



1

OVERVIEW

Brain development.	The hand model of the brain & state dependent functioning.	What is happening when a child becomes dysregulated?
How do we support children to stay regulated?	Proactive Strategies: <ul style="list-style-type: none"> • Classroom factors. • Dosing of regulatory activities. • Spacing of stress. 	De-escalation: <ul style="list-style-type: none"> • Regulate. • Relate. • Reason.

2

Brain Development


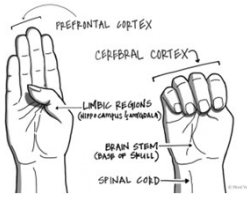
Brains are built like house- from the foundations up

<p>Cortex: 'upstairs brain', 'logic brain', 'learning brain', creativity, 'thinking', language, values, time, hope.</p> <p>Develops until the late 20s</p>	
<p>Limbic system: includes the amygdala and hippocampus, 'big feelings', 'cave man brain', 'mammalian brain', 'emotional brain', reward, memory, bonding, emotions.</p> <p>2-4 years</p>	
<p>Diencephalon (dai-uhh-seh-fuh-ion): arousal, sleep, appetite, movement.</p> <p>1-3 years</p>	
<p>Brainstem: basic life functions, 'reptilian brain', 'downstairs brain' heartbeat, temperature, breathing.</p> <p>Up to 8 months</p>	

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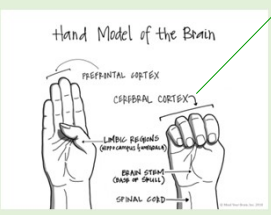
The hand model of the brain

Daniel Siegel

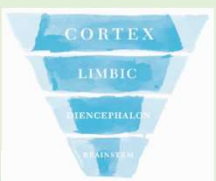



4

Regulated Child



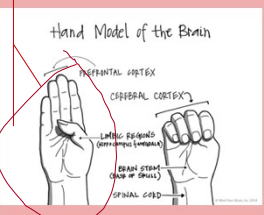
Integrative functioning (the high road):
 "a form of processing information that involves the higher, rational, reflective process of the mind (cortex). High road processing allows for mindfulness, flexibility in our responses and an integrating sense of self awareness. **The high road involves the prefrontal cortex and it's processes**"
 -Siegel and Hartzell




5

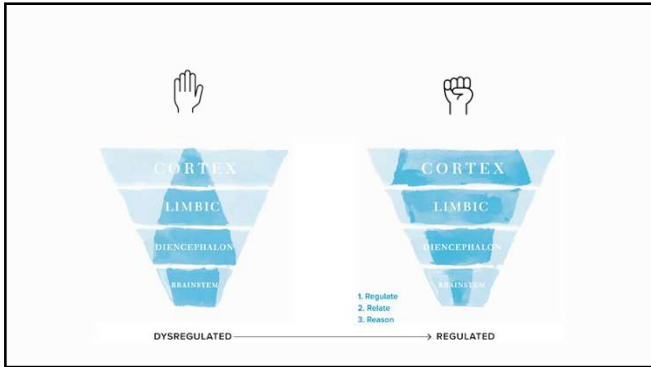
Dysregulated Child

Non-integrative functioning (the low road/Flipping your lid):
 "Low road functioning involves the shutting down of the higher processes of the mind and leaves the individual in a state of intense emotions, impulsive reactions, rigid and repetitive responses and lacking in self reflection and the consideration of another's point of view. **Involvement of the cortex is shut off when one is on the low road**"
 -Siegel and Hartzell






6



7

What is happening when a child becomes dysregulated?

Dysregulation is what happens when the child's brain and the body have swung into action in order to support survival. Resources are diverted from the non-essential functions in the cortex and are directed towards the survival responses coordinated in the lower parts of the brain- i.e. fight, flight, freeze. This can also be referred to as 'flipping your lid' or 'the low road'.



Responses that require the child to access their cortex- i.e., anything that requires language, thinking, reasoning or planning- are not possible when the child is in this state as the child does not have access to this part of their brain.

8



9

So, how do we support children to stay regulated?

10

Proactive Strategy: **Classroom Factors**

Consistency, predictability and reliability reduce stress. Consider:

Building positive relationships.

Classroom **structure and predictability**:


- Whole class visual schedule.
- Personalised 'now, next' visual.
- Follow the same routine as much as possible.

Support to manage **transitions**, i.e.

- Student shown on **visual schedule** or told, prior to the transition occurring: *where* they are going, *when* they are going there, *what* they will be doing, and *who* will be there?
- Student may benefit from being given count down warnings and **reminders** regarding the transition, i.e. 'remember, in 2 minutes we are going to start x'.

• 'The more familiar the routine, the more settled the child'

• - Making Space for Learning



11

Proactive Strategy: **'Dosing' of Regulatory Activities**


'Brainstem calmer activities', or PRBSA's (patterned, rhythmic, repetitive, somatosensory activities) work directly on the lower parts of the brain and do not require the higher order brain functions in order to have a calming effect. A therapeutic 'dose' is approximately **3 minutes**.

Activities include:

- Walking
- Tapping
- Drumming
- Music
- Singing
- Dancing
- Running
- Breathing
- Movement

Consider: it may be useful to consider 'dosing' students with one of these activities after/during every transition. You may find that the student requires doses more regularly than this, which is OK. Activities could be done at a whole class level.

Idea: brainstem calmer activities could be incorporated into brain breaks for a student.



12

"One of the most powerful sets of associations created *in utero* is the association between patterned repetitive rhythmic activity from maternal heart rate, and all the neural patterns of activity associated with not being hungry, not been thirsty, and feeling 'safe' (in the womb).

"Patterned, repetitive, rhythmic somatosensory activity... elicits a sensation of safety. Rhythm is regulating. All cultures have some form of patterned, repetitive rhythmic activity as part of their healing and mourning rituals – dancing, drumming, and swaying.

- Bruce Perry

13

Proactive Strategy: **Brainstem Calmers, continued**

Some ideas:

- Transitions: move in slow motion to come to the mat/put your books in your bag etc./move like a jellyfish/pretend you are an astronaut floating in outer space/move like a robot/ pretend you are a strand of spaghetti/ pretend you are a flower swaying in the wind.
- Mindful breathing.
- Yoga for children.
- Stretching.
- Singing, sing a 'packing up song'.
- drumming/ patting/ tapping children to copy you or another child who leads different beats and rhythms for them to copy.
- listen to a chime etc. on YouTube until the sound is quiet.

14



15

Proactive Strategy: **Spacing of Stress**

Stress is merely a demand on one or more of our physiological systems, i.e. hunger, thirst, exercise, completing a big task.

Stress is essential to health development and is essential in the building of resilience. It is the pattern of stress that determines if the stress is destructive or helpful.

Try not to schedule stressful activities one after the other. Wherever possible, give students a break after a stressful activity to engage with an activity that they find regulating.

NEUROSEQUENTIAL NETWORK

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16

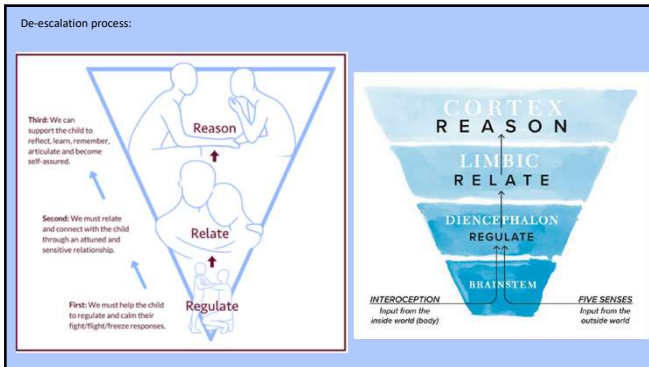
Proactive Strategy: **Spacing of Stress**

Consider modifying the inherent stressfulness of tasks and events wherever possible. In general, the higher the degree of the below stressors the event or task includes the more stress inducing the event or task will be. However, this will vary for child to child, so it is important to understand what each student finds stressful.

17

DE-ESCALATION

18



19



20

Regulate:

Co-regulation

- Use your calm to help students to calm down when they are becoming dysregulated
- Mirror neurons are the 'see it, do it' or 'see it, feel it' neurons in our brain responsible for the contagion of emotional states. Knowing this, we recognise that in the presence of someone who is dysregulated our nervous system will begin to become dysregulated too. If we can pause to focus on calming ourselves, this in and of itself is a fantastic calming strategy- called co-regulation.

WHEN THEIR STORM MEETS OUR CALM

CO-REGULATION OCCURS

21

Regulate:

Co-regulation

Reactive child and well-regulated adult (e.g. teacher)

Present, parallel, patient, persistent – facilitate multisensory, multi-domain, repetitive activity

Rhythm & Relationships = Regulation

Child

Adult

Time

Terror
Fear
Alarm
Alert
Calm

"When our little people are overwhelmed by big emotions, it's our job to share our calm, not join their chaos."
 - L.R. Knost

22

Repeated experiences of co-regulation over time 'teach' the child's nervous system how to de-escalate. Over an extended period of time, the child may gain the ability to self regulate.

23

Regulate: **Co-regulation, how to:**

- Remember that in the presence of someone with a **dysregulated nervous system our nervous system begins to become dysregulated too.**
- Pause, and notice your own body. **WHERE** can you **FEEL your stress rising?** Is it a lump in your throat, a heaviness in your chest, or a pit in your stomach? Do you feel hot, have your thoughts started racing?
- If you need to take a **break** before helping the child and have someone else support them, do so. If you are not the best person to help the child today, that is OK.
- Make an effort to **calm your nervous system.** Ideas:
 - Focus on **BREATHING**, deep controlled breaths in, with an emphasis on producing a longer out-breath through your mouth. Try to breathe into your stomach rather than your chest (this is called *diaphragmatic breathing*)
 - Try the **physiological sigh** (inhale, but before you get to the top of the inhale take another quick breath in, then a deep exhale).
 - Sigh.
 - You may like to **hum** to yourself.
 - Try a **grounding exercise** (wiggle your toes, notice the sensation of your feet in your shoes, notice if what you are sitting on is hard or soft, massage your hands, etc.)
 - Try to notice the entire visual field, with yourself in it.
- MANTRAS** can be very useful in the moment to help us reframe a child's behavior, move our brain to a sense of safety, and in helping us respond more compassionately. e.g. "this child is not giving me a hard time, they are having a hard time", "I can be present in this moment and this moment shall pass", "I can handle this".
- Consider your physical proximity to the distressed child.** Avoid crowding or looming over them. You may need to take a few steps back and sit on the ground or on a chair so that you are at their level.
- Slow down your movements.
- Slow down your rate and volume of speech. Use a calm tone of voice.
- If you would like to say something, you could let the child know you are there for them when they are ready for you, and/or that they are safe.

x Do not raise your voice or shout, and avoid 'no', and 'stop', and 'don't' - these words activate the stress response.

24

Regulate:

Initiate a brainstem calmer activity

The illustration shows a human silhouette with the brainstem highlighted in blue. To the left, there are three icons: a drum labeled 'drumming', a person dancing labeled 'dancing', and a musical note labeled 'music'.

25

“The only way to move from these super-high anxiety states, to calmer more cognitive states, is rhythm.

Patterned, repetitive rhythmic activity: walking, running, dancing, singing, repetitive meditative breathing – you use brain stem-related somatosensory networks which make your brain accessible to relational (limbic brain) reward and cortical thinking”

– Bruce Perry

26

Regulate:

If necessary, give the child **SPACE and TIME** to regulate. If they have a calm down space, you can invite them to access it. You may invite a child to use a calming strategy.

Note: even when the child looks calm, they may still be dysregulated. As a general guide, give them more time than you think they need to calm down.

You can also **model the use of a calming strategy**, e.g. 'I feel stressed, I am going to take deep breaths in and out'.

x Do not raise your voice or shout, and avoid 'no', and 'stop', and 'don't'.

27

Regulate:

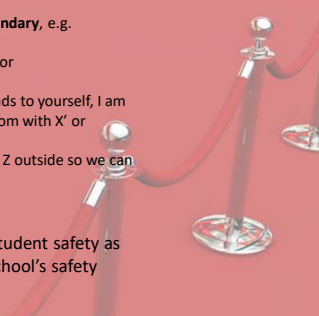
If safety is becoming a concern, **enforce a boundary**, e.g.

'it's ok to be frustrated, but it's not OK to hit', or

'I see you are having trouble keeping your hands to yourself, I am going to ask these students to exit the classroom with X' or

'Y doesn't feel safe, we are going to follow Mr Z outside so we can give them space to feel safe again'.

For bigger emotions, ensure staff and student safety as the number one priority. Follow your school's safety procedures and policies.



28

Co-regulation for bigger emotions

- Remember that in the presence of someone with a **dysregulated nervous system our nervous system begins to become dysregulated too.**
- Pause, and notice your own body. **WHERE** can you **FEEL** your stress rising? Is it a lump in your throat, a heaviness in your chest, or a pit in your stomach? Do you feel hot, have your thoughts started racing?
- If you need to take a **break** before helping the child and have someone else support them, do so. If you are not the best person to help the child today, that is OK.
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- Slow down your movements.
- Slow down your rate and volume of speech. Use a calm tone of voice.
- If you would like to say something, you could let the child know you are there for them when they are ready for you, and/or that they are safe.
 - Do not raise your voice or shout, and avoid 'no', and 'stop', and 'don't!' - these words activate the stress response.

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- Take steps backwards physically and/or mentally.
- Sit down or lean against a wall.
- Stand with your body slightly away from the child.
- Avoid physical contact.

29


RELATE

30

Relate, for smaller emotions:

Try **emotion coaching**:

1. Identify the feeling. 'I wonder if you're feeling nervous about doing your show and tell today?'
2. Validate the feeling. 'It's OK to be nervous. Talking in front of a big group can feel a bit scary if you haven't done it before.'
3. Support problem solving. 'Hmmm. I wonder what we could do to help you feel less nervous?' Brainstorm some solutions together (discussed further in 'Reason' section of presentation).



31

Relate, for bigger emotions:

Empathise and validate the child's emotions using less language, e.g. 'this is hard for you', 'it's ok to be upset', or **narrate** 'you really want to do x'.

Try a **1 liner**:

- 'I hear you', 'I know', 'thank you for sharing that with me', 'you want to play with x'.

Limit language use to only what is necessary.

32

REASON

33

Reason:

Try **indirect no** AKA **yes/no/yes sandwich**:

- "wouldn't it be so fun if we could play with the dinosaurs now? I love playing dinosaurs too! Right now we are doing x, we can play with the dinosaurs after that! Which dinosaur will you use?"

Try **controlled choices**:

- i.e. 'do you want to put the dinosaur in your locker or on the shelf so we can use it later?'

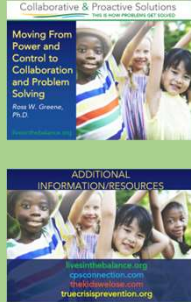



34

Reason:

Try **Collaborative problem solving**:

1. **Define the problem:** e.g. 'student is having difficulty coming back into the classroom after recess and lunch.'
2. **The empathy step:** gather information from the child to determine what is making it hard for them to meet the expectation: e.g. 'I've noticed that it is difficult for you to come back into the classroom after recess and lunch, what's up?'
3. **Define the adult's concern step:** Usually the adult's concern is:
 - How the problem is affecting the child (health, safety, -learning).
 - How the problem is affecting others (health, safety, learning).
4. **The invitation step:** collaborate on a solution that is realistic and mutually satisfactory, e.g. 'I wonder if there's a way to do something about (the child's concerns) and also do something about (the adult's concerns)? Invite the child to generate ideas first 'do you have any ideas?'
5. **Evaluate the solution:** does it address child's concern? Does it address the adult's concern? Is it doable/realistic?
6. Try out the solution, evaluate as necessary, repeat steps as needed.



35

PROBLEM-SOLVING CHEAT SHEET Collaborative & Proactive Solutions

THE POINT OF THIS SHEET IS TO PROVIDE YOU WITH A QUICK REFERENCE TOOL TO USE WHEN YOU ARE FACED WITH A CHALLENGING PROBLEM. IT IS NOT MEANT TO REPLACE YOUR OWN JUDGMENT AND EXPERIENCE. IT IS A GUIDE TO HELP YOU THINK THROUGH A PROBLEM AND TO ASK YOURSELF THE RIGHT QUESTIONS AT THE RIGHT TIME.

EMPATHY - The key to collaborative problem solving is understanding the child's perspective. Ask the child what is making it hard for them to meet the expectation. Listen to their story and validate their feelings.

ADULT CONCERN - Identify the adult's concern. Is it about the child's health, safety, or learning? Is it about the child's behavior affecting others?

INVITATION - Invite the child to generate ideas. Ask them what they think would solve the problem. Listen to their ideas and look for common ground.

EVALUATION - Evaluate the child's ideas. Are they realistic? Do they address both the child's and adult's concerns? If not, invite the child to generate more ideas.

TRYING OUT - Try out the solution. Give the child a chance to try their idea. Monitor their progress and provide support as needed.

REPEAT - If the solution does not work, repeat the process. Collaborative problem solving is an iterative process.

PROFESSIONAL DEVELOPMENT - For more information, visit the website: www.collaborativesolutions.com

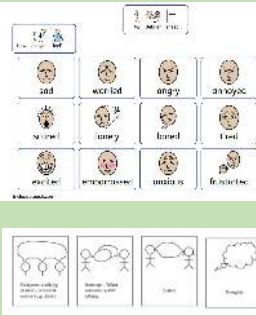


36

Reason- Re-entry and restart:

Incident debriefing

- If you are trying to **unpack what happened**: consider using visuals, comic strip conversations, and/or figurines to support The child's recall of the event.
- If you are trying to build the child's **comprehension skills**: use figurines, objects, visuals and/or comic strip conversations to support the child's comprehension. When using comic strips sequence the events in blocks- what happened first (e.g. where was this person, where were you?) what happened next e.g. (what did they say, what did you do?) There may be gaps in The child's recall which you can add to the comic strip in a different colour 'oh gosh that is really interesting because I saw it differently, that is OK because that is your understanding and this is my understanding, and our understandings are different'. This may help to increase the child's comprehension and psychological flexibility and ability to understand that two people can have different experiences.




37

Reason- Re-entry and restart:

- If you are trying to **problem solve safer behaviour for next time**: 'It's ok to feel frustrated, but it isn't ok to hit. What can we do next time instead of hitting? Let's practise'. Practice safer behaviour while The child is calm. Role plays can be useful- the adult can first model an adaptive response for The child, then have him practice himself.

Idea: use a mouse, a dog, and a lion figurine to help guide the discussion around adaptive responses to frustration. The mouse represents frightened responses, the dog represents positive responses, and the lion represents unsafe responses. Help The child figure out what each animal would do. The goal is to come up with a positive response that would be useful for next time.

- If you are trying to **repair relationships**: 'I noticed that x looks upset *share observations*. What could we do to help them feel better?' **Note**: encouraging apologies does not tend to help children learn empathy. A more helpful approach is to engage in problem solving collaboratively around what could be done to help other's feel better.



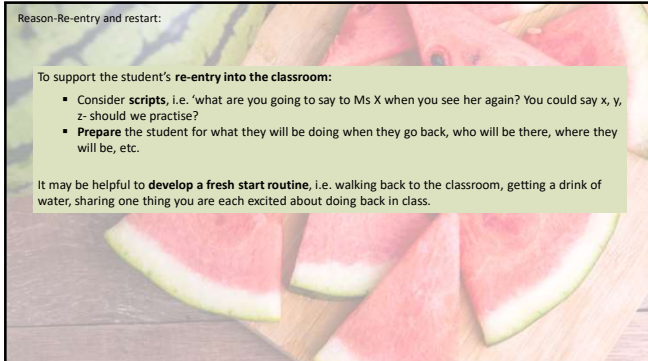
38

Reason- Re-entry and restart:

To support the student's **re-entry into the classroom**:

- Consider **scripts**, i.e. 'what are you going to say to Ms X when you see her again? You could say x, y, z- should we practise?
- Prepare** the student for what they will be doing when they go back, who will be there, where they will be, etc.

It may be helpful to **develop a fresh start routine**, i.e. walking back to the classroom, getting a drink of water, sharing one thing you are each excited about doing back in class.



39

QUESTIONS?

THANK YOU FOR YOUR TIME!

40

References and Additional Resources

[Think:Kids - Collaborative Problem Solving® \(thinkkids.org\)](https://www.thinkkids.org/)
[Hand BBrain https://youtu.be/qFTIjLo1bK8](https://youtu.be/qFTIjLo1bK8)

41
