



te paeroa RTL B

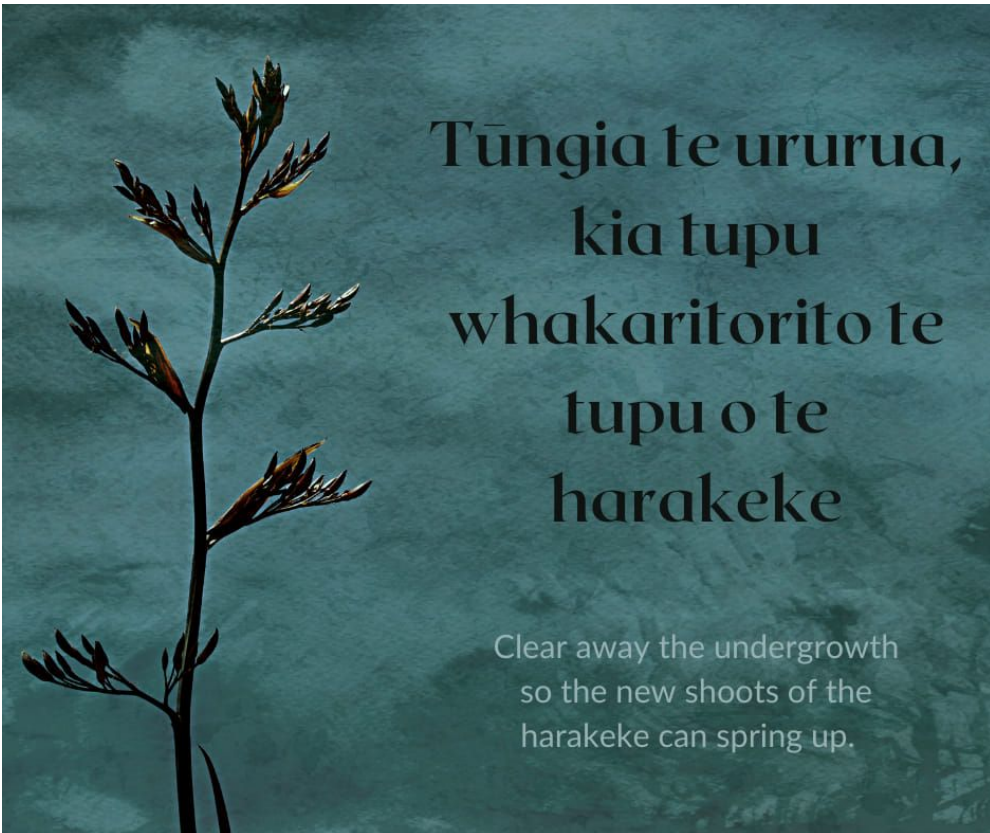


# **Extending understanding of neuroscience and trauma Yrs 0-10**

## **Kaiāwhina PD 2025**

**Paulette Fisher and Elesha Robinson**





Tūngia te ururua,  
kia tupu  
whakaritorito te  
tupu o te  
harakeke

Clear away the undergrowth  
so the new shoots of the  
harakeke can spring up.





## Intended outcomes

- Understand the impact of adverse experiences or trauma on the brain
- Understand the types of trauma, and their symptoms (maladaptations)
- Window of Tolerance and its application
- Optimising learning- Strategies for Application
  - Regulation - Scripting, strategies, routine, rhythm,
  - Te Whare Tapa Whā; Wellbeing Profile
  - PACE
  - Growth Mindset and the Learning Pit







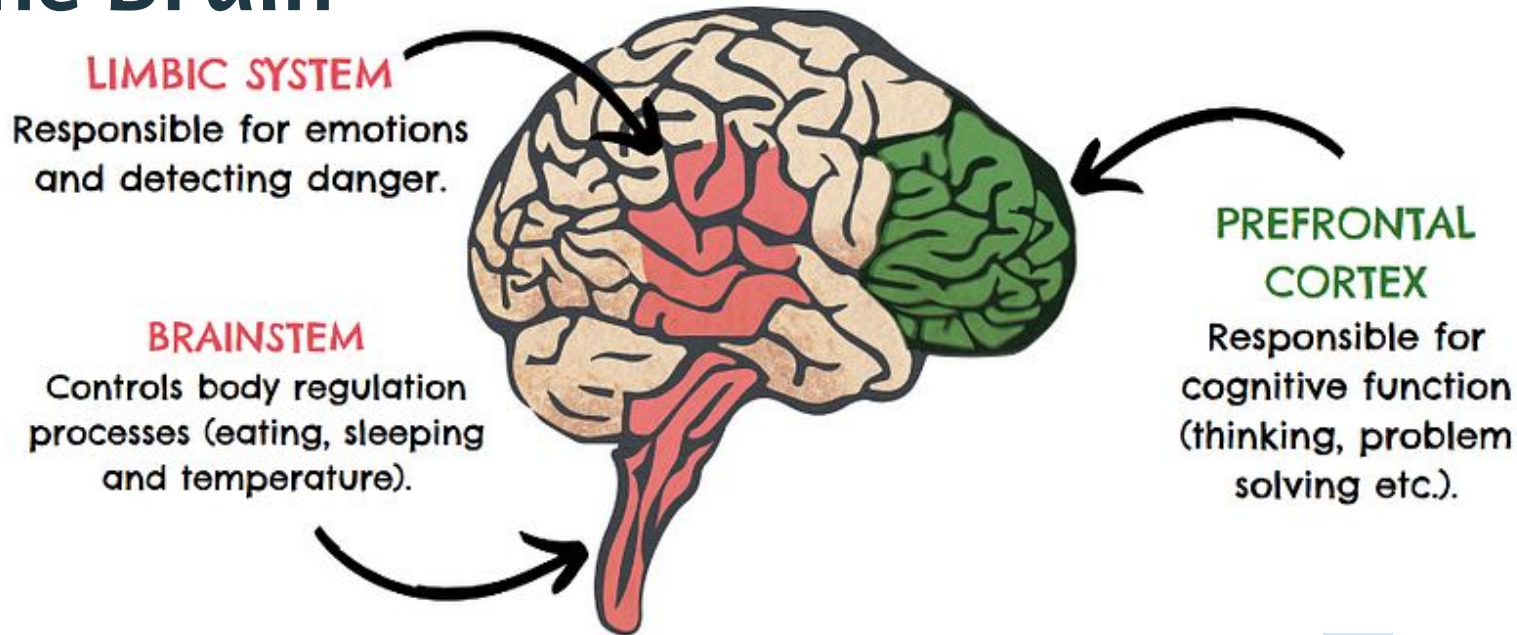
## Ko wai tatau?

# scenario cards





# The Brain



Childhood Trauma and Brain Development, n.d.)





# What is Trauma?

**Capital ‘T’ trauma**, or the experiences that likely come to mind for most people when thinking about trauma: abuse, neglect, natural disaster and death.

**Small ‘t’ trauma**, if prolonged, small ‘t’ trauma stressors activates stress response systems and leads to the very same changes in the brain as Big ‘T’ trauma (Brown & Perry, 2021).





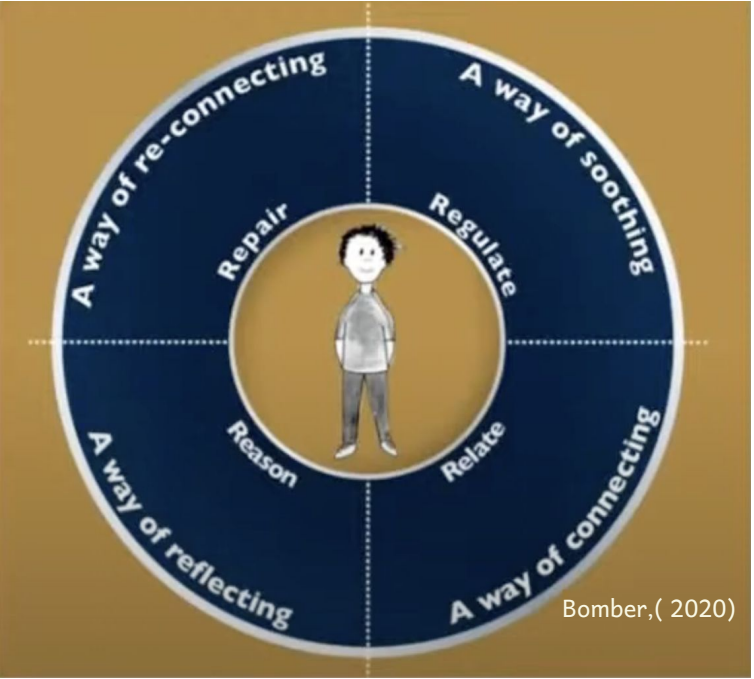
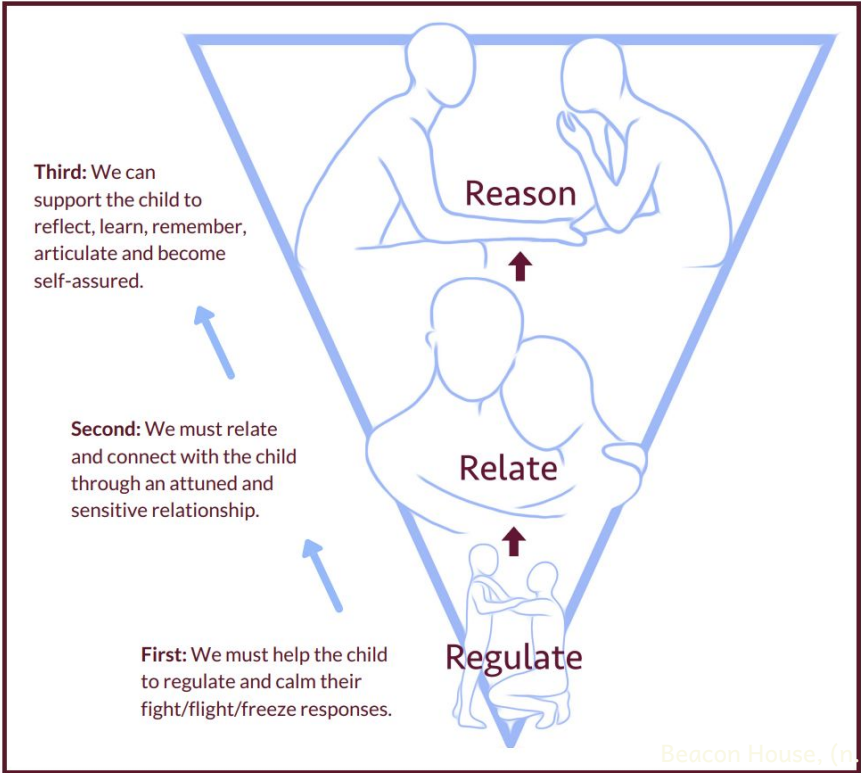


# Understanding the types of Trauma

Simple Trauma	Complex Trauma	Developmental Trauma	Intergenerational Trauma
<ul style="list-style-type: none"> <li>• Often single incidences</li> <li>• Less stigma associated with them</li> <li>• Potentially life threatening or could cause serious injury</li> <li>• Generally are supported by community responses</li> </ul>	<ul style="list-style-type: none"> <li>• Interpersonal threat, violence and violation</li> <li>• Multiple incidences - longer in duration</li> <li>• Almost always associated with stigma and sense of shame experienced by victims</li> <li>• Victims often feel a sense of isolation and a sense of betrayal</li> </ul>	<ul style="list-style-type: none"> <li>• Happens from a young age</li> <li>• Due to the brain still developing the impact is "...faster to manifest ...leaves deeper tracks of damage..."</li> <li>• Development can be slowed or impaired</li> <li>• This trauma undermines the very resource that can help children recover - stable and predictable relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Occurs when unresolved trauma experienced by a generation influences the behaviors, emotions, and even physiological responses of subsequent generations.</li> </ul>
<ul style="list-style-type: none"> <li>• Car crash</li> <li>• House fire</li> <li>• Bush fires</li> <li>• Earthquakes</li> <li>• Cyclones</li> </ul> <p>Australian Childhood Foundation, 2010</p>	<ul style="list-style-type: none"> <li>• Child abuse</li> <li>• Bullying</li> <li>• Domestic violence</li> <li>• Body violation</li> <li>• War</li> <li>• Imprisonment</li> </ul>	<ul style="list-style-type: none"> <li>• Neglect</li> <li>• Abuse</li> <li>• Living with family violence</li> <li>• High parental conflict in the context of separation or divorce</li> </ul>	<ul style="list-style-type: none"> <li>• <i>War or genocide</i></li> <li>• <i>Impact of colonisation</i></li> <li>• <i>Displacement, or forced migration</i></li> <li>• <i>Institutionalised racism,</i></li> <li>• <i>Poverty and family trauma</i></li> </ul>



# The 3 R's - Reaching the Learning Brain





# Repair - Six Principles

- Keep possible stressors low
- Keep shame possibilities low
- Remain warm, open and engaged

- Consider who else should be involved but keep the number as limited as possible: increasing the numbers of adults involved will increase shame
  - Be actively involved yourself, so that anything completed is in partnership
  - Always repair 1:1 or 2:1 ... you together with the child or young person, and when the time is right, with the individual who got offended or hurt.

## Insights Into Psychology

*Withdrawal*



*Avoidance*

## The Compass of Shame

Peterson, (2022)

Adapted from D.L. Nathanson, 1992

mentalhealthathome.org

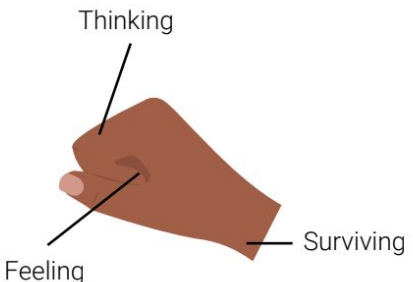
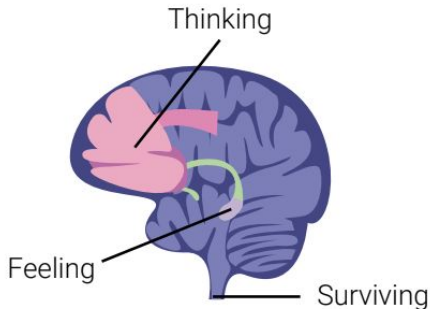


# Understanding behaviour: The trauma iceberg





# Trauma and the brain



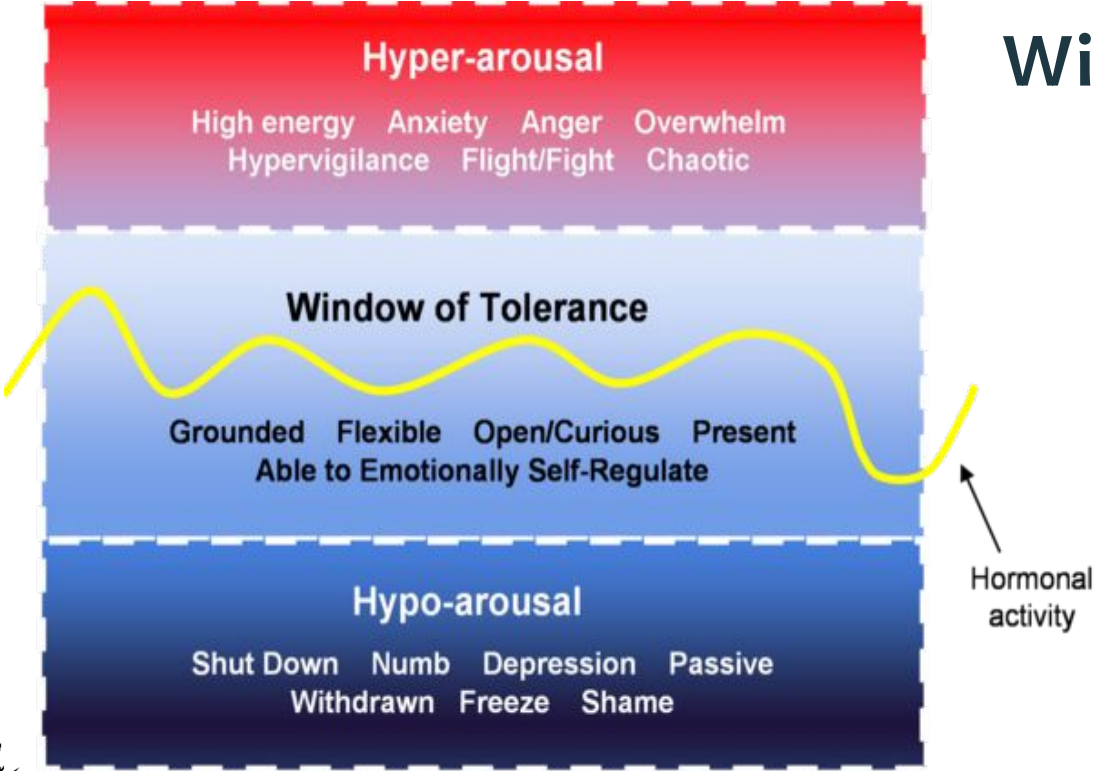
TRAILS, (2013) The Regents of the University of Michigan

(Anna Freud, 2020)





# Window of Tolerance





# Keeping the Survival Brain Calm

Kathryn Berkett's mnemonic acts as a prompt as to how we can support to keep the survival brain calm.

**S**ome  
**B**oys  
**H**ave  
**M**ulletts

**S**ee me...  
Show me I **B**elong ...  
Tell me what is **H**appening ...  
Enhance my **M**ana ...



## What are scripts?

- We can provide “I am...” statements to help rewire a thought process. (Schreurs, 2024. Personal Communication).

**I AM, YOU ARE, WE ARE**

<p><b>I am a reader</b></p> <p>You are a reader</p> <p>We are readers</p>	<p><b>I am a writer</b></p> <p>You are a writer</p> <p>We are writers</p>	<p><b>I am a creator</b></p> <p>You are a creator</p> <p>We are creators</p>	<p><b>I am a maths whiz</b></p> <p>You are a maths whiz</p> <p>We are maths whizzes</p>	<p><b>I am a friend</b></p> <p>You are a friend</p> <p>We are friends</p>
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- Social interactions are essentially negotiations in helping minds and bodies find safety (Bombèr, 2020). This can be done through the use of consistent scripts.
- “I am here” as our response shows kids we will be there for them whatever is happening and reminds us that our role is to help with those tricky feelings and not expect that they be pushed down (Garvey, 2024).

Examples	<h2>Sounds Like</h2> <p><i>Be specific</i></p>
<p><b>SEE</b> me</p>	<p>“Hi _____, it's great to see you today”</p> <p>“Hi _____, I missed you yesterday”</p> <p>“I am looking forward to hearing about _____.”</p> <p>“Great job at....”</p> <p>“Well done, you are back after the bell, where are you going to choose to sit?”</p>
<p>Show me I <b>BELONG</b></p>	<p>“I am so happy you are here, _____”</p> <p>“Why don't you show..... the amazing effort you put into ....”</p>
<p>Tell me what is <b>HAPPENING</b></p>	<p>“You have done a great job at....”</p> <p>“It's time to....”</p> <p>“When you have.... Then you can....”</p> <p>“Kai pai to mahi, you _____.”</p>
<p>Protect my <b>MANA</b> and allow me control.</p>	<p>“Show me where you would like to sit...”</p> <p>Remind me of the expectations of sitting at the table.... That's right, you need to ..... Awesome”</p> <p>“_____, I need your help.... Could you do me a big favour....?”</p> <p>“Tell me what you would like to do at break time...” (potential to add options here)</p>



EXAMPLES	Looks Like	Sounds Like <i>Be specific</i>
<u>SEE</u> me	<ul style="list-style-type: none"> <li>Adults smiling (a smile means I like you)</li> <li>Non verbal praise and communication (thumbs up, visuals etc)</li> <li>Providing positive feedback for everything that _____ does well (no matter how small it may be)</li> </ul>	<p>“Hi _____, it's great to see you today”</p> <p>“Hi _____, I missed you yesterday”</p> <p>“I am looking forward to hearing about _____.”</p> <p>“Great job at....”</p> <p>“Well done, you are back after the bell, where are you going to choose to sit?”</p>
Show me I <u>BELONG</u>	<ul style="list-style-type: none"> <li>Opportunity to connect with peer/s i.e sitting at table together</li> <li>Adults providing support</li> <li>Opportunities for celebrations</li> <li>Non-verbal for prosocial behaviours (thumbs up, smiling, high five)</li> </ul>	<p>“I am so happy you are here, _____”</p> <p>“Why don't you show..... the amazing effort you put into ....”</p>
Tell me what is <u>HAPPENING</u>	<ul style="list-style-type: none"> <li>Adult checking in and checking out at break times (two medals and a mission)</li> <li>Supporting transition back to space</li> <li>Universal visual (for the whole class) what to do after break time (supporting transition)</li> </ul>	<p>“You have done a great job at....”</p> <p>“It's time to....”</p> <p>“When you have.... Then you can....”</p> <p>“Kai pai to mahi, you _____.....”</p>
Protect my <u>MANA</u> and allow me control.	<ul style="list-style-type: none"> <li>Choice of where to sit i.e. sitting at the table (visual to support)</li> <li>Potentially a wobble stool or cushion for seating (movement seeking)</li> <li>Provide a job</li> </ul>	<p>“Show me where you would like to sit...”</p> <p>Remind me of the expectations of sitting at the table.... That's right, you need to ..... Awesome”</p> <p>“_____, I need your help.... Could you do me a big favour....?”</p> <p>“Tell me what you would like to do at break time...” (potential to add options here)</p>

# Keeping the Survival Brain Calm

EXAMPLES	Looks Like	Sounds Like <i>Be specific</i>
<u>SEE</u> me		
Show me I <u>BELONG</u>		
Tell me what is <u>HAPPENING</u>		
Protect my <u>MANA</u> and allow me control.		

te paeroa RTL B



refocus.  
refresh.  
reset

*as many times as you like*



# Break

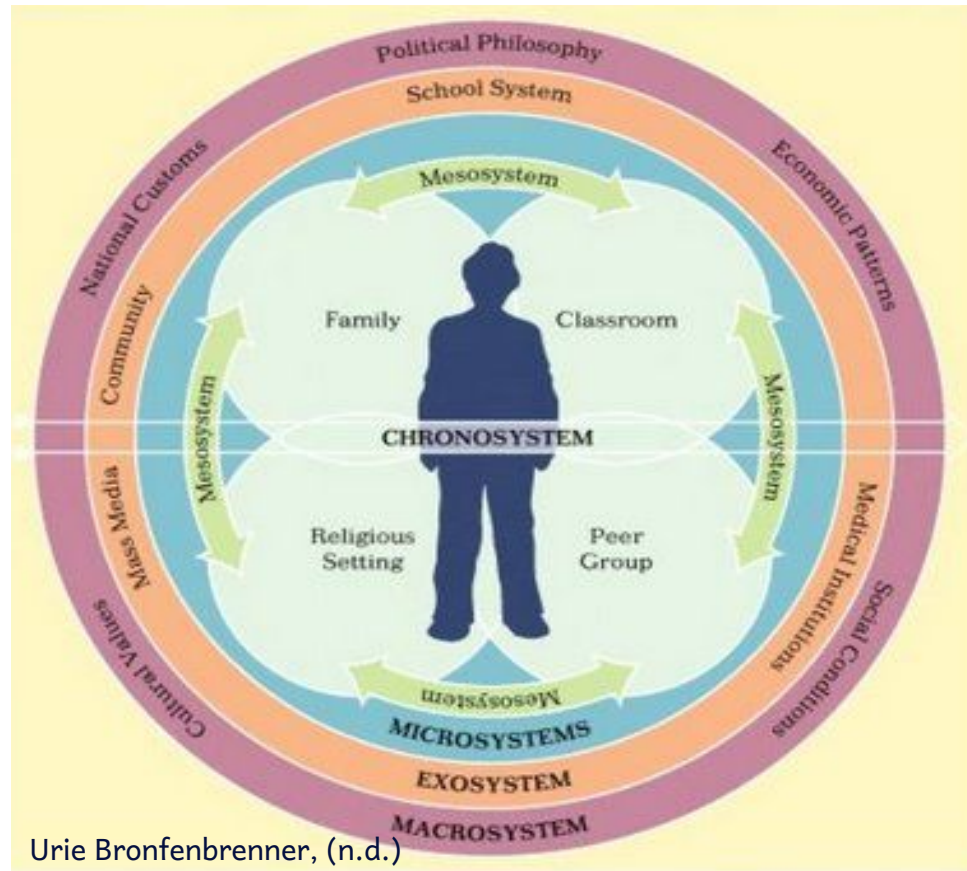




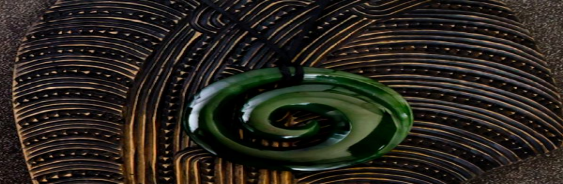
# Ecological View

- Holistic
- Consistency
- Consideration
- Transference
- Healing

(MOAT: Mental Health Services, 2023)



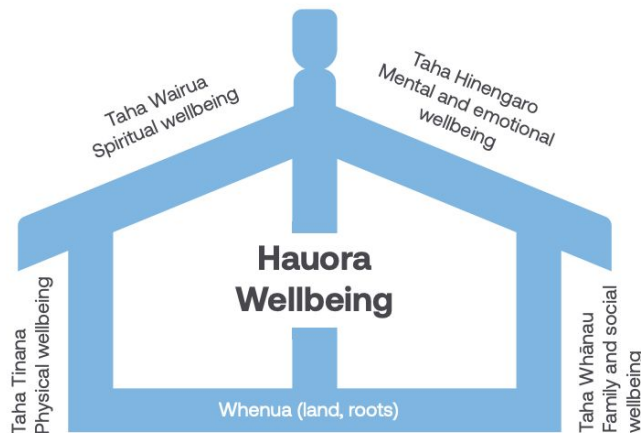
Urie Bronfenbrenner, (n.d.)



# Te Whare Tapa Whā

“Working in a trauma informed way means weaving together knowledge, understanding and responses. This includes people, culture, systems and organisations” (Te Rau Ora et al., n.d).

Te Whare Tapa Whā, which is based on the four interconnected aspects of wellbeing, provides a Māori perspective on health and offers a broad concept of wellbeing for everyone.



Durie, 1985

People's wellbeing depends on all aspects being in balance. When people experience trauma, this can impact all four aspects of their wellbeing.

(Te Rau Ora et al., n.d).

“We are chasing symptoms, not healing people.... pain, distress and dysfunction would arise from some form of fragmentation, disconnection, dyssynchrony...” (Perry and Winfrey, p.249, 2021)

Kaupapa Māori and trauma-informed approaches share common principles, emphasizing connection, holistic healing, and acknowledging the impact of trauma on individuals' overall well-being.



# Wellbeing Profile



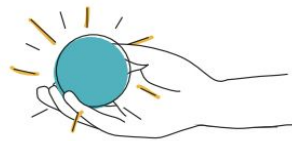


## Belonging

- Connection to people, land and culture
- Engage in kōrero with ākonga about who they are and where they come from, what they feel connected to and what they lean into for support
- Take shoes off, feel the grass beneath your feet or be in nature (outside)
- If there are changes to the learning environment ensure this is communicated
- Have a range of environmental supports to create predictability around expectations within the learning space and practise routines
- Use stories to link whenua to people e.g., Tāwhiri-mātea
- 'Anchor points'

(Australian Childhood Foundation, 2010).

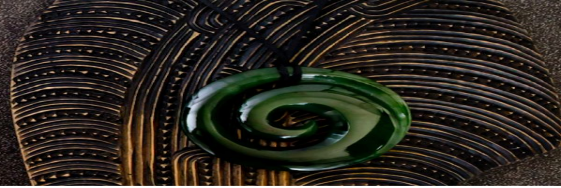
MORNING



Show and Tell

Reading and Writing

Recess



# Family and Social Wellbeing

- Take a genuine interest in who they are and where they come from
- Be mindful of the resources you use - know your learners
- Relationship building strategies
  - Greeting Choices
  - Two by Ten (Rohan, p.21, 2017); Praise:Prompt ratio (4:1); Check-in/check-out; Brain State Check-in
  - Identity web (Australian Childhood Foundation, 2010); Would you rather Qns
  - Let them know you think about them (drop and go statements)
- Humour
  - Share jokes and funny stories
  - Impromptu and fun experiences
- Opportunities to play and practise pro-social skills, supported by an adult providing explicit commentary, modelling or coaching
- Put the relationship first. “If the work doesn’t get done, but your relationship remains intact, then this will be an investment into the brighter days ahead” (Bombèr, 2020)

# Social Wellbeing

Apply **P.A.C.E**- Playfulness, Acceptance, Curiosity and Empathy

- **Playfulness**- creating an atmosphere of lightness and interest when you communicate joy.
- **Acceptance** - actively communicating that you accept the wishes, feelings, thoughts, urges, motives and perceptions that are underneath any outward behaviour.
- **Curiosity** - wondering about the meaning behind the behaviour for the individual and lets them know adults understand.
- **Empathy** - actively showing the child that the child's inner life is important to the adult and he or she wants to be with the child in her hard times.

Image sourced from: bMindful, (2024)

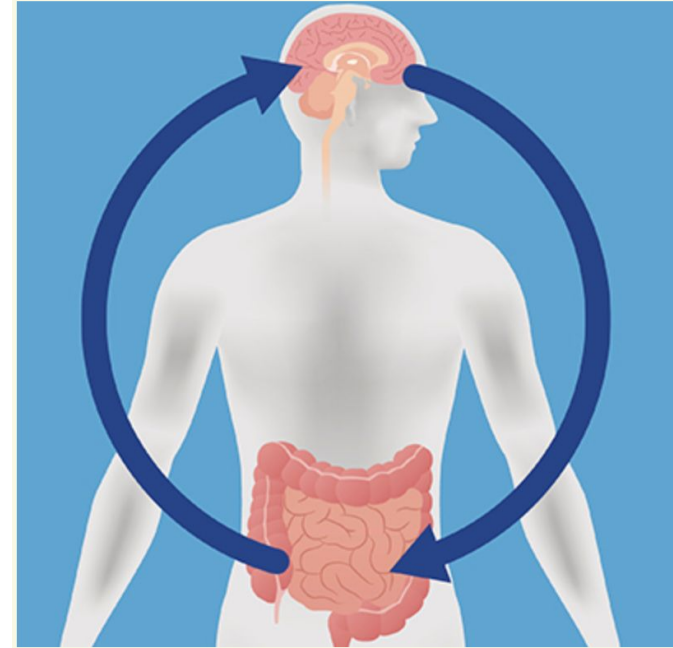




# Physical Wellbeing

“Did you know that the gut area has the largest collection of neurons found in the body outside of the brain? It gives endless feedback to our brains... a very significant organ in processing our emotions and contributing to our intuition,” (Bombèr, 2020).

- Take stomach issues seriously for traumatised children
- Support children in staying open to reading their body cues
- Sensory comforts are a great way to soothe bodies and nurture our vulnerable students. i.e. blankets, bean bags, wheat bags, warm drinks, ice packs



(Harvard Medical School, 2017)





# Physical Wellbeing

- Tolerable stress
  - Shooting hoops
  - Kapahaka
  - Competitive Sports/Games
- Include stretching, physically relaxing and rhythmic phases at predictable times each day
- Music
  - Drumming circles - relaxing and sense of release
  - Singing supports breath work and can soothe
- Movement and sensory breaks including interoception activities (Lean & Leslie, 2020), i.e. heavy work to support regulation
- Being mindful of the warmth our face and eyes portray to children as well as body language (Bombèr, 2020).
  - Children and young people are hypervigilant to these cues as they signal threat or danger.

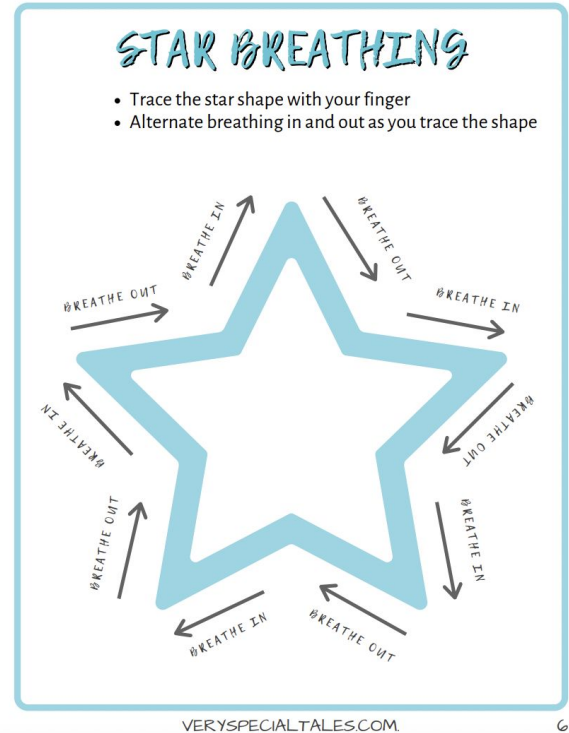


(Lean & Leslie, 2020)

# Personal Wellbeing

“Reset their baseline of internal stress and arousal levels in order to bring their cortex back online...”  
(Australian Childhood Foundation, 2010)

- Connecting to Whakapapa
- Mindfulness and Meditation - Sparklers videos
- Breathing Exercises - i.e blowing out each finger as if they were candles on a cake whilst counting in your head 10
- Practising Gratitude
- Provide a safe space and/or have a safe person a student can access if a situation is stressful or threatening



# Wellbeing Profile

Either discuss your strategies or gain new perspectives from others.





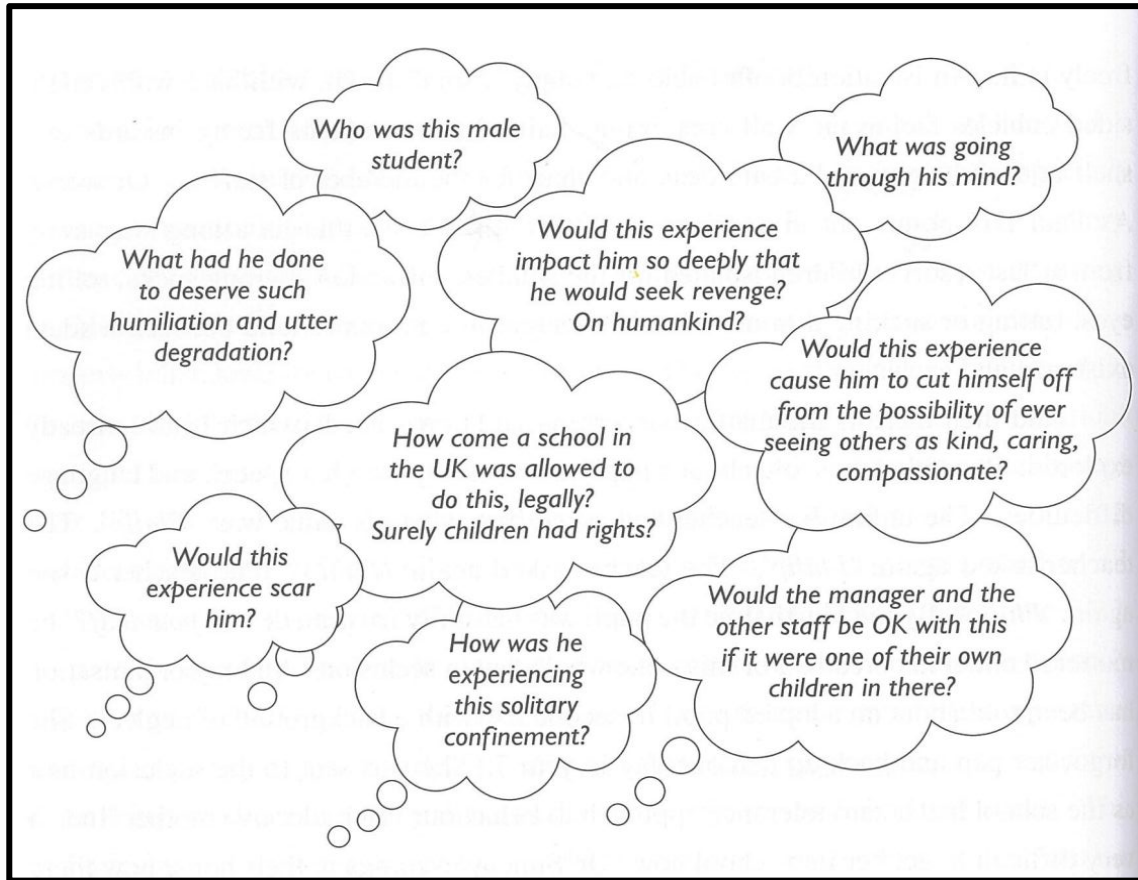
# Mental & Emotional Wellbeing

Remain curious “Your body is trying to tell us something, I wonder what it might be?” (Bombèr, 2020).

By remaining curious we are telling ākonga that...



(Bombèr, 2020)







# Mental & Emotional Wellbeing

## FIXED MINDSET

Intelligence is static

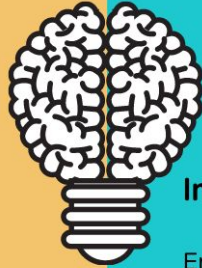
Avoid challenges

It's too hard

Expect reward without effort

Ignore feedback

Threatened by success of others



## GROWTH MINDSET

Intelligence can be developed

Embrace challenges

I can train my brain.

Effort is a path to mastery

Learn from feedback

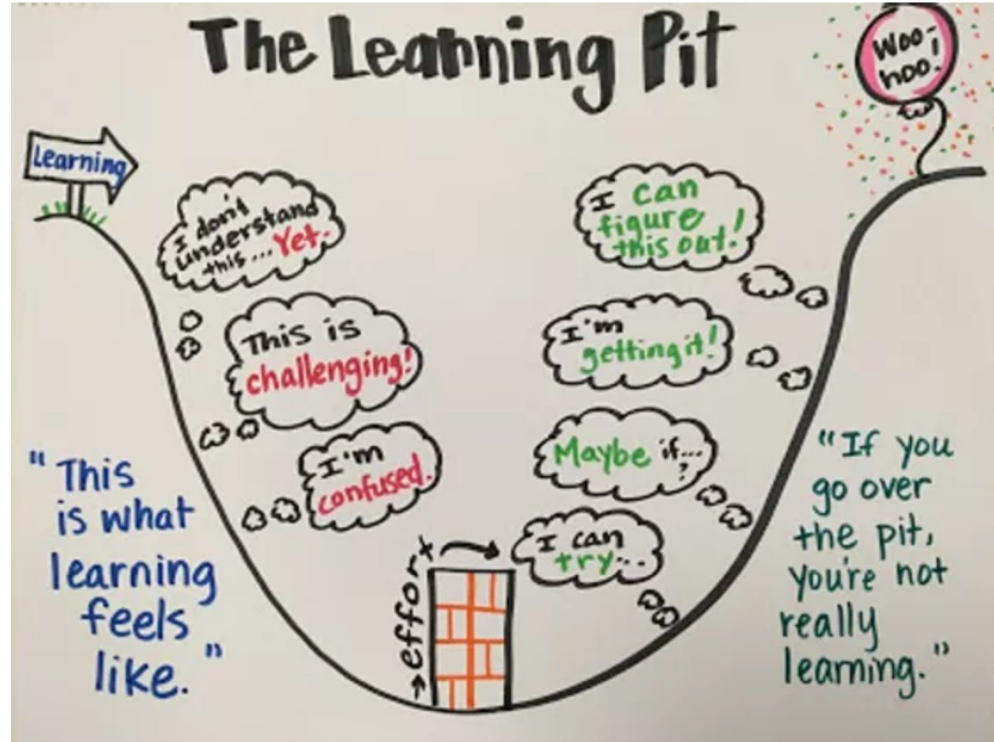
Inspired by success of others



Image sourced from:  
alterledger (2021)



# Mental & Emotional Wellbeing



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