

PDA Conference 2023, Galway.

Teacher Emotions in the Classroom and their Implications. A Polyvagal Perspective

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PDA Conference 2023



**CLASSROOM RELATIONSHIPS ARE
SOCIAL CONNECTIONS**

**“ THE DRIVE TO CONNECT IS BAKED
INTO OUR DNA”. ”**

**CONNECTION IS NOT A CHOICE.
IT IS AN EVOLUTIONARY IMPERATIVE.**





lets go back 250 million years....

The drive to social connection is baked into our DNA over millions of years of evolution

2023 Calendar

Start of the stone age.

January						
S	M	T	W	T	F	S
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29	30	31				

February						
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March						
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31/12/2023
Graeco-Roman civilization.
Start of science.
5:00pm

April						
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30						

May						
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June						
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31/12/2023
Industry /
Replication
11:05pm

Discovery of fire.

July						
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31/12/2023
Development of Schools
11:30pm

Development of agriculture

October						
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30	31					

November						
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December						
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31						

31/12/2023
Most still live in poverty
11:40pm

31/12/2023
Availability of internet &
Social media
11:59pm



Why do we connect?

- We were much more likely to stay alive if we were not alone.
- Those who stayed in groups were more likely to survive and thrive.
- To be in groups we needed to connect
- To connect we needed
 - to signal we were safe to connect with
 - to read signals from other to identify who it was safe to connect with.



Autonomic Nervous System

- The autonomic nervous system (ANS) is our window on the world and its ultimate purpose is to keep us alive.
- The ANS allows humans and other mammals to make quick internal adjustments and react without having to think about it.
- The traditional view of the autonomic nervous system presents a two-part antagonistic system:
 - the sympathetic nervous system, which is more activating (“fight or flight”),
 - the parasympathetic nervous system, which supports rest, health, growth, and restoration (“rest and digest” “conserve and restore”).
 - Polyvagal theory introduces a third component; the social-engagement system which determines how our biology enables us to interact with each other on a daily, ongoing basis.



Autonomic Nervous System (ANS)

- The autonomic nervous system controls internal body processes such as :
 - Blood pressure
 - Heart and breathing rates
 - Body temperature
 - Pupil dilation
 - Digestion
 - Metabolism
 - The balance of water and electrolytes (such as sodium and calcium)
 - The production of body fluids (saliva, sweat, and tears)
 - Urination
 - Defecation
 - Sexual response

Our Social Engagement System.

- We have also developed an extensive system of muscles that enabled social communication and gestures signaling safety. We broadcast and read these signals intuitively.
- These involved
 - Eye contact
 - Welcoming facial expressions
 - Vocalization with an appealing inflection and rhythm (Prosodic vocalisations)
 - Modulation of the inner ear muscles to distinguish the human voice from background sounds more efficiently
- Some are baked into our DNA others we learn from birth.



The vagus nerve is connected at the brain stem to four nerves that control facial expression.

- Trigeminal Nerve
- Facial Nerve
- Glossopharyngeal Nerve
- Accessory Nerve



Polyvagal Theory

- Polyvagal theory has three organizing principles
 - o Neuroception
 - o Hierarchy
 - o Co-regulation



1. Neuroception

- Neuroception describes how the nervous system gathers and interprets the cues that tells us what's happening and how we should be reacting to it;
- It decides whether we should be in a state of connection or a state of protection.
- Neuroception has three streams of information that it is constantly listening to.
 - Inside
 - Outside
 - Between
- Neuroception answers the question “Are we safe?”
- For us to thrive and perform at our optimum we need to **FEEL** safe



Safety

- So, the one question that is always active in a child's subconscious mind is...



AM I SAFE??

- Depending on
 - ✓ Where a child is...
 - ✓ What's happening around them...
 - ✓ And who they are with...
- the sense of safety can change in a heartbeat

Safety

- Safety is a “visceral” experience not an environmental condition.
- It is a “felt” state.
- It is rooted in the experience of predictability, security and stability.
- In its absence we experience fear and threat.
- We transition frequently between the two states.

What does “safety” mean in school?

- **For children**
- A sense of belongingness, of being in the right place
- A sense of inclusion
- A sense of friendship
- A sense of connection
- **For Teachers**
- Awareness of the role of facial expression, prosody, listening, engagement.
- An awareness of “threat” in all its manifestations
- An awareness of culture
- A belief in progress and improvement (Growth Mindset)
- Being grounded

The Three States – Social Engagement

Parasympathetic System Dominant – I am safe

Eyes	Ears	Body	Brain	Others	Life view
Make eye contact	Hearing full range	Heart rate steady	All systems go	I can connect	See the world as ok.
I can read people well	I can filter out voice from noise.	Breathing regular	Neocortex working well	I can read faces	I can explore
I can show emotion	I can hear what people say to me	Good appetite /digestion	I can think	I can be empathic	I can be creative
My face can show emotions	I can follow instructions	Immune system working	I can concentrate		I am grounded
		Regular toileting	I can reason		I am thriving.
		I can sleep.			

The Three States – Mobilised/Defense

Sympathetic System Dominant – I'm not safe. It's dangerous.

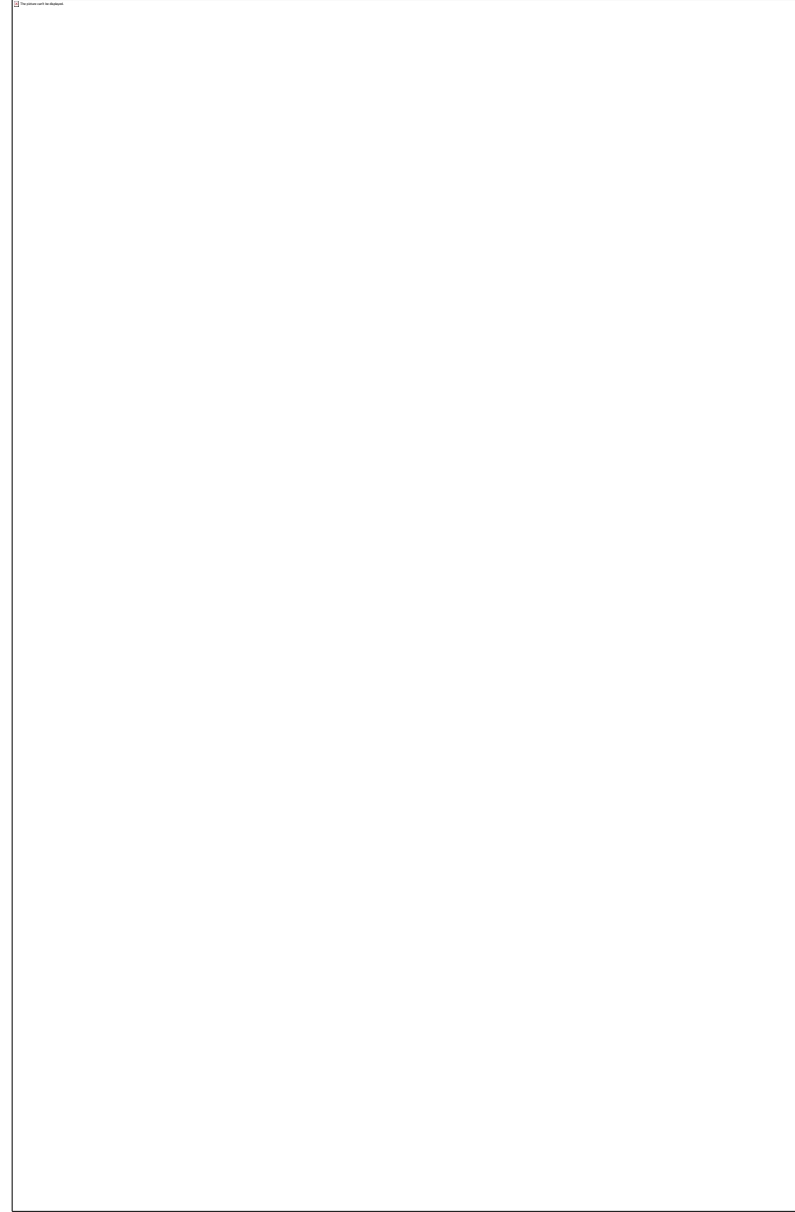
Eyes	Ears	Body	Brain	Others	Life view
Eyes narrow.	I cannot hear all frequencies.	Adrenal glands activated.	Neo-cortex not working	I disengage from social situations.	I am angry
I look around a lot.	Low frequencies.	Pumping noradrenaline & cortisol	Thinking is difficult.	See blank faces as angry.	I either feel invincible or scared.
Eyebrows furrow.	I miss much of what you say	Hear rate increased	Reasoning gone offline.	I assume danger and threat.	I feel vulnerable.
Pupils dilate	I cannot filter background noise	Breathing shallow & fast.	Limbic system in charge. Stored memories and strong emotions	If I cannot move my energy builds.	I'm not safe.
Eyesight/Field of vision narrows	Hearing more sensitive.	I make myself bigger.			I'm not grounded.
		I'm ready!			I'm surviving.

The Three States – Immobilised/Shutdown/Freeze

Sympathetic System is Shut Down/Dorsal Vagal – Something very bad is happening.

Eyes	Ears	Body	Brain	Others	Life view
I cannot make eye contact.	I can hear very little.	My face is blank.	Neocortex not working.	No interactions.	I am in freeze.
Bright lights/quick movements hard to cope with.	I can understand very little.	My digestion is shut off. My appetite is gone.	Limbic system not working.	I do not feel safe around people.	I want to be invisible.
I can't process visually	I stare passively.	Heart rate slow/or very fast.	Brainstem keeping alive.	I try to isolate myself.	I make myself small physically.
I need empty space.		My immune system is shut off	Hard to speak, organise, make choices.	I want to stay in my safe place all day.	I am nowhere near grounded.
		Toileting is difficult	I dissociate.		I am barely surviving.
		Body is flooded with its opioids.	I need to be elsewhere.		

Nervous
system
state is not
a cognitive
choice.



Bruce Perry's Regulate, Relate, Reason (RRR) Model

- Start from a person's regulatory state (physiological and emotional regulation) before engaging in relational and cognitive activities.

Regulate: *Safe, Grounded & Calm*

- Try to create safety. A slow process.
- Mindful Breathing
- Sensory Breaks
- Others

Relate: *Reconnect, caring, sensitive, empathic.*

- Collaboration
- Circle time
- Others

- Reason: *Exploring the reasons behind what's going on in a non-judgmental way*
 - Journaling
 - Problem solving real-life scenarios

We cannot help a child to regulate unless we are regulated ourselves.

Implications for Schools

We need to....

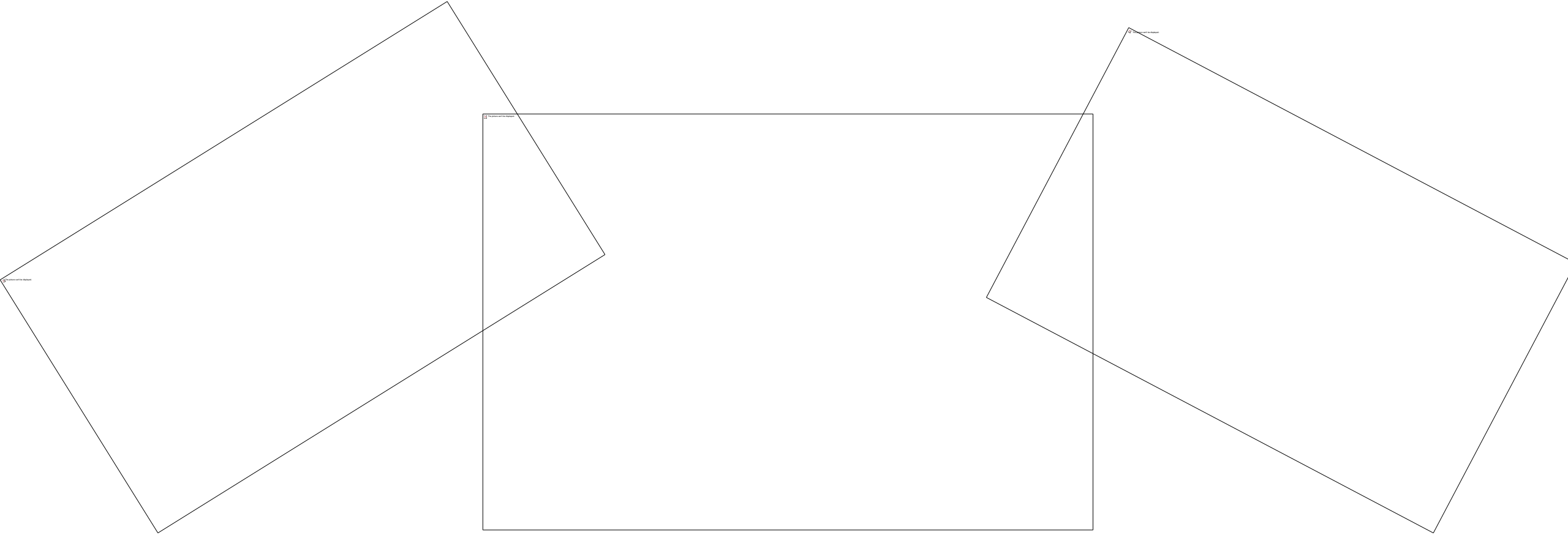
1. understand the concepts of Safety and Social Connection
2. understanding different Stress Responses
3. be aware of the impacts of Trauma on our nervous systems-Informed Practices
4. work toward coregulation and self-regulation
5. Building Positive Pupil-Teacher Relationships
6. Educator Self-Care



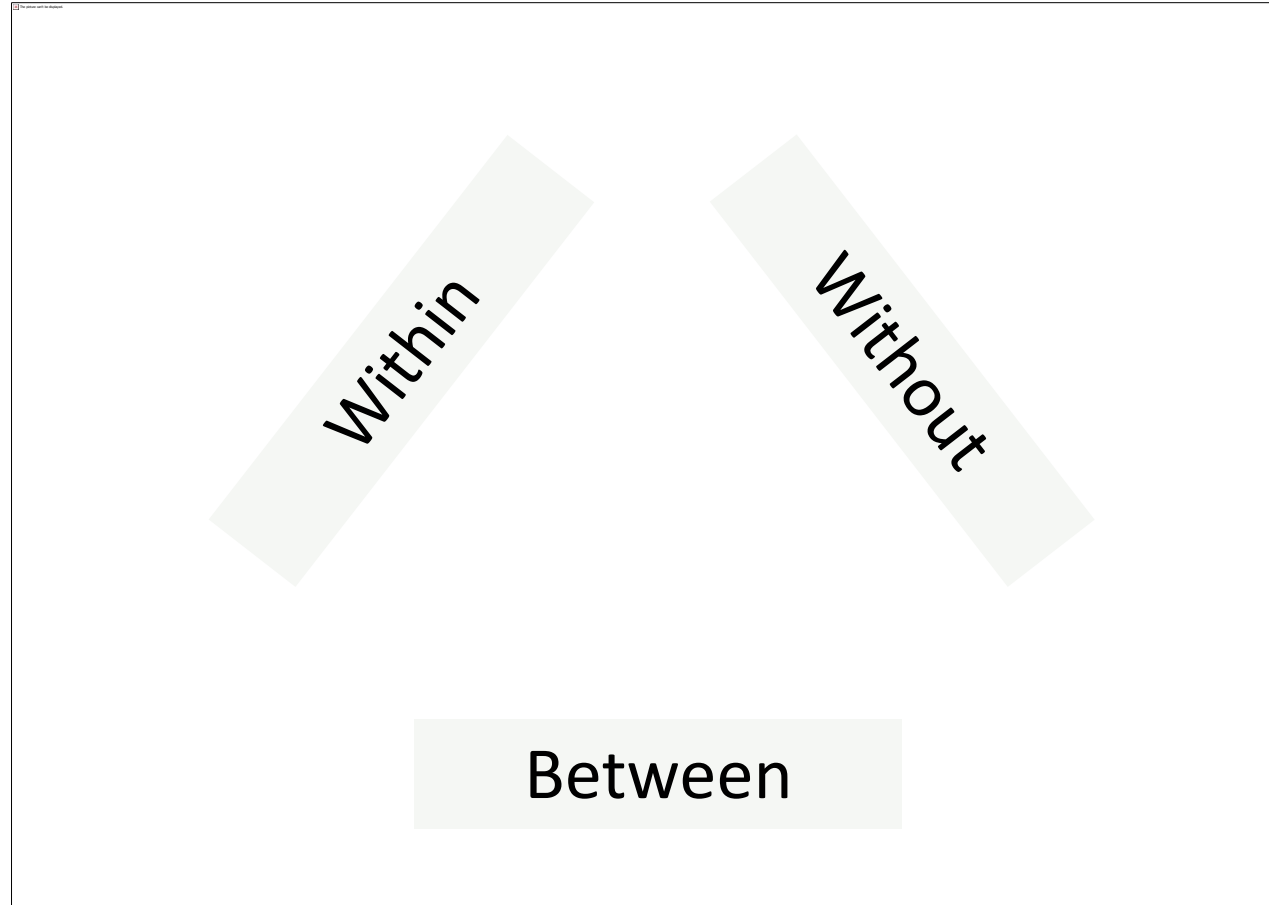
Emphasis on Safety and Social Connection

- Students need to feel....
 - Secure
 - Supported
 - Connected
 - Positive teacher-student relationships with all students
 - Encouraging reciprocity among students
 - Student voice (universal)
 - Consistent and predictable routines.

Feeling Safe is not the same as Removing Threat



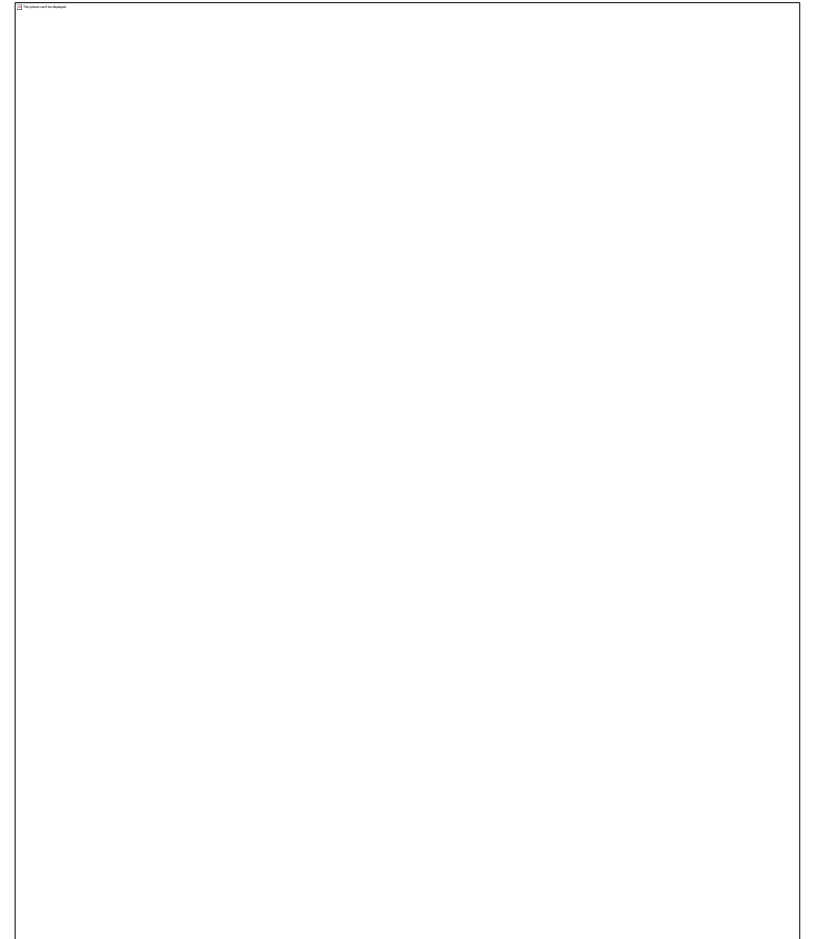
Assessing Safety





Trauma disrupts opportunity to co-regulate

- Chronic disruption of connectedness
- Shifts ANS state
- Distorts social awareness
- Displaces social engagement with defensive reactions
 - Fight / Flight
 - Immobilisation (dissociation)
- Interferes with the ability to co-regulate





Traumatised children do not necessarily generate empathy

Traumatised children

- Are often erratic
- Attuned to threat
- Suffer from stomach aches
- Find it difficult to sleep
- Disengage from contact
- Can be very reactive

How we sometimes describe them

- *They are ungrateful.*
- *They push us away.*
- *They do not appreciate our efforts.*
- *They are argumentative.*
- *They don't listen.*
- *They try to control people around them.*
- *They are very manipulative.*
- *They will never learn.*
- *They are unlovable.*





Regulation Techniques / Co- regulation

- Deep Breathing
- Singing – individual & choral
- Mindfulness practice
- Yoga
- Check-ins / Body scans
- Somatic Practices
- Coregulation

Building Positive Student-Teacher Relationships

- Being Grounded
- Fostering a sense of safety.
- Listening
- Individual
- Flexible Learning Environment
- Fun & Play

Dealing with behaviour

- We are frequently caught in a trap of identifying “behaviour” as voluntary, intentional and chosen.
- Mobilised and immobilised responses are “functionally reflexive” – involuntary, implicit, determined within the body.
- We often seek cognitive explanation for embodied responses!
- We ask questions like “Why did you do that?” Or “Why didn’t you do that?” as if there was a choice. There frequently is no choice. The body makes the decision.
- Our learning through **association** as we grow is often out of the realm of awareness. This learning often determines our reaction.
- So, frequently as we react we don’t know what we are reacting to – it might be a voice, a stance, a tone, a smell, a word or phrase....



Other challenges

- School culture - School policies
- Complexity of the theory – no packs available!
- Individual differences – teachers and students
- Integration with existing practices
- Training
- Time Constraints
- Parental understanding and buy in

Emotional Contagion

- Emotional contagion refers to the phenomenon where one person's emotions and related behaviors can influence and be "caught" by others.
- The ventral vagal circuit, associated with the social engagement system, plays a crucial role in positive emotional contagion.
- The sympathetic nervous system, associated with the defensiveness, plays a crucial role in negative emotional contagion.

The effects of emotional contagion

- Positive emotional contagion
 - enhances well-being,
 - improves cooperation and collaboration,
 - boosts motivation,
 - strengthens social bonds
 - facilitates learning.
- Negative emotional contagion
 - leads to stress and anxiety,
 - impacts decision making,
 - affects team dynamics,
 - creates a hostile atmosphere
 - reduces well-being and job satisfaction
 - Increases burnout

**A journey of a
thousand
miles begins
with a single
step. (Lao Tzu)**