

Making

SPACE

for Learning

Trauma Informed Practice in Schools



Notre Dame College March 2022



The Australian Childhood Foundation acknowledges Aboriginal and Torres Strait Islander peoples as the traditional custodians and owners of this land and waters. We pay our respects to their Elders past and present and to the children who are their leaders of tomorrow. We acknowledge their history and living culture and the many thousands of years in which they have raised their children to be safe and strong.



Australian
Childhood
Foundation



Australian
Childhood
Foundation



Notre Dame
COLLEGE

To Seek. To See. To Respond.



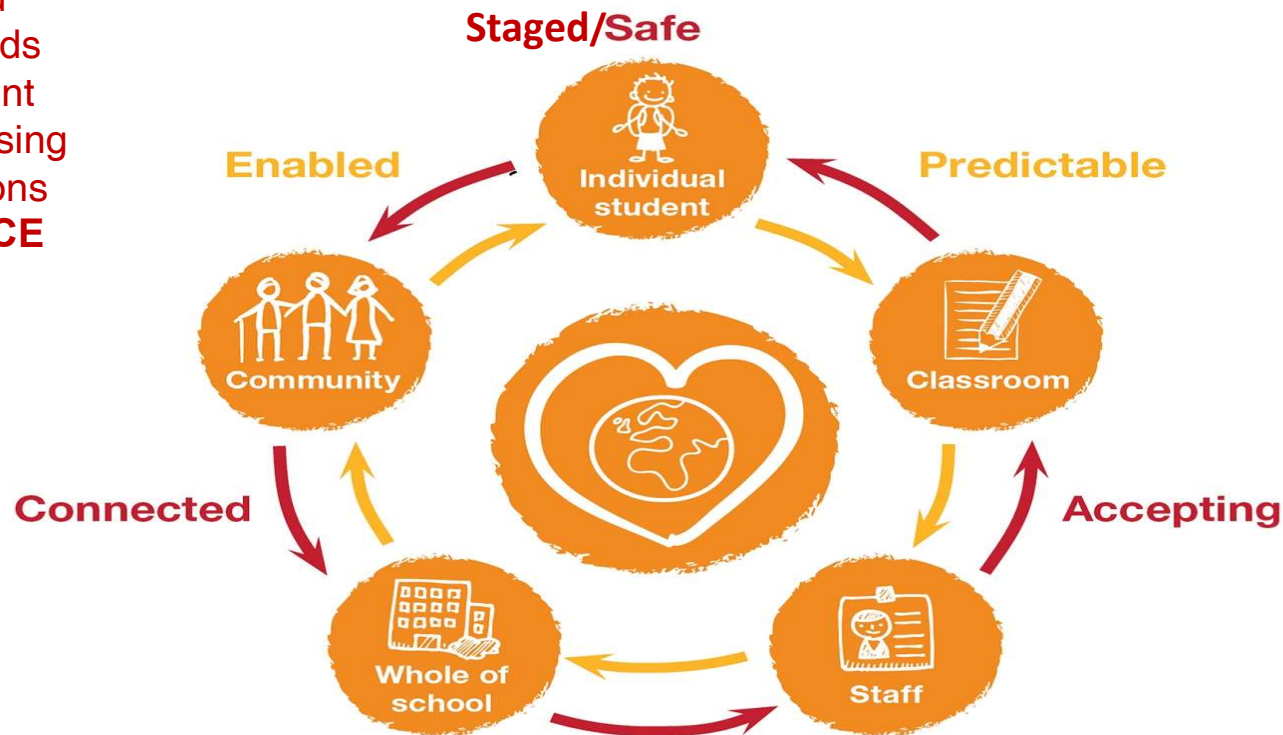
Safety

The content of this training can evoke strong emotions and may trigger personal experiences of trauma. Please be mindful of your own wellbeing during this training and if you need support please ask the facilitator.

Making **SPACE** for Learning

Trauma Informed Practice in Schools

Schools can respond effectively to the needs of traumatised Student and young people, using the five key dimensions of the acronym **SPACE**



Notre Dame
COLLEGE

To See, To See, To Respond

Consider a teacher who taught you and who had a positive influence on you;
What do you remember most about them?
What appealed to you about them?



Holding the student at the centre...



Trauma

Developmental

Trauma: Occurs when the foetus in utero, baby, child or adolescent experiences trauma, from abuse and neglect during key stages of development

Simple	Intergenerational
Complex	Transgenerational
Developmental	Historical
Collective	Epigenetics

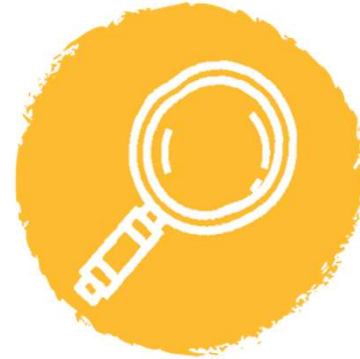
©Australian Childhood Foundation 2018

What is complex/developmental trauma?

“Complex trauma describes both children’s exposure to multiple traumatic events and the wide-ranging, long-term effects of this exposure...They usually occur early in life and can disrupt many aspects of the child’s developmental and the formation of a sense of self. Since these events often occur with a caregiver, they interfere with the child’s ability to form a secure attachment. Many aspects of a child’s healthy physical and mental development rely on this primary source of safety and stability.”

(www.nctsn.org)

Trauma impacts



Trauma can impact all elements of Student's development: brain, body, memory, learning, behaviour, emotions, relationships.





• Trauma and the Brain

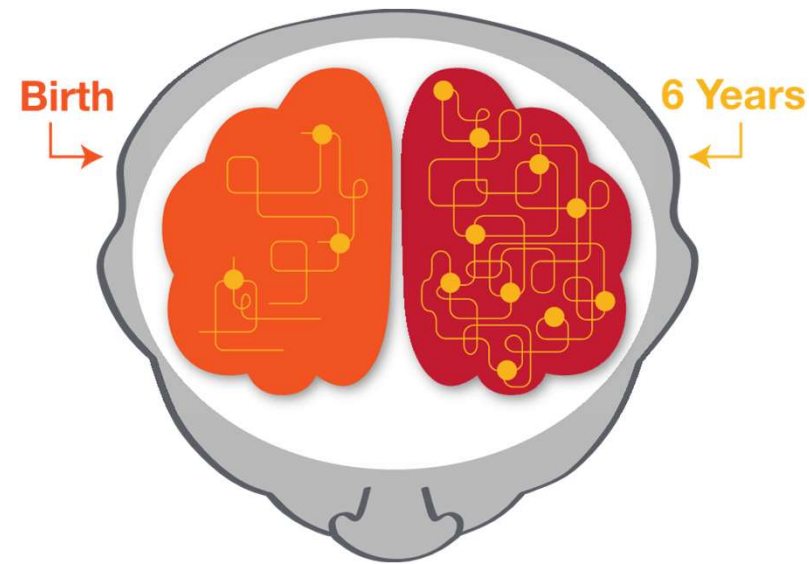
- Normative development
- Impacts of trauma
- Capacity Building and Repair

Neuronal connections

- Neurons – cells in our brain interact and communicate with other neurons
- The neural system has the ability for one neuron to communicate with up to 10,000 other neurons
- The newborn brain has approximately 100 billion neurons

Neuroplasticity refers to the brain's capacity to:

- Grow new nerve cells
- Strengthen connections between nerve cells
- Sprout new connections between different cells



Brainstem – survival centre

- Responsible for basic life functions
- First part of our brain to develop & the most developed brain part at birth
- Responsible for our heart beat, breathing, sucking and swallowing, temperature control blood pressure and our sleep cycle

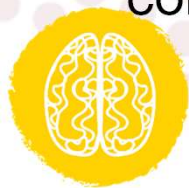


Image source: ©ACF 2020

Cerebellum – movement & coordination centre

- Has a key role in posture and balance
 - Helps us to know where our body is in space- spatial awareness
 - Links to prefrontal cortex
- Responsible for our voluntary movements such as walking and writing and fine and gross motor skills
 - Plays a role in **physical** and **mental** coordination

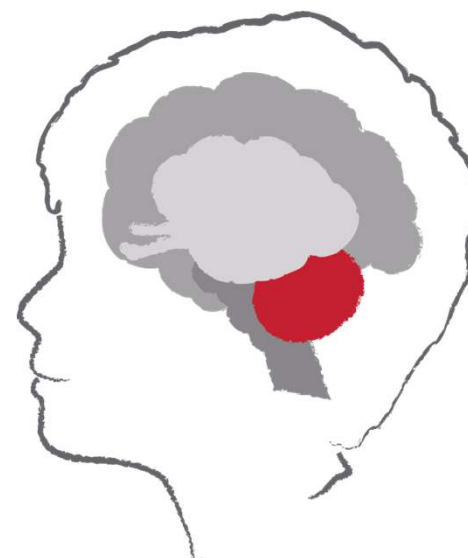


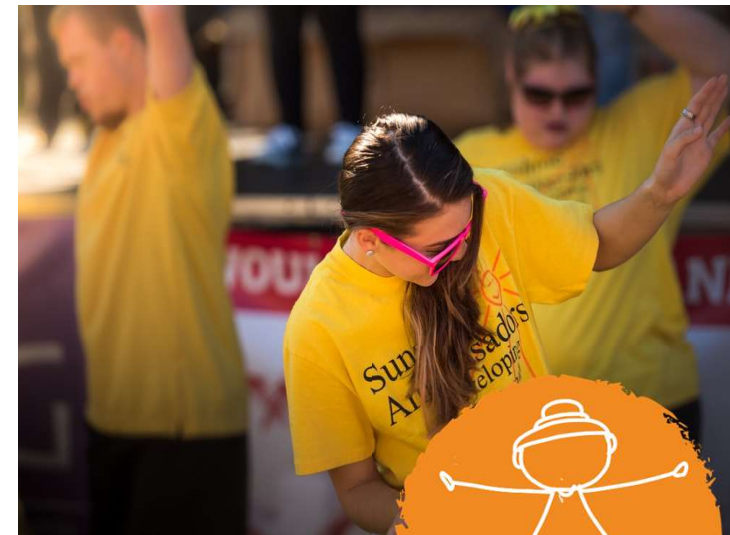
Image source: ©ACF 2020



Strategies for transforming – brainstem & cerebellum:

RHYTHM, BREATH, MOVEMENT

- Include soothing and calming activities; safe containment; breath based activities
- Movement based activities
 - include activities that have a rhythmic, repetitive element
 - include activities that have a balancing element & gross & fine motor skills
- Conduct a sensory audit – ie: is it too hot or too cold, too noisy?
- Include proprioceptive and interoceptive awareness and activities



Diencephalon – sorting and sending centre

- Develops mainly after birth
- Sorts out “messages” coming into the brain and sends them out to other parts of the brain
- Uses hormones to send signals to body

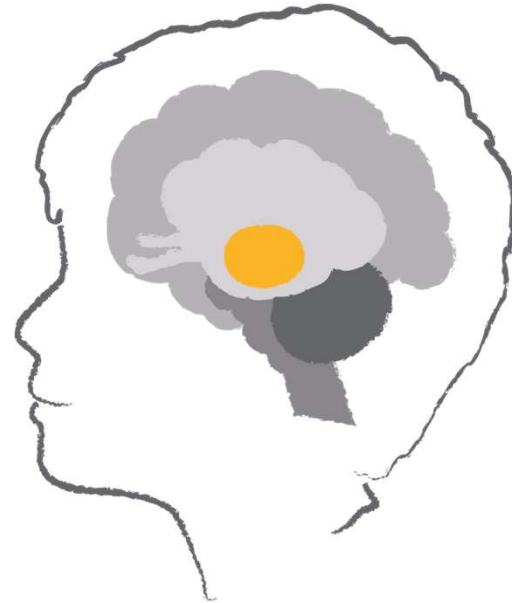
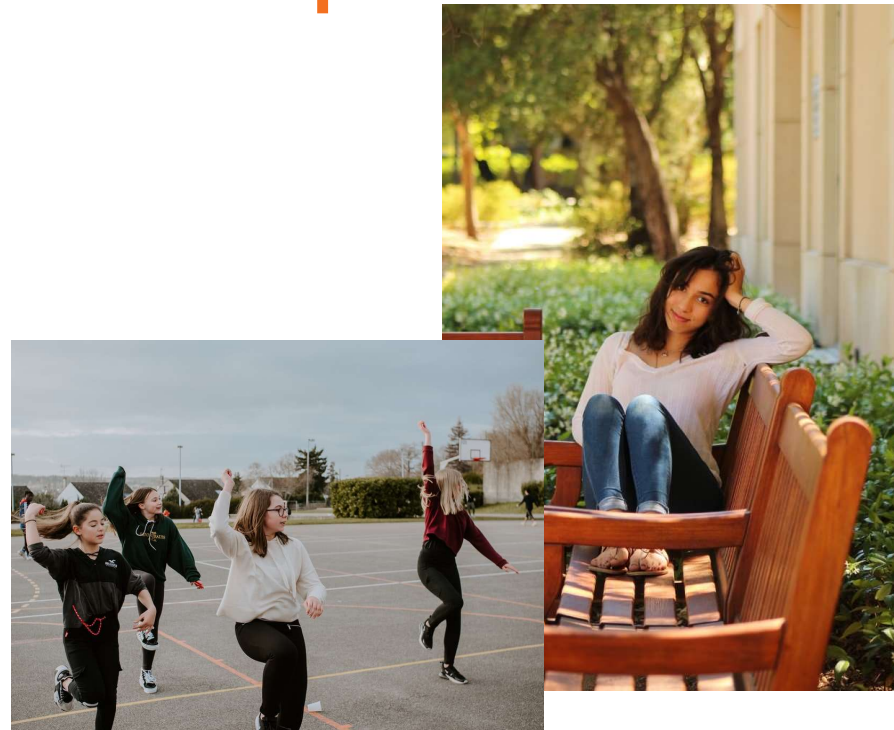


Image source: ©ACF 2020



Strategies for transforming – diencephalon

- Conduct a sensory audit
- Provide calm, positive sensory experiences
- Provide regular and predictable brain and body breaks
- Provide routine and prompts to support body systems and tuning in



What might help during transitions, beginnings and endings?

Image source:Unsplash

Limbic lobe - emotion and memory centre

- helps us attach an emotion to an experience or memory
- particularly involved with the emotions
- heavily involved in attachment processes
- develops mainly after birth
- two important brain parts – the amygdala and the hippocampus are in this part of the brain

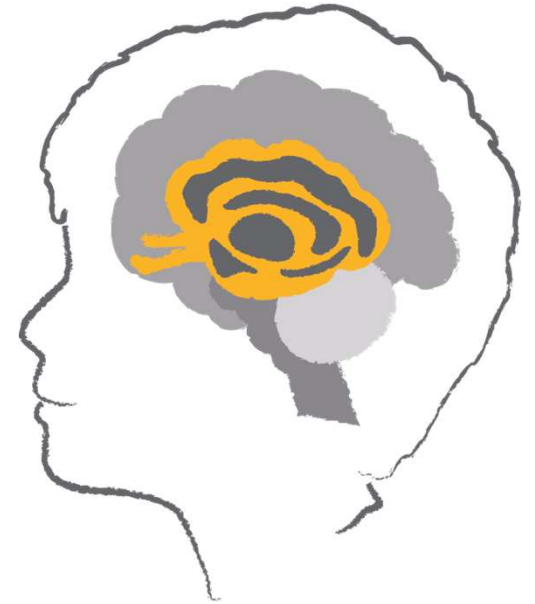


Image source: ©ACF 2020



Building Capacity – Limbic System

1. Co-regulating strong emotions

Validate emotion, cues for proximity/space, engage senses, prosody, rhythm & breathing

2. Enhancing positive emotions

May need help to name & express

3. Promoting emotional literacy

Teach during moments of calm



Amygdala

- Alarm centre - the 'smoke detector' of the brain
- 'Fires' when a threat is detected – triggers a series of brain and body responses
- Stores (& generalises) implicit memories relating to fear/threat

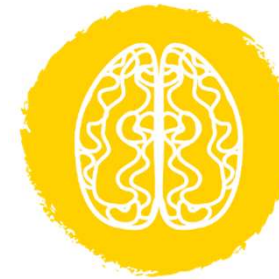
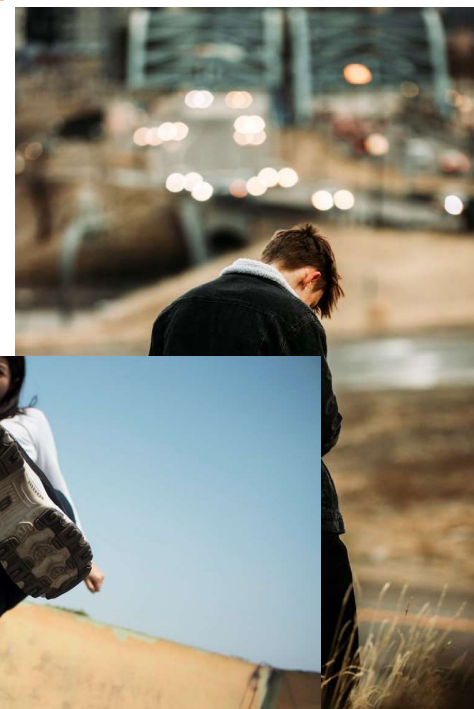


Image source: ©ACF2020

The amygdala under stress and trauma

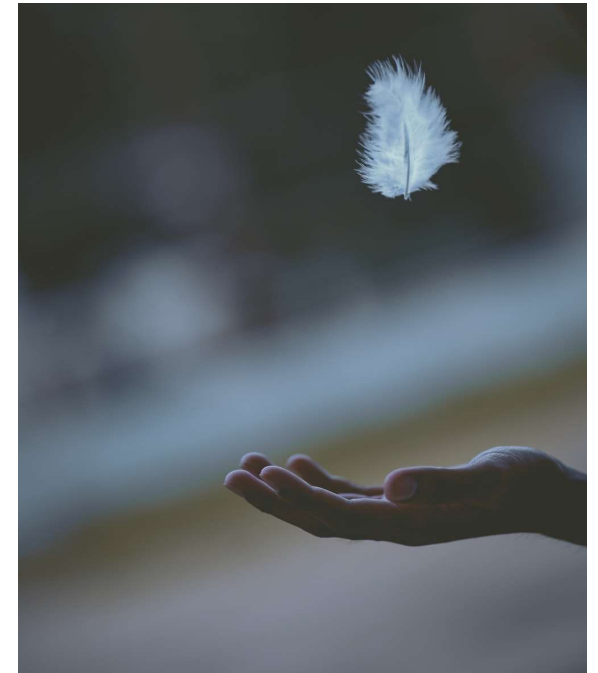
- Can be over active or under active
- Can evoke reminders and flashbacks of the trauma (awakenings)
- Will have difficulty in emotional regulation
- Will have difficulty in reading facial expressions
- Constantly 'firing' – can hijack the cortex (thinking goes offline)



What do you notice and what can you do?

Strategies for transforming – Amygdala

- Manage own reactions (stay calm & present)
- Don't rely on reason/thinking to reduce an escalation
- Regular outreach activities
- Provide opportunities for rest and recovery
- Environmental audit (noise, smell, colour, person, situation).



Re-entry to the classroom should be a safe and positive transition whenever possible.

Hippocampus

- explicit memory centre
- provides context to memories
- provides consolidation of information from short term memory to long term memory
- memory puzzle sorting centre

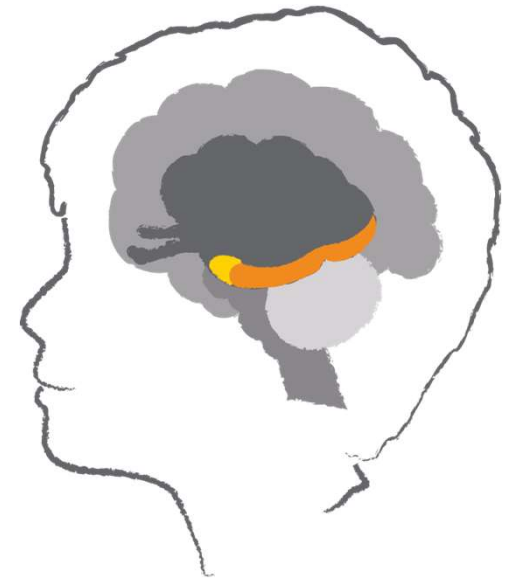
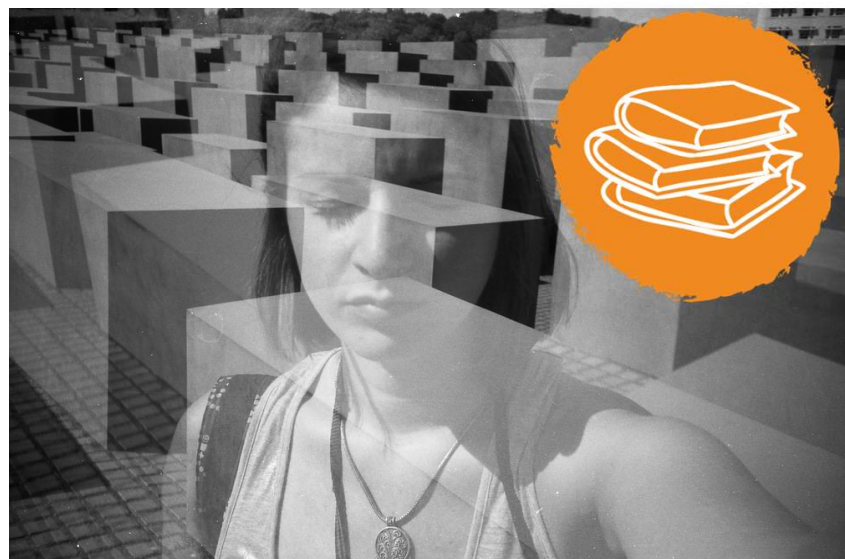


Image source: ©ACF 2020

The hippocampus under stress and trauma

- Reduction of hippocampal volume up to 25% as a result of high levels of cortisol
- Can't place memories in time or place – flooding & flashbacks
- Working memory, retention and recall (retrieval) capacity is severely impacted
- Narrative/autobiographical memory is affected



What do you notice?

Strategies for transforming – Hippocampus

- Repetition
- Reminders
- Review
- Reinforce



Calming the brainstem, quietening the amygdala and boosting the cerebellum will all help the hippocampus to function more effectively

The Prefrontal Cortex- executive function centre

- Self awareness and self reflection
- Reasoning and judgement
- Foresight and anticipation
- Focusing and sustaining attention
- Planning organising and prioritising
- decision making
- Enthusiasm, motivation and persistence
- Impulse control
- Working memory

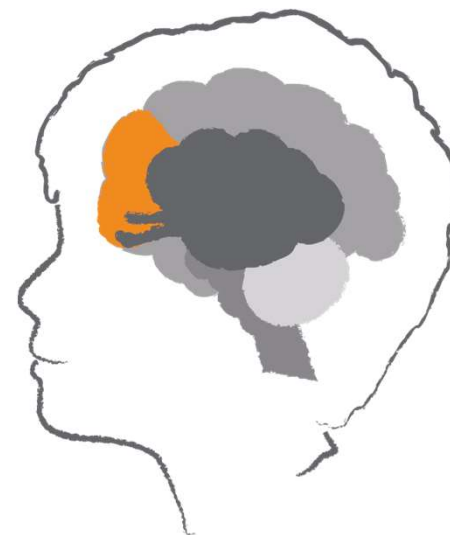


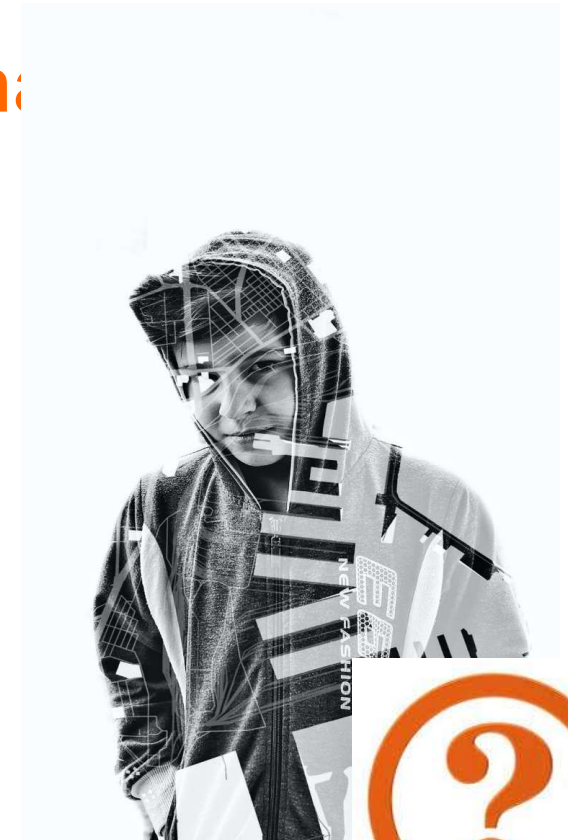
Image source: ©2018 ACF



Cortical areas under stress and trauma

Unable to:

- use foresight and anticipation, focus or sustain attention
- plan, organise or prioritise or make decisions well
- reflect or have self-awareness
- be enthusiastic, motivated or persist with activities
- use impulse control



What do you notice and what can you do?

Strategies for transforming – cortical areas

Safety and stability are essential pre-requisites for cortical access

- Problem solving activities and strategies
- Support to map and plan activities
- Games - card games – boards games, strategy games
- Voluntary movement activities – table top drumming clapping etc
- Thinking and choice games – “Would you rather?”
- Mindfulness activities



Strategies for transforming

Brain area	Function	Activity ideas
Brainstem & Diencephalon	Basic survival & sensory processing	Pacification or stimulation. Activities in the child's preferred sensory modality
Cerebellum	Coordination of movement	Using music, rhyme and movement activities
Limbic	Emotional processing	Building relational connection through plays, animals, games
Cortex	Thinking processes	Linking experiences and sensations to words and descriptions
Prefrontal cortex	Analytical and abstract thinking	Challenges and safe risk taking activities

Image source: ©2018 ACF

Development of the left and right hemispheres

Left Hemisphere

- Evaluates language content
- The optimistic hemisphere
- Understands beginning, middle and end
- Learns from the past and expects the future
- Looks for patterns



Right Hemisphere

- Orientated in the present moment
- Eye Contact
- Facial Expression
- Tone of Voice
- Posture
- Gesture
- Intensity
- Grasps the whole

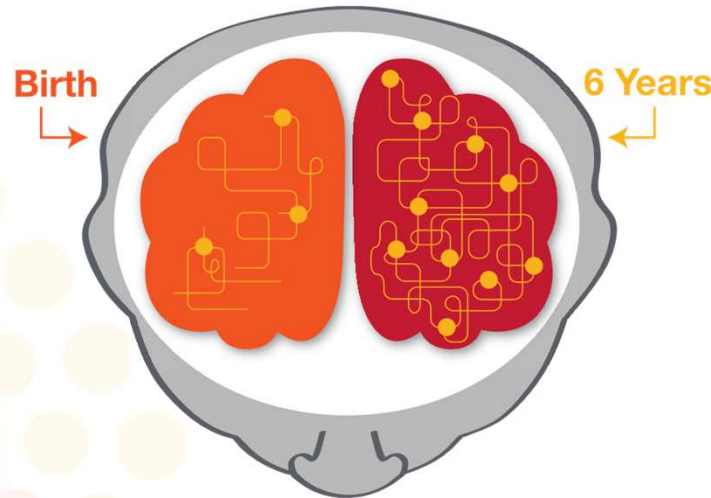


Image source: ©ACF 2020

Strategies for transforming – building **RH/LH** connection

- Activities that cross the midline
- Using gestures, intonation, melody, etc to accompany speech
- Putting words to feelings when making observations
- Incorporate cognitive elements into calming/stimulating activities (eg. Counting)



Image source: Unsplash

Adolescent neurobiology

Adolescent brain development



Under stress and trauma....

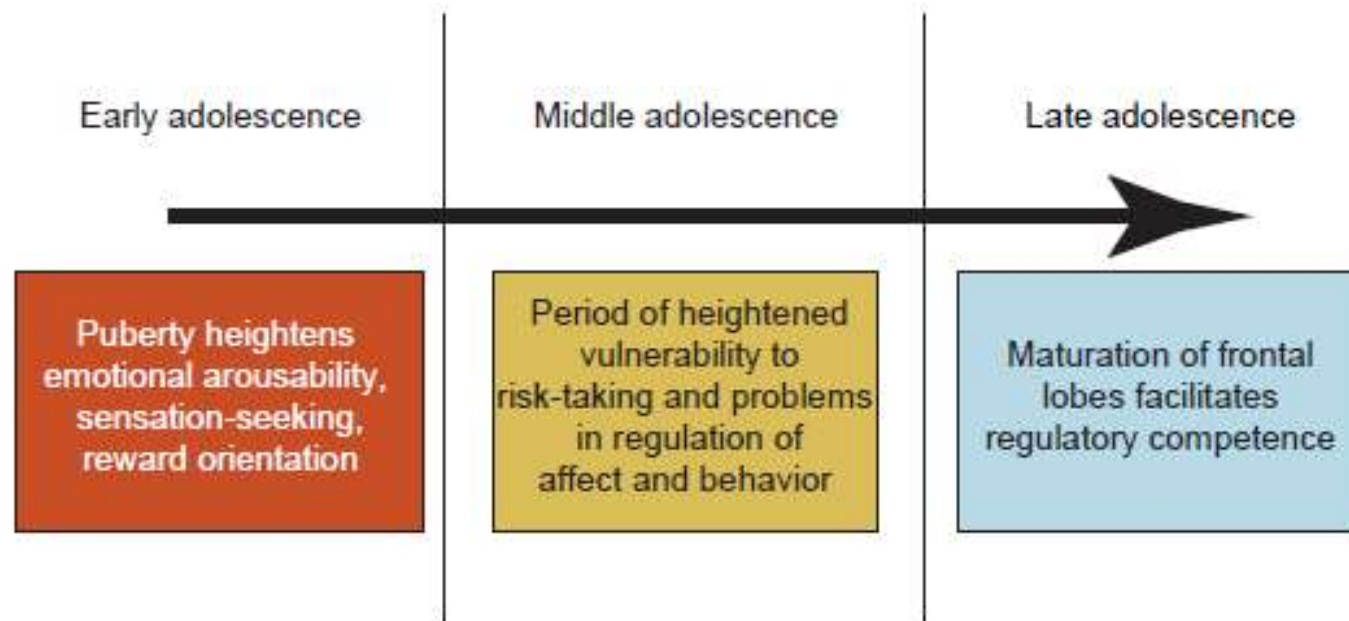
Young people, who have had experiences of trauma, are often operating from their right hemisphere. What do you remember about the functions of the Right Hemisphere?

It could be hard for them to:

- Understand or comprehend what we say (a left hemisphere task)
- Speak (a left hemisphere task)



The adolescent brain



TRENDS in Cognitive Sciences

Complex trauma in adolescence

- **Anxiety**
- Depression
- **Dissociation & Avoidance**
- Relational & affect regulation disturbance
- Cognitive distortions
- Somatization
- Externalising behaviours such as: self-mutilation & violence
- Sexual disturbance



Complex Trauma in Adolescence

- Substance abuse
- Eating disorders
- Susceptibility to re-victimisation
- Traumatic bereavement associated with loss of family members and significant other attachment figures
- Sleep disturbance
- Danger – not recognising or over-recognising
- Defiant behaviours
- Anger



Activity

Trauma and Behaviour



The trauma organised behaviour cycle

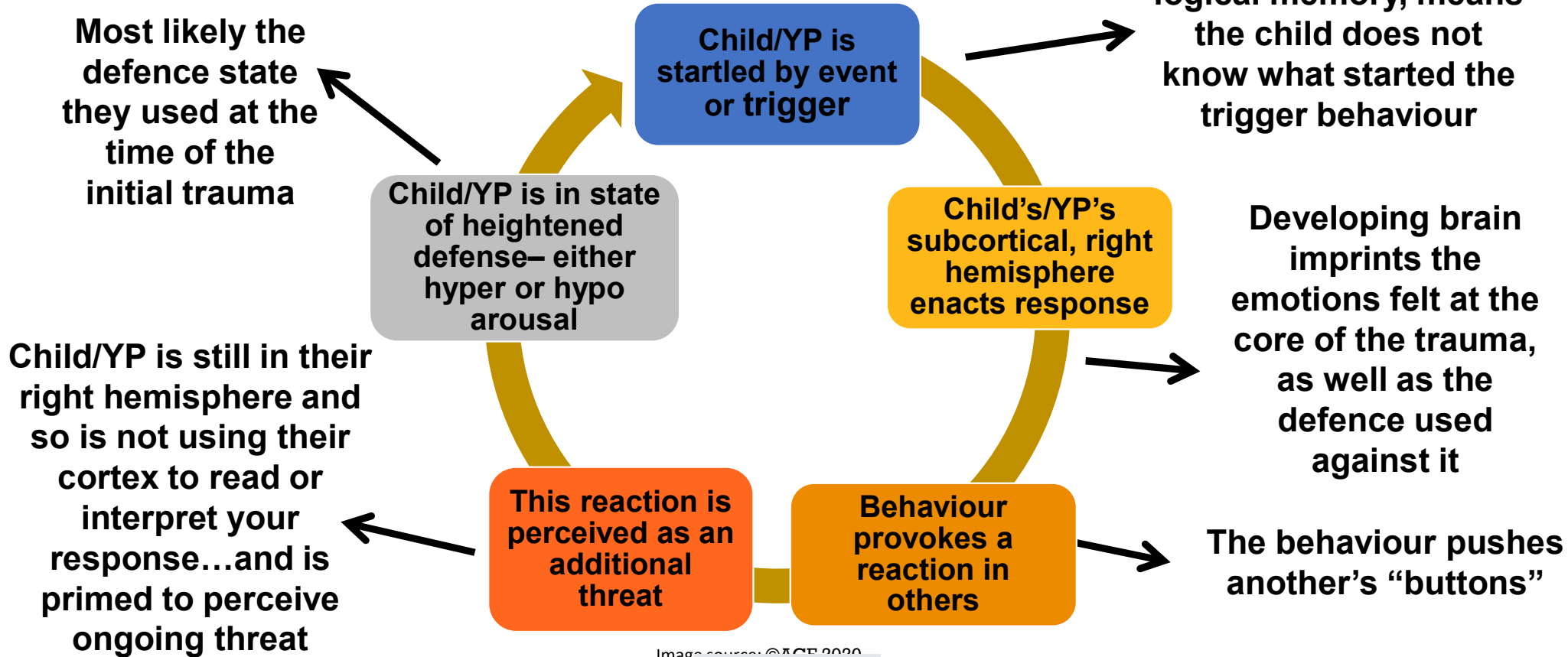
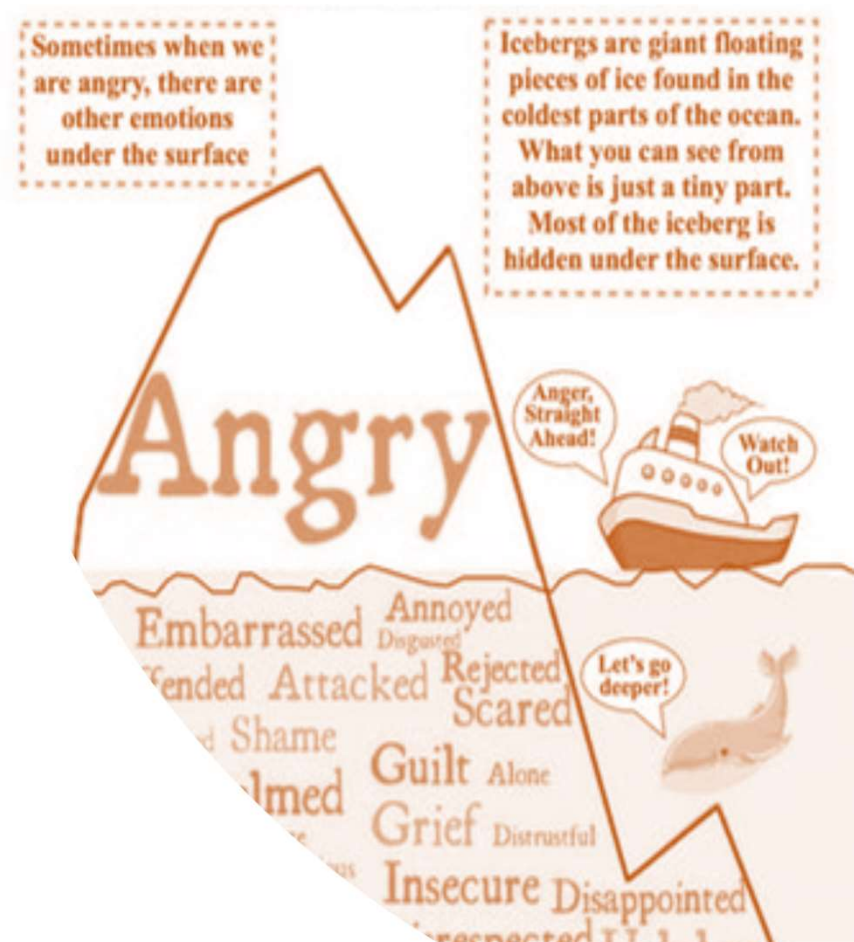


Image courtesy @ACE 2020

Behavioural – narratives of trauma

- **Behaviour tells a story!**
- Traumatized Student's behaviour can be difficult and complex for parents, teachers and carers to understand, manage and shape
- However, it is functional and almost always makes sense given their specific experiences of trauma
- Student's behaviour is the manifestation of the impacts of trauma outlined in the previous sections



The shield against shame



Avoidant behaviour

Feelings of social inhibition & creation of social isolation
Inadequacy & inferiority (low self esteem)
Sensitive to negative criticism & ridicule
Humiliated, Rejected

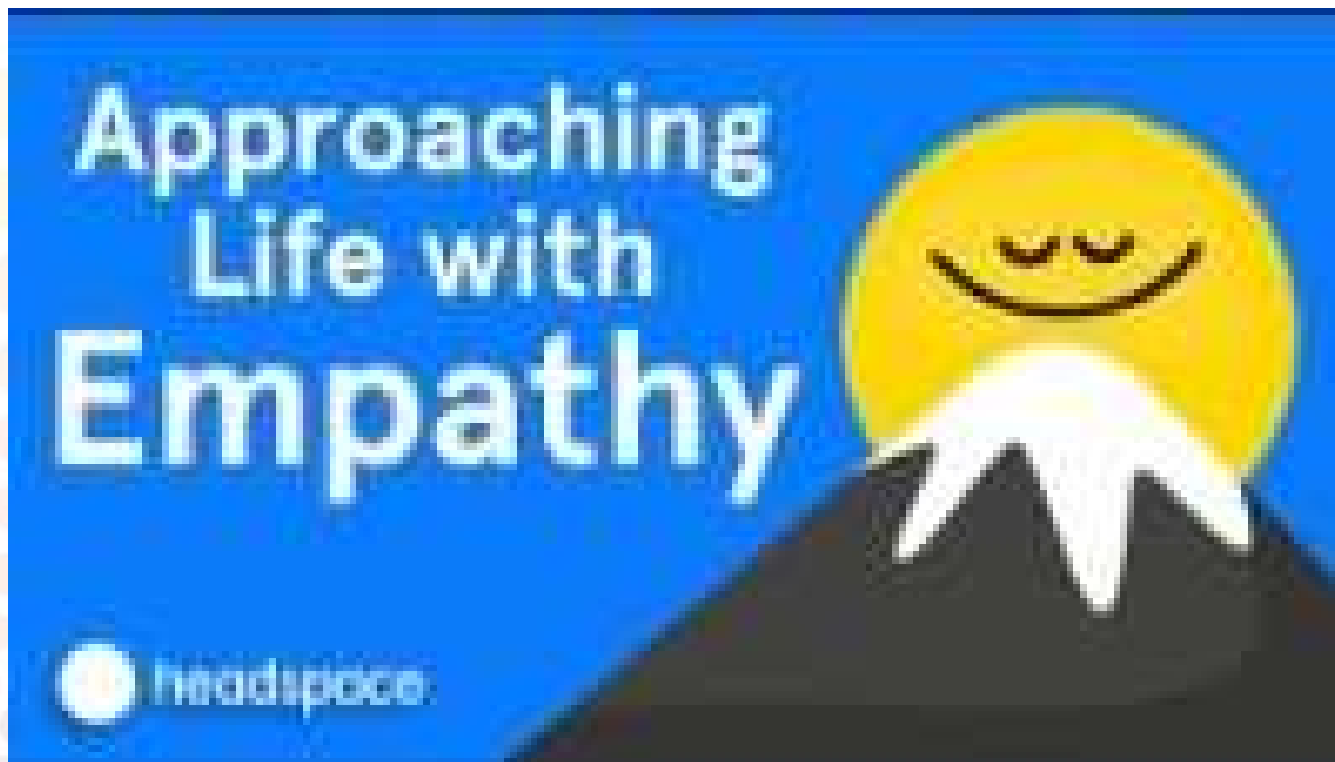


Shame -

Being flawed and inadequate
Unlovable & unworthy
Defective and undesirable
Hopelessness
Helplessness
Shut down

Empathy

Why is empathy important? How do we learn empathy?



Trauma and the Body

- Neuroception
- Polyvagal Theory
- Window of Tolerance
- Creating Safety

Neuroception: *Cues of risk and safety are continually monitored by our nervous system*

(Porges, 2015).

Polyvagal theory and protective responses

Behavioural Functions

Body Functions

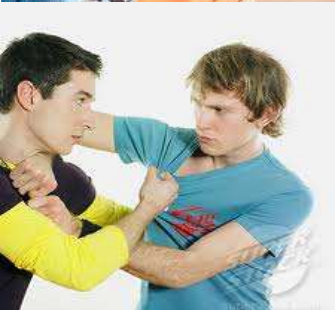
(Porges, 2011)



Social Engagement

Soothing and calming
Indicates safety

- Lowers or raises vocalisation pitch
- Regulates middle ear muscles to perceive human voice
- Changes facial expressivity
- Head turning
- Tears and eyelids
- Slows or speeds heart rate



Mobilisation

Fight or Flight
Active Freeze
Moderate or extreme danger

Hyper arousal

- Increases heart rate
- Sweat increases
- Inhibits gastrointestinal function
- Narrowing blood vessels - to slow blood flow to extremities
- Release of adrenaline



Immobilisation

Collapse or submission
Death feigning
Increased pain threshold
Conserves metabolic resources
Life threatening situations

Hypo - arousal

- Slows heart rate
- Constricts bronchi
- Stimulates gastrointestinal function



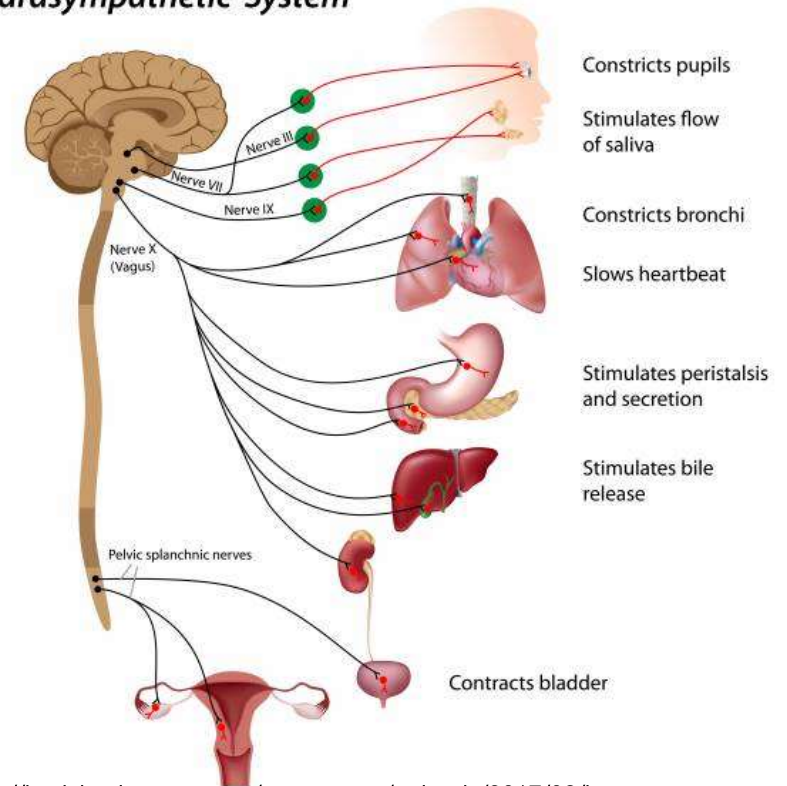
An introduction to the Polyvagal theory and neuroception

Cues of risk and safety are continually monitored

“Before we can engage in social interactions, we must first feel safe.”

(Porges, 2015, 2011)

Parasympathetic System



<http://lewisinstitute.com.au/wp-content/uploads/2017/08/img-ages2.jpg>

Dys-regulated Arousal

Fight or Flight Hyper-vigilant, action-orientated, impulsive, emotionally flooded, reactive, defensive, self-destructive

Freeze Physically immobilized, frozen, tense musculature

Sympathetic Hyper-arousal



Submit Collapsed, weak, defeated, flat affect, numb, empty, helpless, hopeless

Parasympathetic Hypo-arousal

Image courtesy ©2010 ICF

Activity

My Day feeling safe and unsafe

Mobilised

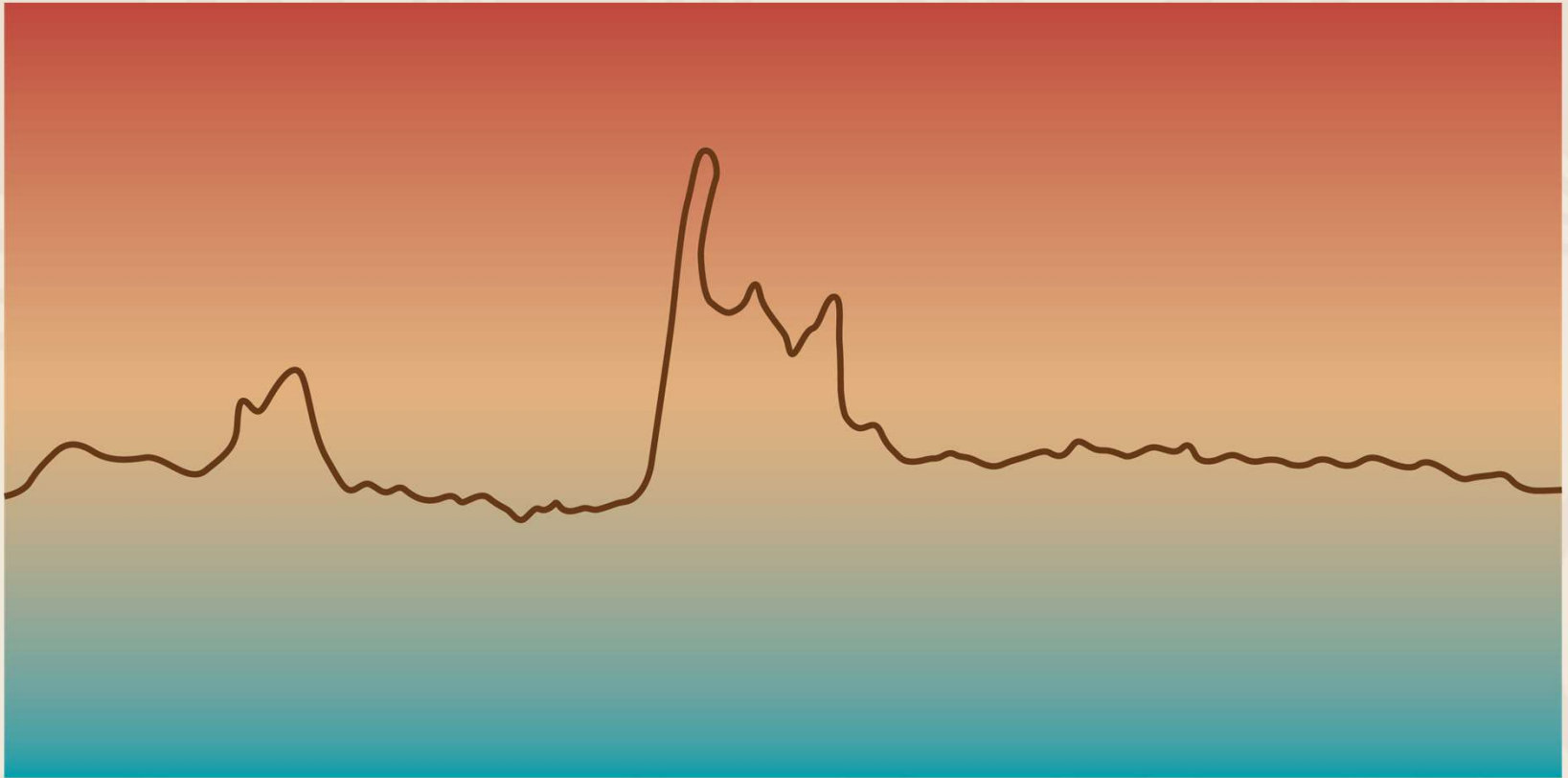
I don't feel safe zone

Socially Engaged

I feel safe zone

Immobilised

I don't feel safe zone



My Day



Notre Dame
COLLEGE

To Seek. To See. To Respond.

Overshooting your Window of Tolerance:

- Upset and hyped up
- Angry and agitated
- Frustrated
- Heart beating fast
- Tense and can't think clearly
- Unable to regulate your emotions



Making Space for Learning – Action Research Project - St Thomas More School, Elizabeth Park, S.A.

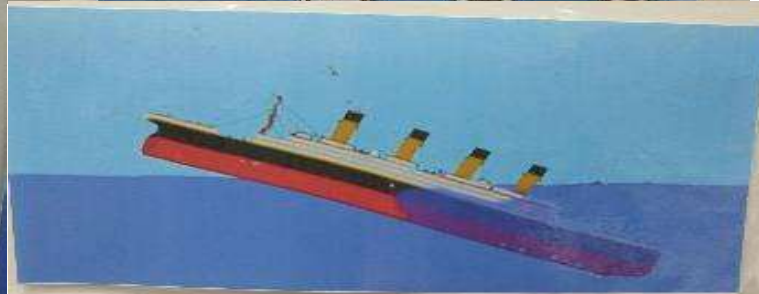
Within your Window of Tolerance:

- Feeling safe, calm and peaceful
- Happy and able to think clearly
- Ready to learn
- Settled and content
- Mindful and able to regulate your emotions



Undershooting your Window of Tolerance:

- Sad and tired
- Unmotivated with no energy
- Feel empty and withdrawn
- Don't want to listen, talk or play
- Can't think about learning



SPACE

Classrooms, activity rooms, can respond effectively to the needs of traumatised Student and young people, using the five key dimensions of the acronym **SPACE**.

Making **SPACE** for Learning

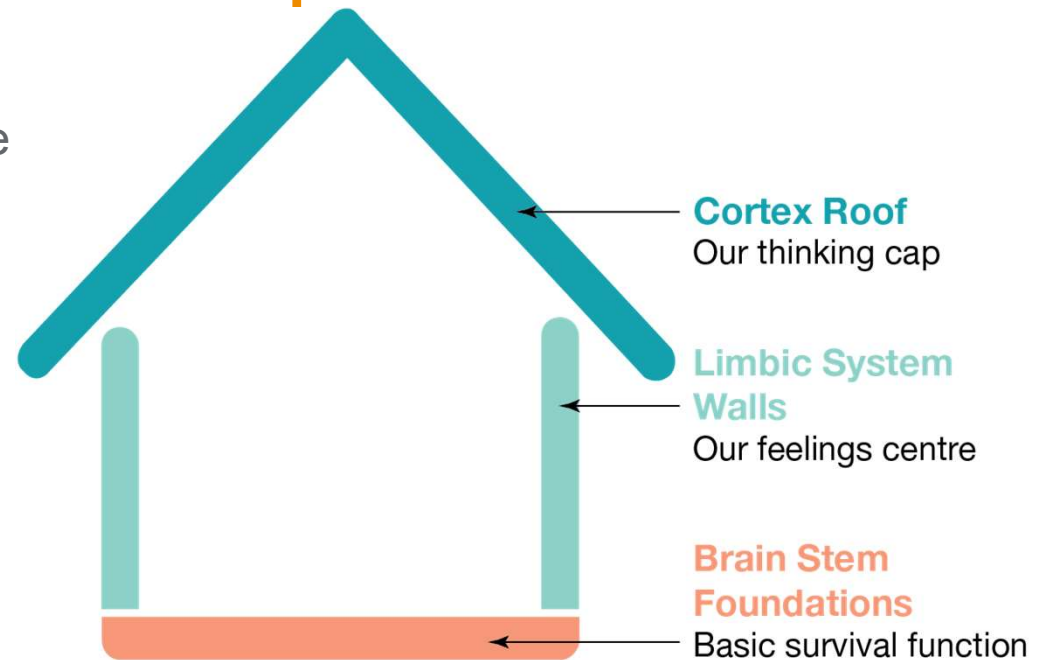
Trauma Informed Practice in Schools

Staged/Safe



Staged/Safe- Sequential brain development metaphor - My Brain House

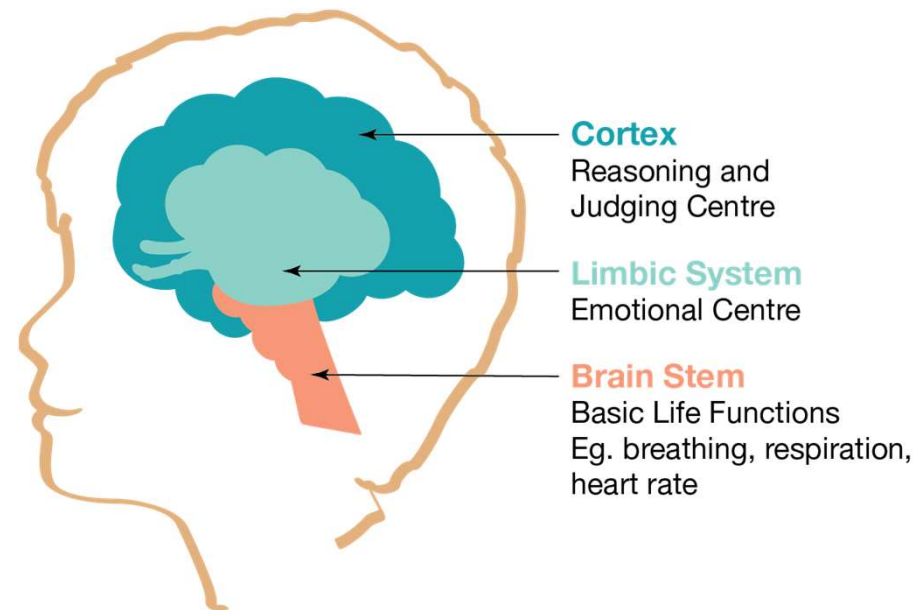
- We build our brain from the bottom to the top- like building a house
- We reinforce parts of our house as we grow, with our roof continuing to develop into our mid 20s.
- A student who is calm and focused at school will likely be functioning with a strong standing brain house, from foundation to roof.
- In times of great stress bits of our brain house can come down and require repair. This is achievable and our brain house can stand strong again.



Staged/SAFE

- Brain development is sequential
- One of the ways our brain develops is vertically, from the bottom to the top
- Some neurodevelopmental delays such as those effected by trauma can cause brain changes. However with the right support the brain can be repaired through neuroplasticity.
- Student cannot learn if they do not have neural safety

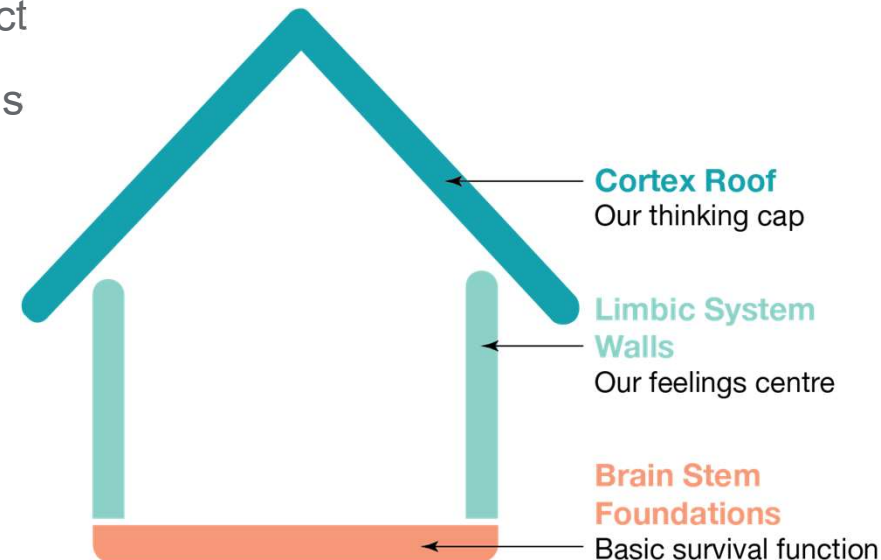
Student's brains need support to grow and learn



My brain grows upwards, step by step.

Staged/Safe- A brain development metaphor - My Brain House

- Our brain house can experience adversity. This can effect its structural integrity. If we get rattled our thinking cap roof can come off, leaving our feeling walls exposed. This can lead to strong emotions coming out without our thinking cap to help us contain our feelings.
- When this happens we can struggle to find words to communicate as our words flew off with our thinking cap roof.
- If we are deeply shook our roof and walls might come down and leave only our foundation. Our foundation is very strong and reliable. In these times we have our basic life functions to focus on to get us through- eg. our breathing, our heart beat.
- Everyone's rooves blow off from time to time. Given we have all built our own brain houses, we are all equipped to support each other to repair our houses together.

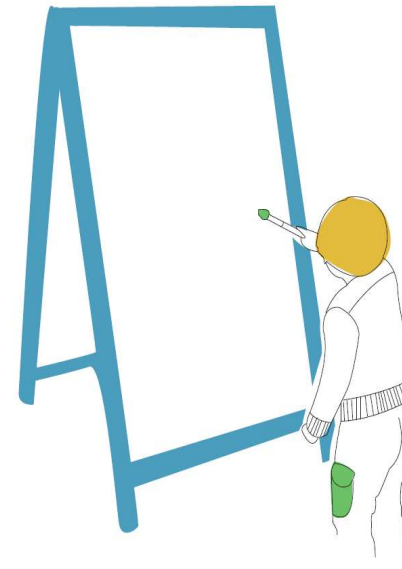


Predictable

- Changes to routines and uncertainty can be a source of stress to Student
- Predictability in Student's relationships and environment deactivates their stress systems
- This then promotes flexibility and adaptability

Student need to know what they can count on

I feel better when I know what is coming next.



What might predictability look like in practice?

- For students
- For families
- For all staff
- Systemically

relationships

physical environment

routines

instructions

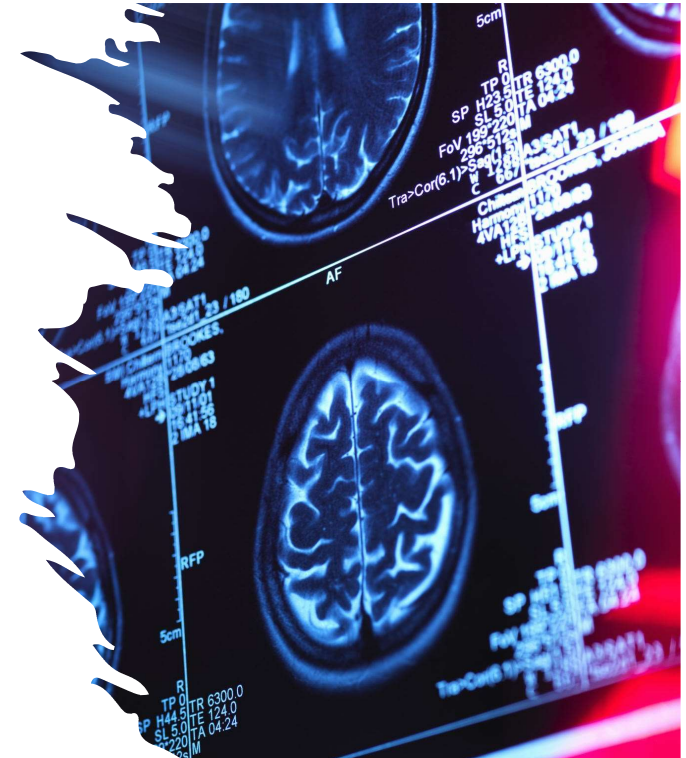
learning tasks

behavioural expectations

Predictable you

- Co-Regulating Child's State of Arousal:
- Use of Self
- Matching Vitality Affect
- Match tone
- Match intensity
- Match prosody
- Don't match the emotion

Dan Hughes 2007



Adaptive

- Most of us have a set of behavioural routines that we draw from to respond to challenges when they emerge.
- To broaden student's behavioural repertoires and promote increased adaptability we need to maintain multiple meanings for the behaviour and remain open to multiple options for interventions.
- We need to provide challenges that extend the window of tolerance but do not push the young person outside the WoT.



Student need support to grow up healthy and strong **There are things I need to grow up healthy and strong.**

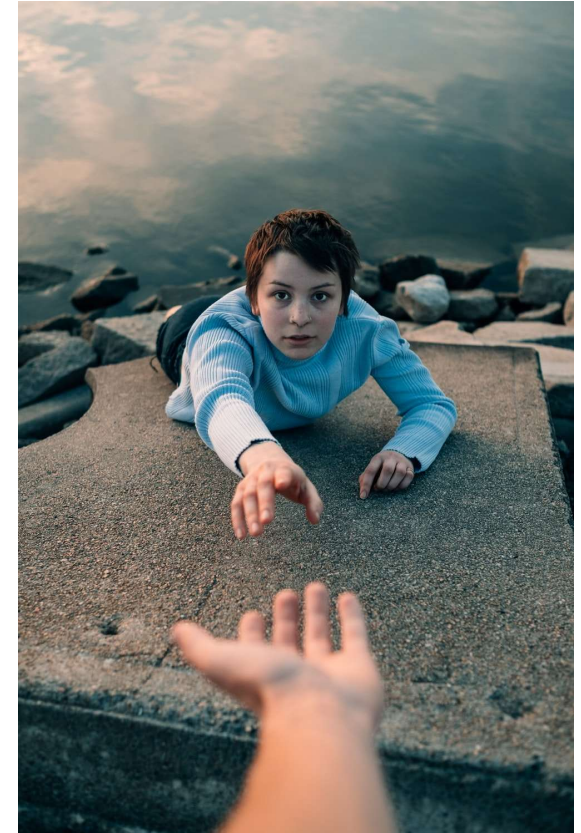
Adaptive



- Traumatized students and young people rely on a limited set of behavioural routines to respond to the challenges of their context.
- These routines are sourced in the history of their physiological reaction to trauma and the experiences of relationships through which these reactions were interpreted and responded to.
- Strategies which promote adaptability in students and young people are those which are able to maintain multiple meanings for behaviour and remain open to multiple options for interventions.

What might adaptive look like in practice?

- See the needs beneath the behaviour
- Utilise strengths
- Psychoeducation in classroom
- Relationship, repetition, rhythm
- Use PACE
 - Playfulness
 - Acceptance
 - Curiosity
 - Empathy

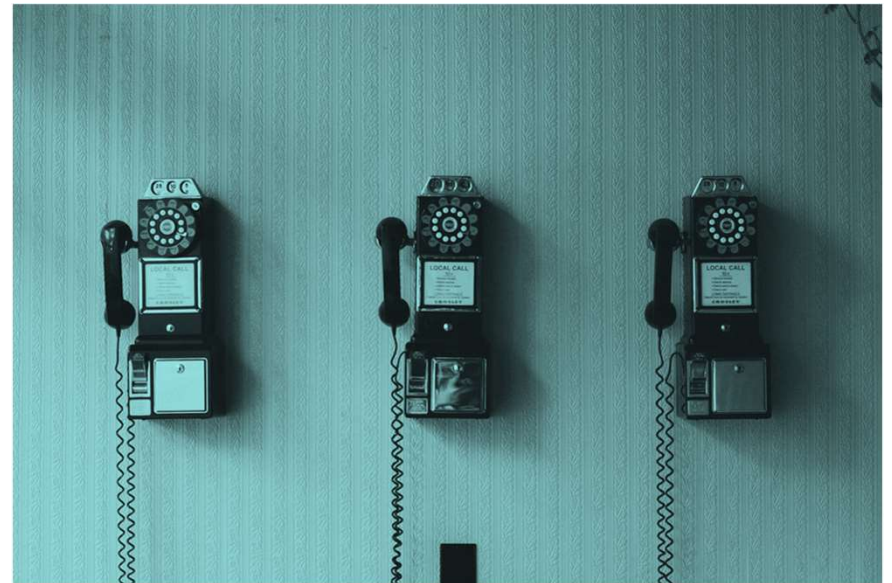


Connected

- Students need connection across the whole of school
- Connections in the classroom
- Connections to other students
- Connections to self

Where attention goes, neural firing flows,
and neural connection grows.“

Seigel 2018.



Activity

Connected

- Student's relational templates for forming and being in relationships take shape as they grow. They learn what to expect and how to navigate relationships through their experiences of connection with those around them.
- We tend to expect things from relationships based on what we have known from past connections.
- Strategies to support students as their relational templates continue to develop emphasise relationships with safe and consistent adults and peers as the foundation for healthy, strong social and emotional functioning.

**I need to feel like I am connected.
I need to feel safe.
I need safe connections in my life.**

Students need to feel like they are connected.

Students need to feel safe and know about what makes a safe connection.

*Sian Phillips et al 2021
Bruce Perry 2019*

What might connected look like in practice?

- The student feels safe and connected
- Co-regulation occurs
- A feeling of connectedness is what you get when you feel like you belong in a group, when you are with others of your
- Mirror neurons –eye contact
- Attuned listening.

“

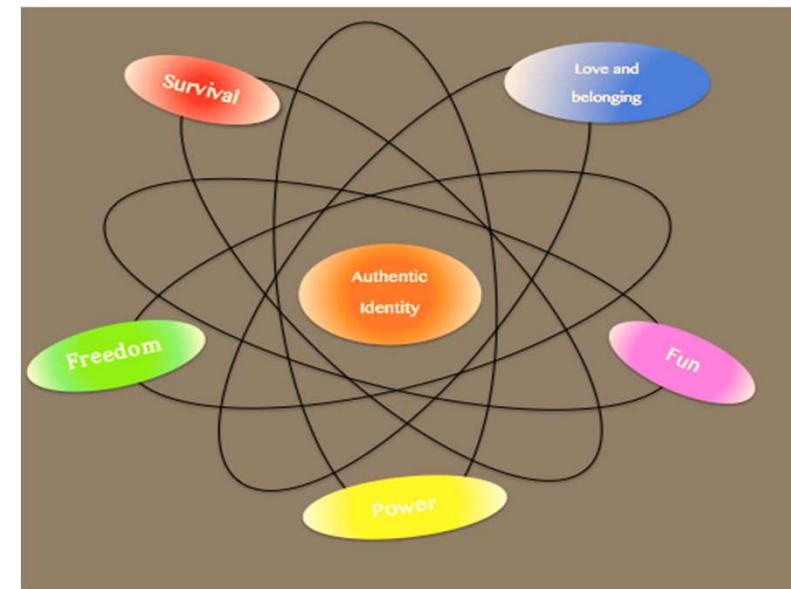


Schools and their staff are lifeboat a in a chaotic world

Trauma-responsive educators understand traumatized, abused and neglected students need to:

- Have a strong felt sense of safety at school
- Reach their developmental stages and potential
- Be **seen** and heard
- Learn to regulate themselves
- Develop a sense of agency (control)
- Psychoeducation- learn about their own neurophysiology and neurobiology
- Gain emotional literacy and understanding

Sian Phillips et al 2021



Enabled

- Engaging students in the process of understanding themselves can build social and emotional well being.
- Learning about and identifying feelings, understanding them and practice communicating them with others in socially cohesive ways bolsters emotional regulation.
- When students know about their qualities, their attributes and their talents they can feel good about themselves.
- Knowing about their own special story helps students to build a coherent self narrative



Students need to know more about what makes them who they are.

I grow stronger as I learn more about what makes me, me.

What might enabled look like in practice?

- Creating safety
- Understand triggers
- Map behaviours
- Victoria Dept of Ed's ABC and Scatter Plot Data
- Classroom approaches for individuals
- Flight, Fight, Active Freeze or Submit responses are assisted to enable learning.



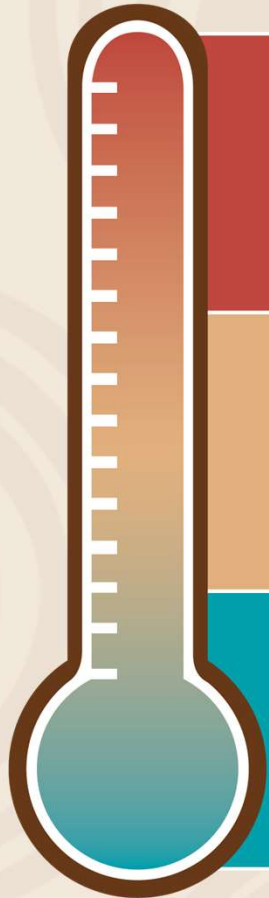
SPACE

All educators want students to thrive in the **spaces** we create with them at school.

What makes the best kinds of learning spaces for students?



Polyvagal Theory & Sensing Safety



Mobilisation Fight, Flight, Active Freeze	I don't feel safe	I am filled with energy I need to move I need to act now	Red Faced, hot and sweaty Fast beating heart Muscles tensed Moving body, hard to find stillness
Social Engagement	I feel safe	I am all set to play and explore I am ready to connect I am open to your ideas	Making Eye contact Orienting towards those around Listening Relaxed, loose, flowing body
Immobilisation Flop	I don't feel safe	I am numbed out I am retreating inside I am collapsed, small, and distant	I have cold extremities Glazed eyes, distant stare Slow movement Lethargic & passive body



Notre Dame
COLLEGE

To Seek, To See, To Respond.

Learning: Things to do

- Be predictable and consistent with routines and structure
- Prepare the student for any change in routine in advance
- Provide boundaries to help the student feel safe
- Be flexible and adapt to the student's needs
- Give the student short periods to practise independence
- Give consistent, clear and simple instructions
- Look for opportunities to build self-esteem
- Celebrate success and good choices, e.g. photographs

(Golding, et al. , 2016, p. 113)

- **1 thing your school does well?**
- **1 thing you do well?**
- **How do you do that well?**



Making SPACE for Learning – Site Audit Tool

This audit tool can be used to evaluate the policies and initiatives of a school that resource and equip different levels of the school structure to undertake trauma informed practice. In the following table, list strategies, policies or other processes currently undertaken that support traumatised students at your school.

	Whole Site	Staff	Classroom / Group	Small Group	Individual Student / Child
S Staged					
P Predictable					
A Adaptive					
C Connected					
E Enabled					

Sensing Safety

“Before we can engage in social behaviour and learning we must first feel safe”

Dr Steven Porges



Week by Week Delivery Summary

Week	Needs Statements	Week by week
1 Staged	Student's brains need support to grow and learn My brain grows upwards step by step	The brain week
2 Adaptive	Students need support to grow up healthy and strong There are things I need to grow up healthy and strong	The healthy body, mind, heart and spirit week
3 Predictable	Students need to know what they can count on I feel better when I know what is coming next.	The things we can count on hand week
4 Connected	Students need to feel like they are connected- I need to feel like I am connected	The connection week
5 Connected	Students need to feel safe- I need to feel safe What makes a safe connection? – I need safe connections in my life	The feeling safe week
6 Enabled	Students need to know more about what makes them who they are I grow stronger as I learn more about what makes me, me.	The feelings week with special guest Morty Monster
7 Enabled	Students need to know more about what makes them who they are I grow stronger as I learn more about what makes me, me.	The 'Me' week
8 Bringing things together and Sharing	A week to reflect and consolidate learnings, culminating in a sharing session on the final day of the program	The Reflective week

Accompanying students through Notre Dame SPACE



To seek, To see, To Respond

**Small, everyday moments
of positivity can build
to something truly reparative,
given enough repetitions.**

- Marina Dickson#childtrauma2016



Brene Brown – Daring Classrooms

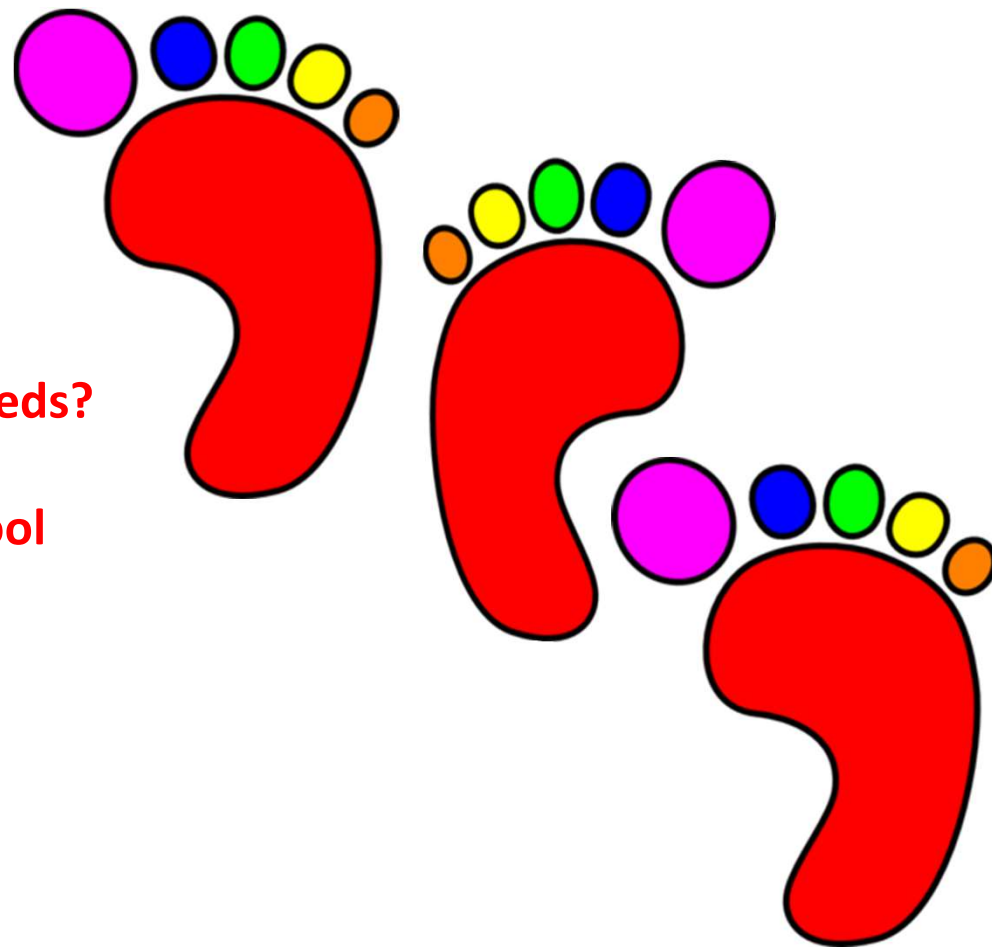


Next steps

What are 3 things I would like to do?

What are three things my classroom needs?

What are three things the whole of school needs to do?



Activity

References

ACF

Baylin, J. & Hughes, D.A. (2016). *The neurobiology of attachment-focused therapy*. New York: W.W Norton Company.

Bombér, L. M., & Hughes, D. A. (2013). *Settling to learn: Settling troubled pupils to learn: Why relationships matter in school*. Worth Publishing.

Golding, K., Turner, M., Worrall, H., Cadman, A., & Roberts, J. (2016). *Observing Adolescents with Attachment Difficulties in Educational Settings: A Tool for Identifying and Supporting Emotional and Social Difficulties in Young People Aged 11-16*. Jessica Kingsley Publishers.

Jennings, P. A. (2018). *The trauma-sensitive classroom: Building resilience with compassionate teaching*. New York: W.W. Norton & Company.

Lacoe, J. (2013). *Too scared to learn? The academic consequences of feeling unsafe at school*. Working Paper #02–13. Institute for Education and Social Policy.

Minahan, J. (2014). *The behavior code companion: Strategies, tools, and interventions for supporting students with anxiety-related or oppositional behaviors*. Cambridge, MA: Harvard Education Press.

Minahan, J. (2019). Building positive relationships with students struggling with mental health. *Phi Delta Kappan*, 100(6), 56–59.

National Center for Injury Prevention and Control: Division of Violence Prevention and Control (January 5, 2021) sourced from: <https://www.cdc.gov/violenceprevention/aces/riskprotectivefactors.html>

Perry.B. 2012

Phillips S. 2021

Porges, S. W. (2015). Making the World Safe for our Children: Down-regulating Defence and Up-regulating Social Engagement to 'Optimise' the Human Experience. *Children Australia*, 40(02), 114-123.

Porges, S. (2012). *Understanding Polyvagal Theory: Emotion, Attachment and Self-Regulation* [Video file]. Psychotherapy Networker. Retrieved July 2, 2016, from *Counselling and Therapy in Video: Volume III*.

Seigel, D. & Bryson, (2012). T. The whole-brain child. Brunswick: Scribe Publications Pty Ltd

van der Kolk, B. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin: New York

Trainer

drichards@childhood.org.au

To find out more about the
Australian Childhood Foundation
please visit our website:

www.childhood.org.au

training@childhood.org.au

Phone: 1300 381 581

