●	80-70	Minutes or Seconds	Self
Brainstem - Terror	●	70-60	Loss of Sense of Time	Body Integrity


Based on Bruce Perry's Neurosequential Model, Child Trauma Academy

## STRESS

Stress is contagious.

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When stress exceeds one's abilities to manage it in the moment, the brain moves from higher regions to lower regions.

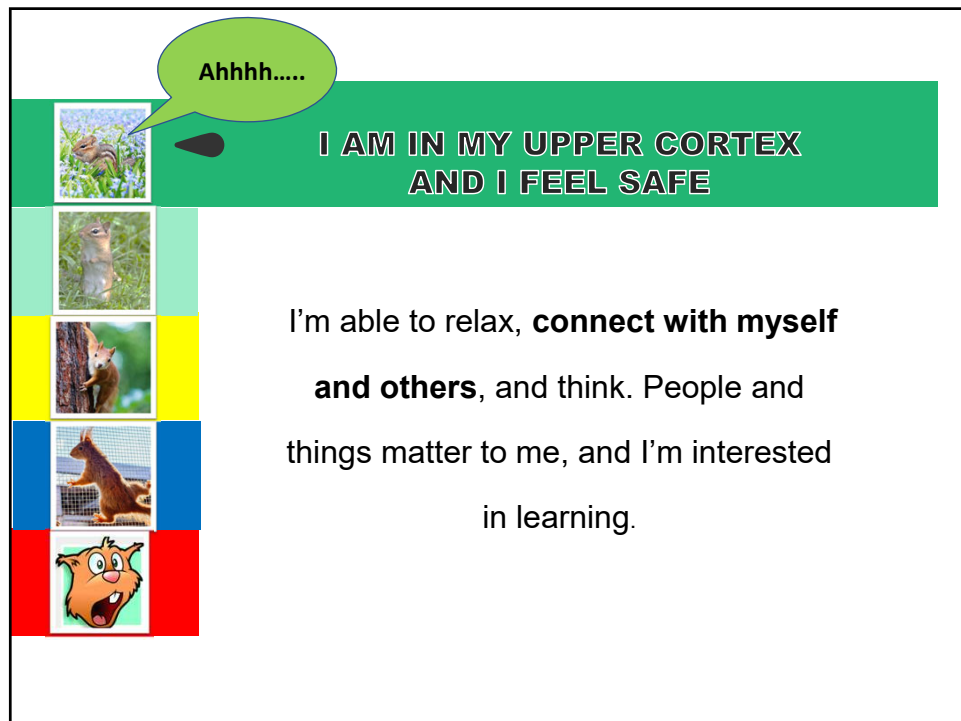
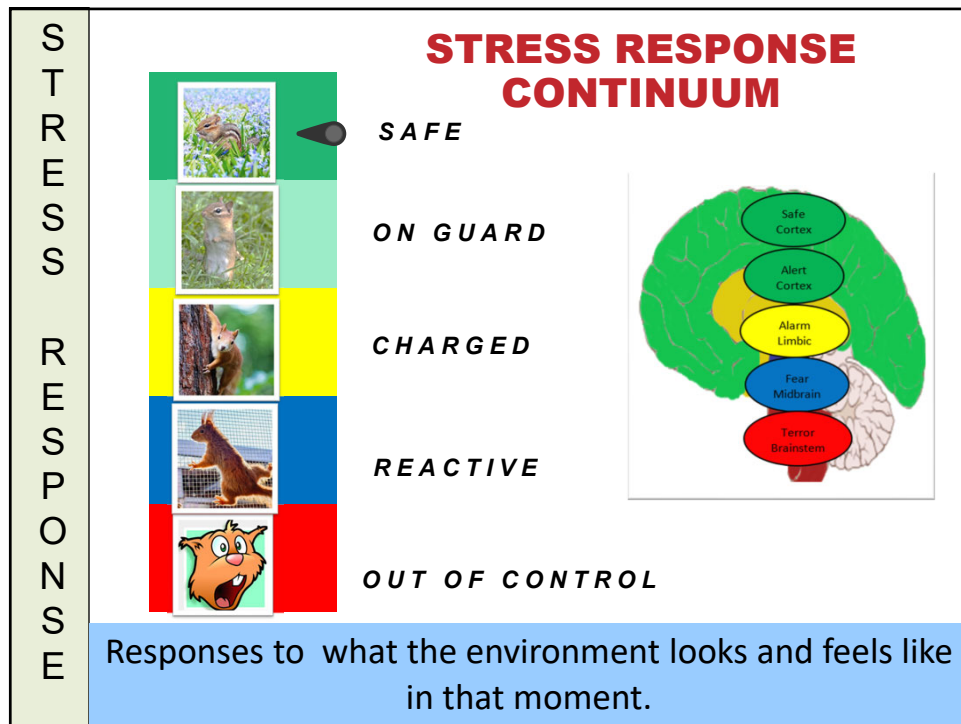




Mirror Neurons

## Understanding and Recognizing Brain States

Part of the Brain	Brain State Responses	Options & Challenges	Regulatory Suggestions
Cortex	<b>Calm/Safe</b> "Reflect"	Many behavioral and cognitive options are available	Instructive breathing and other exercises
Cortex	<b>Alert</b> "Flock"	<b>BEHAVIORAL CHALLENGES:</b> Engaging in something new or challenging <b>COGNITIVE CHALLENGES:</b> Creativity Spotlight focus	Reassurance Connection Information about what to expect
Limbic	<b>Alarm</b> "Freeze"	<b>BEHAVIORAL CHALLENGES: RELATIONAL</b> Managing emotions Attunement or empathy Sharing and forming relationships <b>COGNITIVE CHALLENGES:</b> Short term memory/learning	One on one support/ Proximity to attuned adult Caring prosody and tone of voice Parallel interactions (not face to face) Modeling regulatory behavior not telling Smaller and slower movements Do something together that isn't challenging
Midbrain	<b>Fear</b> (Looks like anger) "Flight"	<b>BEHAVIORAL CHALLENGES: MOTOR, SENSORY &amp; REGULATORY</b> Large and fine motor skills Tendency towards sensory seeking or avoiding Impulsivity <b>COGNITIVE CHALLENGES:</b> Attention – tendency towards daydreaming Transition, Processing input accurately	Complex rhythmic movement (tap out rhythm to repeat) Slow controlled large muscle movements Isometrics (chair push-ups) Walk/Run/Exercise Bilateral movement Creative arts, Music, Drumming, Dance Doodling (you remember 60% more) Hold yoga ball against wall with your back
Brainstem	<b>Terror</b> (Looks like rage) "Fight"	<b>BEHAVIORAL CHALLENGES: SELF-GOVERNING ISSUES</b> Shifting attention Abnormal body temperature, eye blink or movements Skin sensitivities Need to have something in mouth or chew gum. <b>COGNITIVE CHALLENGES:</b> Not able to take in any information	Rhythmic patterned input (things we do with babies)Swinging or Rocking (rocking chairs) Bouncing (yoga ball, bouncy chairs) Balance Slow stretching or Yoga Chewing/Sucking (chew sticks, pencil topper chews) Calming pictures or scents




Part of the Brain	Cognitive Ability	Functional IQ	Heart Rate	Sense of Time	Sphere of Concern
Cortex	Think Abstractly	110-100	70-90	Future	World
Cortex	Think Concretely	100-90	90-100	Week or Day	Community
Limbic	Responds Emotionally	90-80	101-110	Hours or Minutes	Family or Close Peers
Midbrain	More Reactive	80-70	111-135	Minutes or Seconds	Self
Brainstem	More Reflexive	70-60	136-160	Loss of Sense of Time	Body Integrity








I'm ALERT and **checking out my surroundings**. I'm looking around to figure out what information will help

**I AM IN MY LOWER CORTEX  
AND I FEEL ON GUARD**








me make sense of things. I'm feeling nervous about doing things that seem new or challenging. My thinking is more concrete so I might struggle with things that require creative thinking. If I know what to expect, and feel connected, I can still learn.

I'm ALARMED because I perceive a real threat. I am paying attention to all movements and sounds but likely won't process them accurately. My sense of safety is deteriorating and I'm beginning to feel overwhelmed.

**I AM IN MY LIMBIC REGION  
AND I FEEL CHARGED**

The only information I'm processing is what feels relevant to staying safe. My body is **frozen as I'm assessing** the danger. I need someone to authentically connect with me and help me move back towards my window of tolerance.




It's coming for me!

I'm AFRAID and feel a complete lack of safety. Everything feels like a threat, including you. I've completely disconnected from others and am only aware of myself at this very moment. I'm trying to figure out if there's a

**I AM IN MY MIDBRAIN AND I FEEL REACTIVE**

way to **get away**. I need an external regulator to support me in grounding and regulating.



It's got me I'm going to die!

I'm TERRIFIED and in survival mode. My behavior is instinctive, I'm mobilizing everything in my power to **stay alive**. I'm not thinking nor aware of you or my surroundings. I need an external regulator to keep me safe.

**I AM IN MY BRAINSTEM AND I FEEL OUT OF CONTROL**

Question 2: Am I seeing escalation in their behavior?



## Stress Response Continuum



Ahhhh.....

**SAFE:** I'm able to relax, **connect with myself and others**, and think. People and things matter to me, and I'm interested in learning.



Did I hear something!

**ON GUARD:** I'm ALERT and **checking out my surroundings**. I'm looking around to figure out what information will help me make sense of things. I'm feeling nervous about doing things that seem new or challenging. My thinking is more concrete so I might struggle with things that require creative thinking. If I know what to expect, and feel connected, I can still learn.



I definitely heard something!

**CHARGED:** I'm ALARMED because I perceive a real threat. I am paying attention to all movements and sounds but likely won't process them accurately. My sense of safety is deteriorating and I'm beginning to feel overwhelmed. The only information I'm processing is what feels relevant to staying safe. My body is **frozen as I'm assessing** the danger. I need someone to authentically connect with me and help me move back towards my window of tolerance.



It's coming for me!

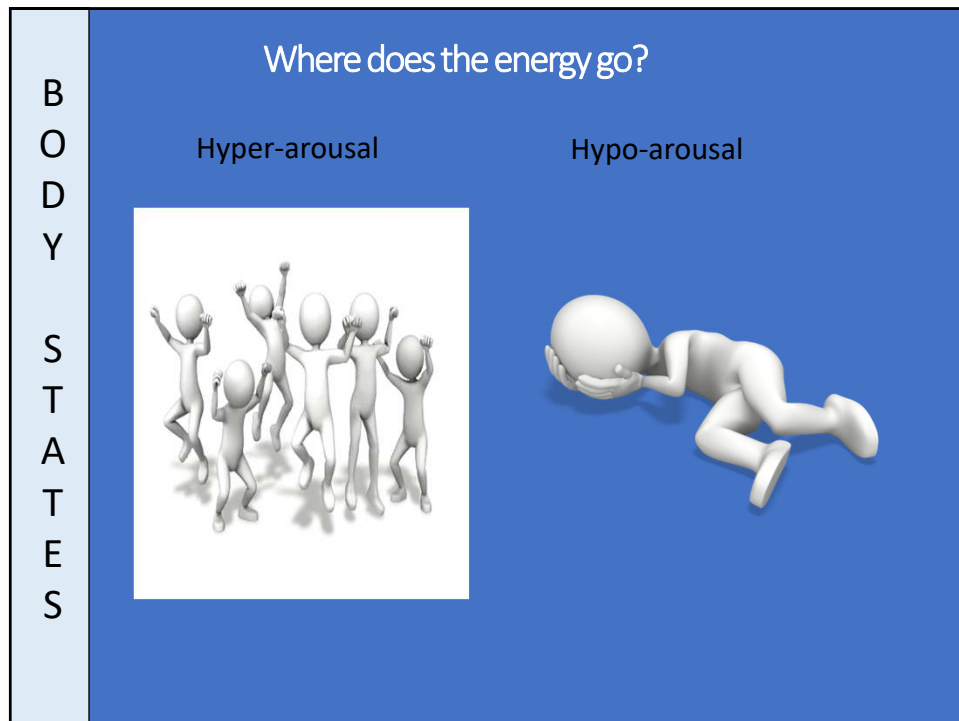
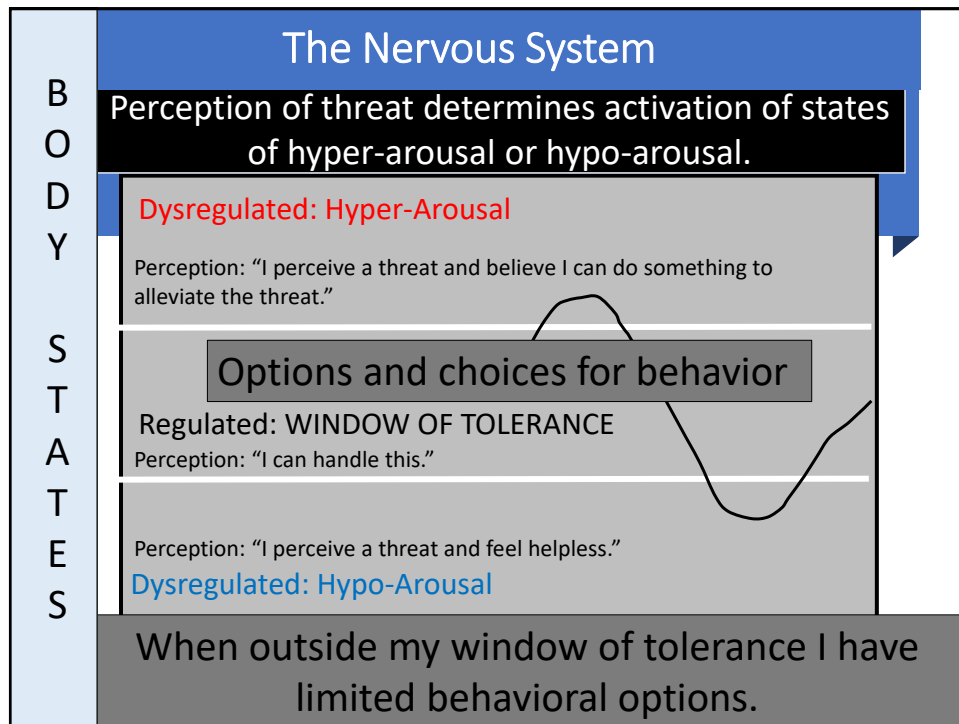
**REACTIVE:** I'm AFRAID and feel complete lack of safety. Everything feels like a threat, including you. I've completely disconnected from others and am only aware of myself at this very moment. I'm trying to figure out if there's a way to **get away**. I need an external regulator to support me in grounding and regulating.



It's got me, I'm going to die!

**OUT OF CONTROL:** I'm TERRIFIED and in survival mode. My behavior is instinctive, I'm mobilizing everything in my power to **stay alive**. I'm not thinking nor aware of you or my surroundings. I need an external regulator to keep me safe.





## Nervous System Symptoms of Regulation and Dys-Regulation In the Classroom

States of Arousal	Sensations	Behaviors
<p>Dys-Regulated Nervous System</p> <p><b>Hyper-Arousal</b></p> <p>Energy goes to our extremities, our head/face, arms/hands, and legs/feet, as we prepare to “take on” a perceived threat.</p>	<p>The following body states or sensations:</p> <p>Increased heart rate Sweaty palms Highly Irritable Overwhelmed or overwhelming others Anxiety Defensive or Aggressive Hyper-alertness - hears/sees everything Hyper-vigilance - seems ready to pounce</p>	<p>The following on-going excessive behaviors:</p> <p>Getting in others’ space Moving from thing to thing Spinning, Jumping, Pounding Making noises/sounds Calling out Jumping from thought to thought Biting nails or shirt Chewing or Tapping pencil</p>
<p>Regulated Nervous System</p> <p><b>Within our Window of Tolerance</b></p>	<p>Feeling “grounded” Able to recognize physiological sensations Able to notice breath</p>	<p>Displaying wide range of emotional expression Ability to initiate and inhibit Able to focus and shift focus Thinking logically and clearly Communication effectively Holding up body without great effort Able to change pace of movements Demonstrating self-regulation</p>
<p>Dys-Regulated Nervous System</p> <p><b>Hypo-Arousal</b></p> <p>Energy goes inward as we prepare to “shut down” to protect ourselves from a perceived threat.</p>	<p>Seems numb, unable to feel body Shuts down Lethargic Excessively tired Non-expressive Lack of motivation or initiative</p>	<p>Withdrawn or Won't participate Says "I can't" or "It's too hard" Easily gives up Whining Unresponsive to others Can't make choices Overly compliant Covers face or head or Head on desk Slumped forward or Collapsed body Arms or legs pulled into self</p>

## Synergetic Play Therapy™ Regulation Activities for School

Listed below are just some examples of activities that can be used to help regulate a dys-regulated nervous system. It is wise to do these activities pro-actively, as well as in moments of dys-regulation.

Put your hand in front of your mouth, on your chest or on your belly and "find your breathe"	Use Braindrops Language or other ways to talk about states of arousal	Rub gently or vigorously on your skin or clothing
Belly breathing, or other breathing	Describe what is happening in your body out loud--- "My shoulders are tight", "My legs feel heavy", etc...	Get a drink of water
Interlace your fingers and put your hands behind your neck with your elbows out to the sides	Use a learning tool	Put cold or hot water/wash cloth on face
Sit in a chair and push up with your arms as if trying to get out of the chair, keep some resistance or do Chair yoga	Balance on one foot, then the other	Eat (particularly something crunchy)
Deep pressure on arms and legs. Squeeze your muscles	Get a book, iPad, or computer Us	Mindful listening, or other mindfulness activity
Sway back and forth	Do isometrics, wall pushups or push hands together	Movement and/or Brain break
Use duck-walker, saucer twist or a balance board	Run, jump, spin, dance with pauses to take deep breaths	March or sing during transitions
Take a wall	Use In Focus Activity	Focus on one sense during Transitions
Use alternate seating or standing desk	Carry heavy things or push heavy things around	Use GoNoodle
Dim the lights if in hyper-arousal	Dance, or other rhythmic Movement	Wrap up in a blanket, or use a weighted blanket or vest.
Play Mozart music in the background during challenging times of the day if in hyper-arousal	Bounce on a yoga ball	Go to cozy corner, or find a pillow Or soft chair
	Do Brain Gym: PACE, cross crawls, hook ups	Turn on the lights if in hypo-Arousal
		Play Hard Rock/Fast/Bass music if in hypo-arousal

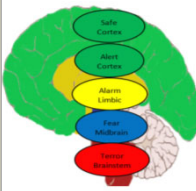
**Identifying Nervous System States**

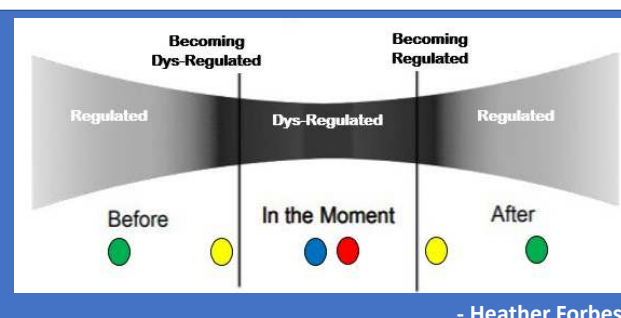
Hyperaroused	Regulated Inside Window of Tolerance	Hypoaroused
Getting in others' space	Displaying wide range of emotional expression	Withdrawn or Won't participate
Moving from thing to thing	Ability to initiate and inhibit	Says "I can't" or "It's too hard"
Spinning, Jumping, Pounding	Able to focus and shift focus	Easily gives up
Making noises/sounds	Thinking logically and clearly	Whining
Calling out	Communication effectively	Unresponsive to others
Jumping from thought to thought	Holding up body without great effort	Can't make choices
Biting nails or shirt	Able to change pace of movements	Overly compliant
Chewing or Tapping pencil	Demonstrating self-regulation	Covers face or head or Head on desk
		Slumped forward or Collapsed body
		Arms or legs pulled into self

**My window of tolerance is not static. IT IS POSSIBLE TO INTENTIONALLY & EXPLICITLY grow windows of tolerance.**

Question 3: What is their behavior telling me about their nervous system arousal state?

**TIME LINE**





- Heather Forbes

**Reasonable Expectations & Goals**

“Sometimes we ask children to do things that are outside of their developmental or “in the moment” capability which leads to confusion and frustration for all.”

- Mona Delahooke

Thinking & Reasoning

Connecting & Feeling

Grounding & Regulating



## One foot in and one foot out

### What do we mean by one foot in?

Having one foot in the dysregulation, means we are allowing ourselves to experience it we're not trying to avoid it.

### Why not just avoid it? Two Feet Out....

Neurons link together creating networks and patterns of behavior. If our pattern is to move away from certain experiences, this pathway is activated and strengthened over and over again. This pattern of avoidance reinforces the perception that we can't handle that experience.

W  
X  
V  
E  
X  
I  
K  
M  
I  
W

## What do we mean by one foot out?

Having one foot out of the dysregulation, and instead in a regulated state, allows us to

**experience regulation in the midst of dysregulation.**

This allows us to make a new connection in that moment and widen our window of tolerance. We begin to believe we can handle the experience.

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**One foot in and One foot out re-patterns our nervous systems and shifts our perceptions from "I can't handle this," to "I can handle this."**



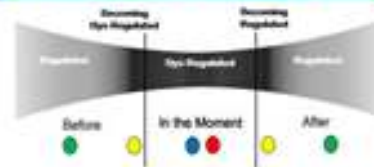
**TWO feet in**

**Co-escalation or  
Co-dysregulation**



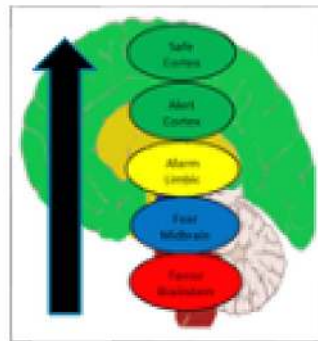
S  
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S

## Thinking & Reasoning



- Explanations & Consequences
- Negotiations & Setting Norms
- Facilitate Creating a Coherent Narrative

They don't have to like the conversation AND "before" and "after" is when they are capable of engaging in it.



## Do I need to step in and use a bottom-up approach?

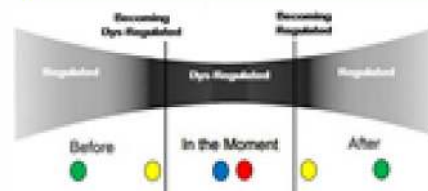
Question 1: Were they able to process what I was asking them to do?

Question 2: Am I seeing an escalation in their behavior?

Question 3: What is their behavior telling me about their nervous system arousal state?



## Connecting



- Connect and redirect
- Speak through a part's view
- Be real about how you feel

Moments of connection in the midst of dysregulation.



W  
X  
V  
E  
X  
I  
K  
M  
I  
W

## Co-regulating

- Remember to regulate you
- Name it to tame it
- Communication of physical sensation

**Self Reflection  
&  
Interoception**

W  
Y  
T  
T  
S  
V  
X

## RUPTURE and REPAIR

The foundation of healthy relationships.

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GLSSWMRK  
GSRWGM  
SYWPJ

Qdyldwldqj Frqiolfw

My Needs      Your Needs

Values  
Relational  
Styles

Careful, Careless and Caring  
Making Conscious Choices

SUPPORT

## Resources:

**Managing Your Child's Moods and Behaviors Online course \$49**  
<https://www.facebook.com/healbrihtpage/videos/1712147559024168/>

**Teaching interoception**  
<https://synergeticeducation.com/resources/>  
 Click on link to use virtual regulation room, one space in the room is solely focused on teaching interoceptive awareness

**Mona Delahooke Child Behavior Survey**  
[https://monadelahooke.com/quiz/?fbclid=IwAR3PQfRm\\_gqHLXpgHIV3IC4b22CqTYRHa2-SS4sTDV9nefpFlzYlqNgP21o](https://monadelahooke.com/quiz/?fbclid=IwAR3PQfRm_gqHLXpgHIV3IC4b22CqTYRHa2-SS4sTDV9nefpFlzYlqNgP21o)

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