



The Trauma- Informed Classroom

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LAKE SIDE



Objectives

- Discuss how students' brains operate and why they don't always work as we expect
- Create a new lens to view students through, specifically in terms of their classroom behaviors
- Provide strategies and interventions to utilize with your students.
- Equip you with the necessary information to create countless strategies that will work with your students



Fidgets

- The brain loves movement, big or small, the brain thrives off it
- Different fidgets offer different textures which can be calming to the brain
- Fidgets create pretty mindless entertainment, that can actually improve attention rather than distracting



Brain Breaks

- Just that, an opportunity for the brain to take a break from whatever you may be focusing on at that time.
- Typically 2-5 minutes, but can be longer or shorter dependent on activity or needs of students.
- Choose your breaks based upon the needs of the students at that time.



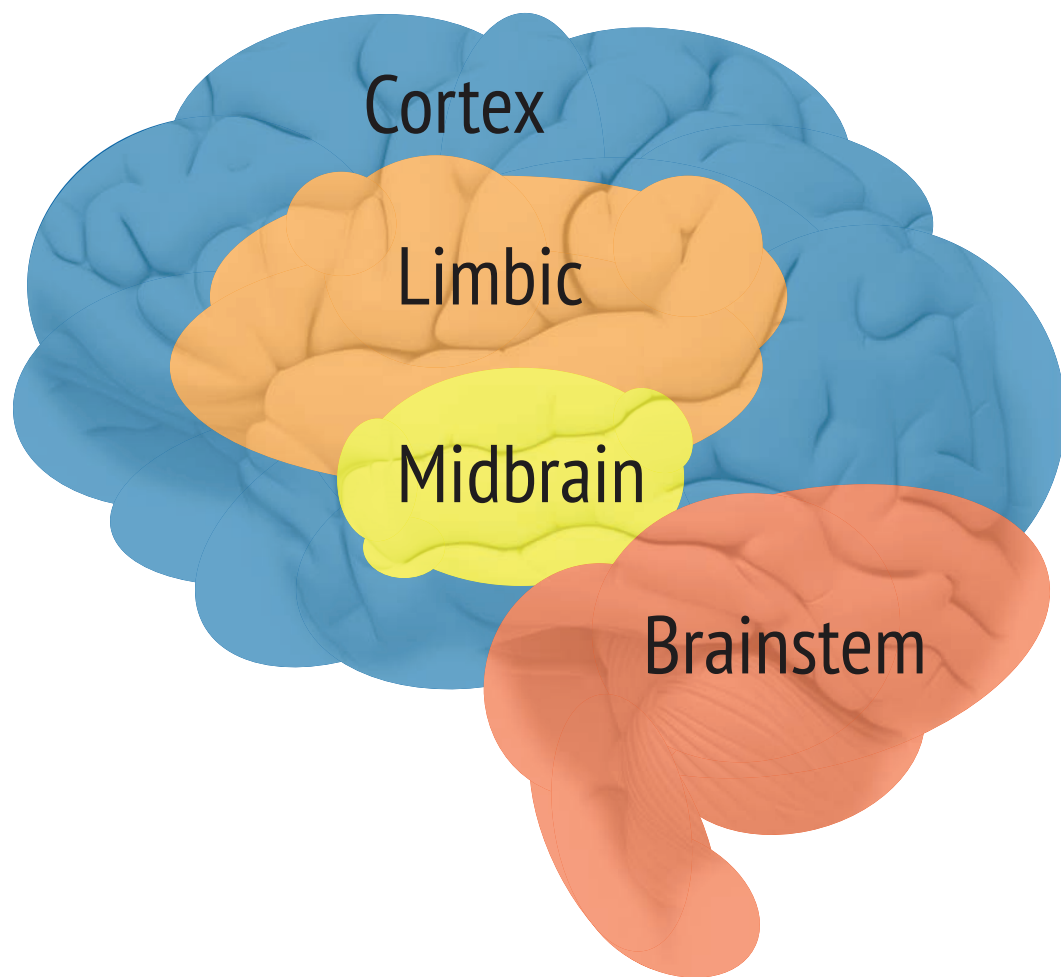
Taking Pulse



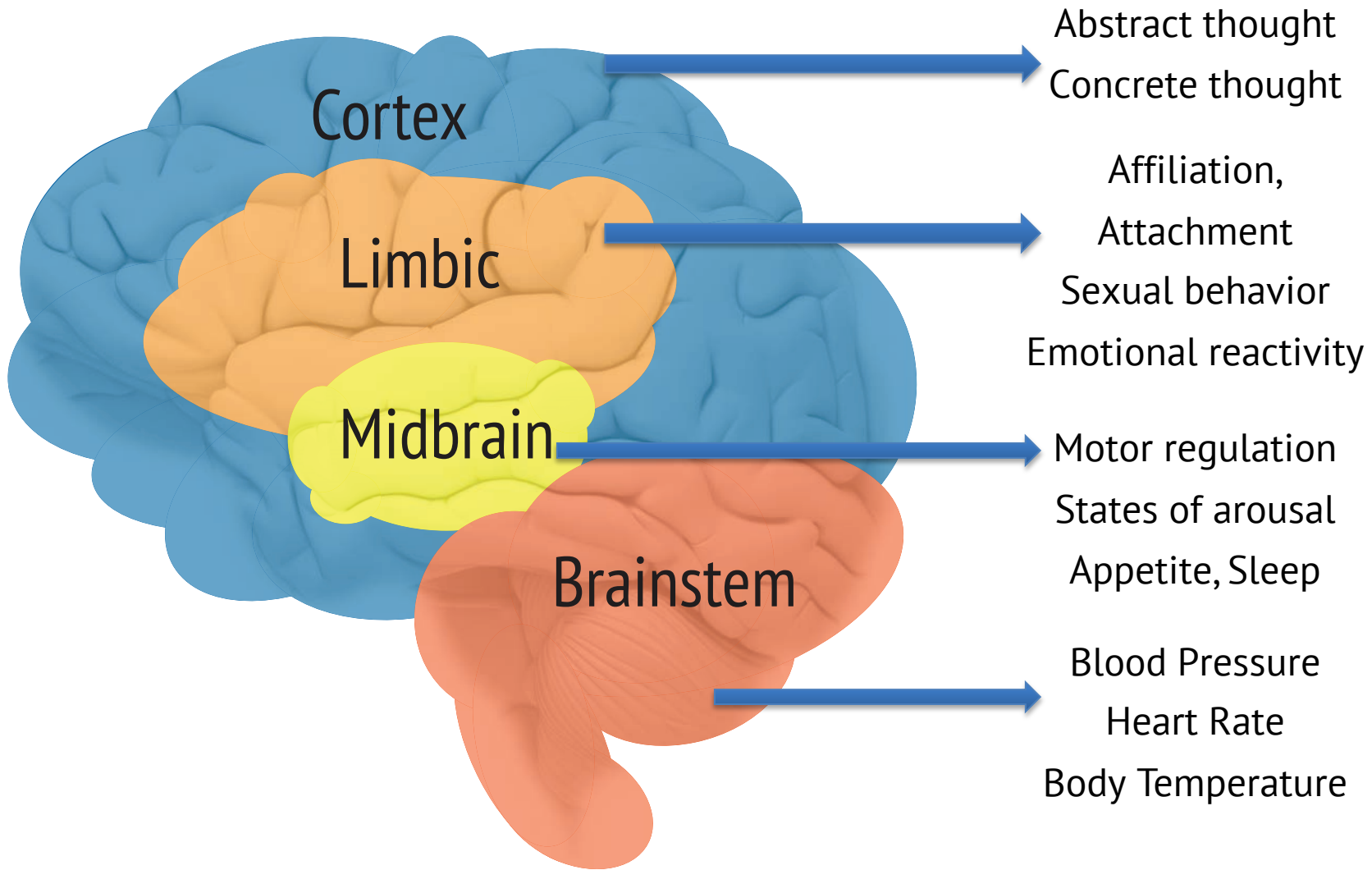


Breathing

- Belly Breathing vs. Chest Breathing
- 10 times more air into your body!
- Brain thrives on rhythmic breathing
- Calm breathing promotes a calmer brain
- Any focus you can bring to breathing will promote brain health



The brain
develops from the
bottom up and
inside out.





ACES Study

- Center for Disease Control and Kaiser Permanente HMO
- Started in 1995 with long-term follow up on health outcomes
- Over 17,000 people in suburbs of California
- Mostly white, upper-middle class, college educated with jobs and great health care.
- 2013 ACE study done on Philadelphia residents



ACES Study

Asked 10 questions about things that happened to children directly:

- physical, sexual or verbal abuse and emotional neglect

And things that happened in their families

- Loss of parent, addiction, mental illness, prison, divorce, witnessing abuse

The number of yes's determined their ACE score



Researchers Measured:

1. Physical abuse
2. Sexual abuse
3. Verbal abuse
4. Physical neglect
5. Emotional neglect
6. A family member who is depressed or diagnosed with other mental illness
7. A family member who is addicted to alcohol or another substance
8. A family member who is in prison
9. Witnessing a mother being abused
10. Losing a parent to separation, divorce or other reason



ACE Study - The Effects of Toxic Stress

Results compared to adults with zero (0) ACEs:

Four or more ACEs: 2x more likely to smoke; 7x to be alcoholic; 7x sex before 15 yrs of age; 2x diagnosed with cancer, heart or liver disease

Five or more: 40x to used illicit drugs

Six or more: 30x more likely to attempt suicide

Seven or more: 360x more likely for heart disease even if they didn't smoke, drink excessively or were overweight



Why are ACEs significant?

ACEs are common – nearly two-thirds (64%) of adults have at least one.

ACEs don't occur alone – if you have one, there's an 87% chance that you have two or more.

ACEs cause adult onset of chronic disease as well as mental illness, violence and being a victim of violence.

ACEs can have a significant impact on children's ability to be successful in school.

For more information: Visit ACEStoohigh.com



How Trauma Can Impact the Brain

- 💧 Children who experience trauma can become either dissociative or hyper-vigilant.
- 💧 Because of over-stimulation that leads to excess brain wiring, there is often greater density in the brainstem and mid-brain
- 💧 In traumatized children there is less cortical modulation and in some cases a smaller cortical area
- 💧 Unresolved trauma can prevent children from learning to regulate emotions and from being calm and focused enough to learn.



How often do you say or think:

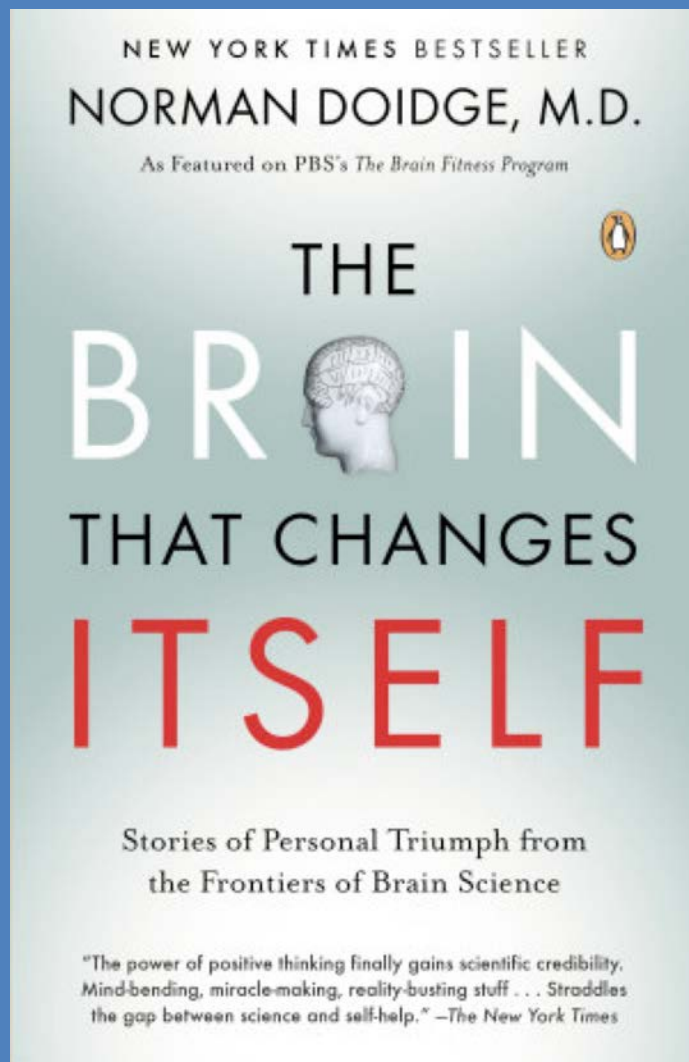
What's wrong with you?

It turns out the better question is:

What could have happened to cause someone to react this way?

And even more important:

What can we do to help you?



An Example of Plasticity



Brain States

- A guide to understanding how students are doing based on what part of their brain they are primarily operating from.
- We all move through brain states based on our assessment of threat and safety in any given situation.
- There is no cut and dry divide between brain states, they are a continuum that everyone moves through



B R A I N S T A T E

Cortex ●

Calm / Alert

Limbic ●

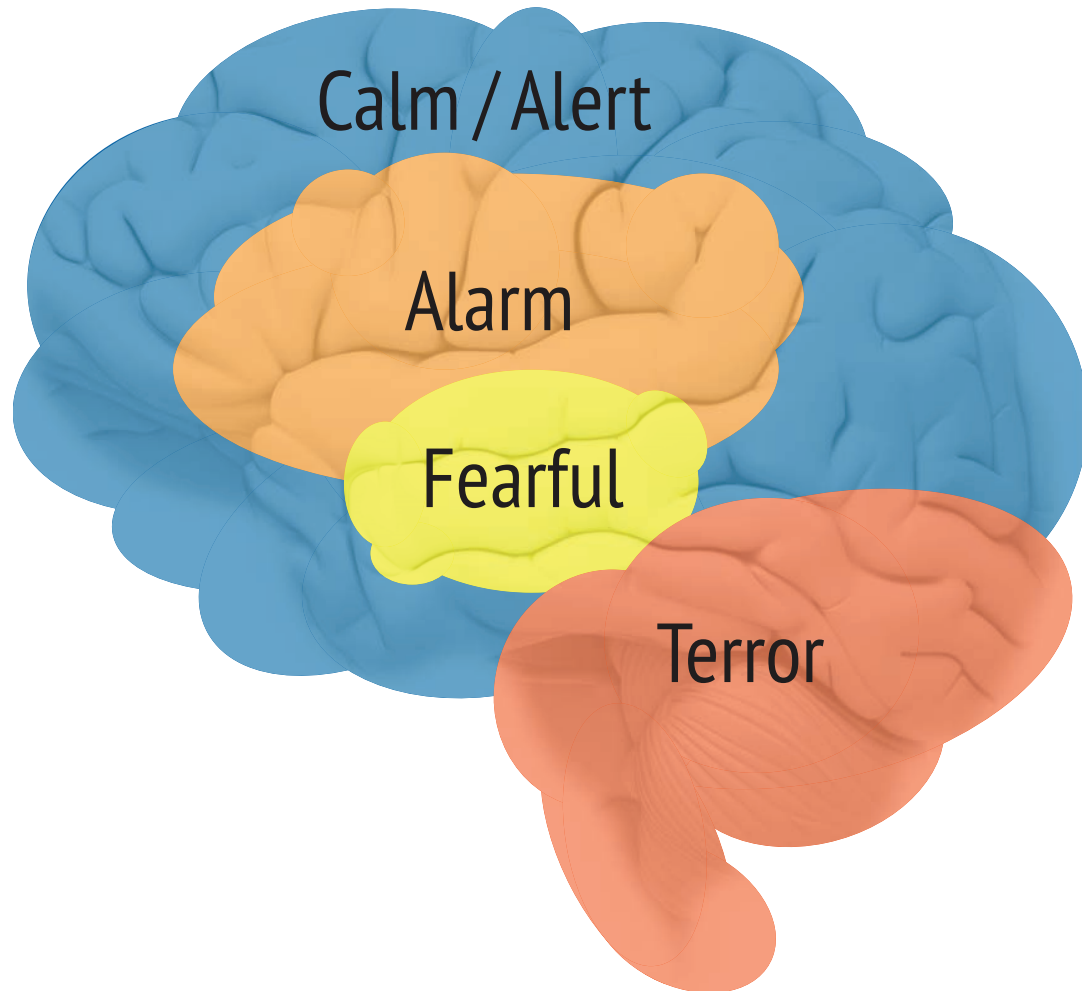
Alarm

Midbrain ●

Fearful

Brainstem ●

Terror



T H I N K I N G

Abstract / Creative

Concrete

Emotional

Reactive

Reflexive



FUNCTIONING IQ

Calm / Alert

110-100

Alarm

100-90

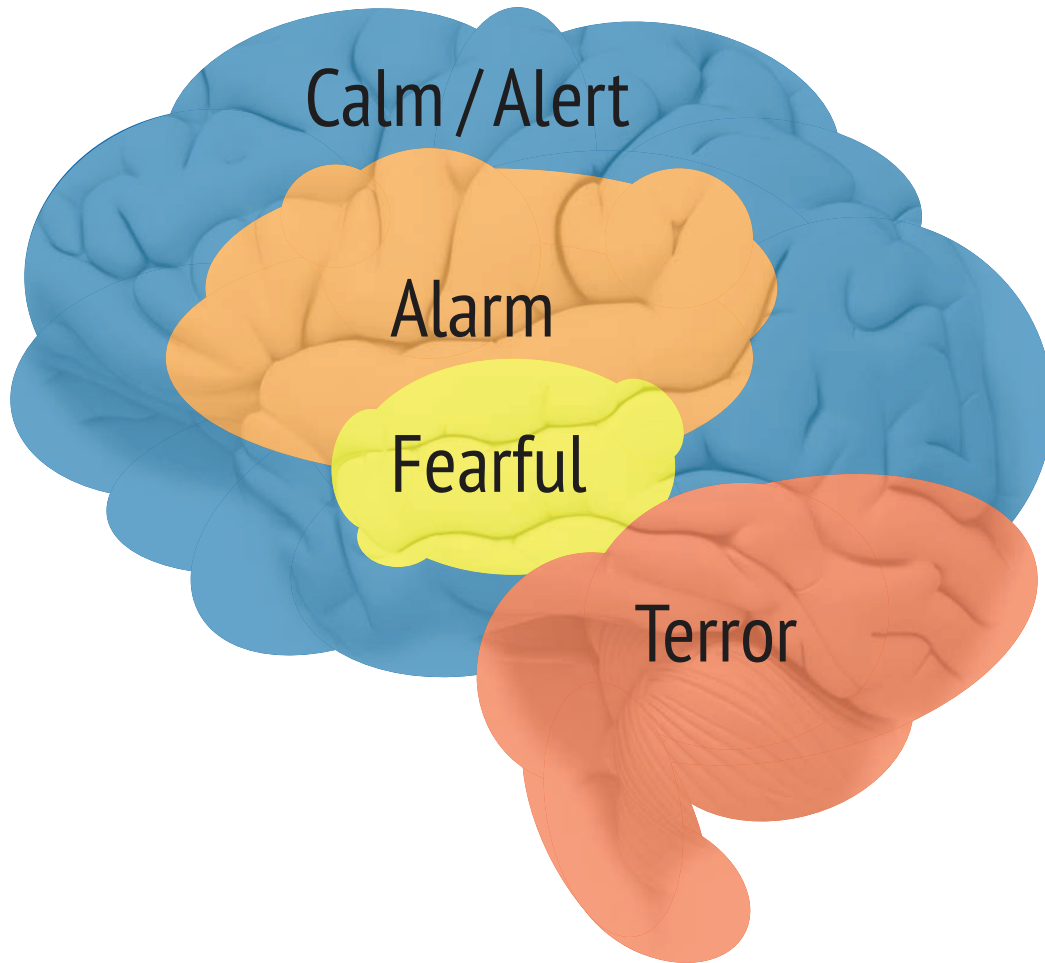
Fearful

90-80

Terror

80-70

70-60



H E A R T R A T E

70-90

90-100

101-110

111-135

136-160



Calm / Alert

Alarm

Fearful

Terror

S E N S E O F T I M E

Future

Week / Day

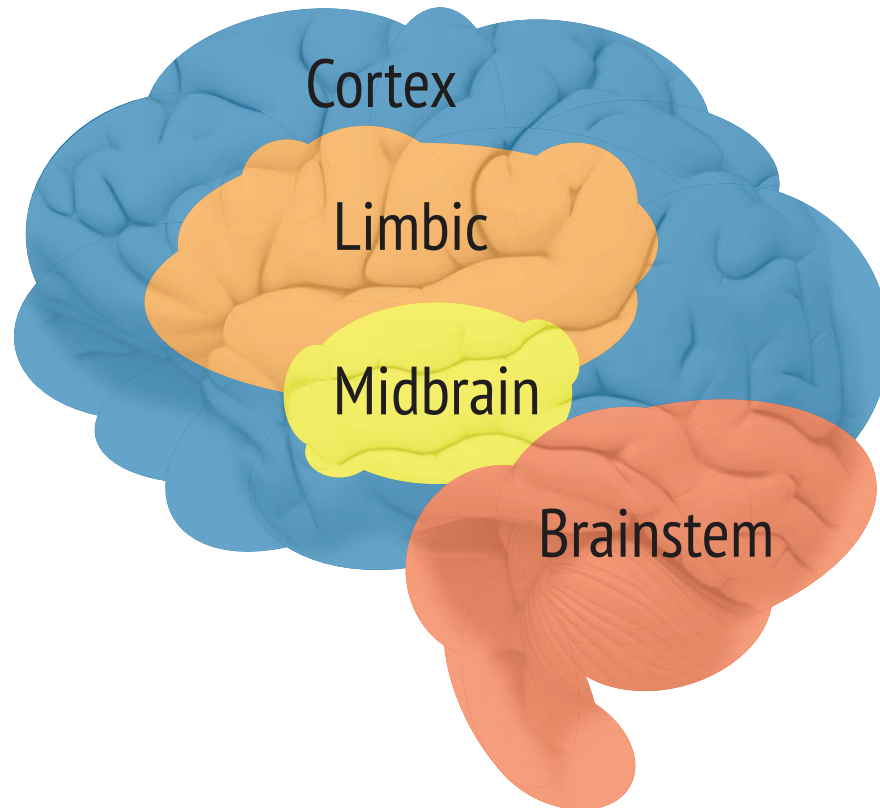
Hours / Minutes

Minutes / Seconds

Loss of sense of time



SPHERE OF CONCERN



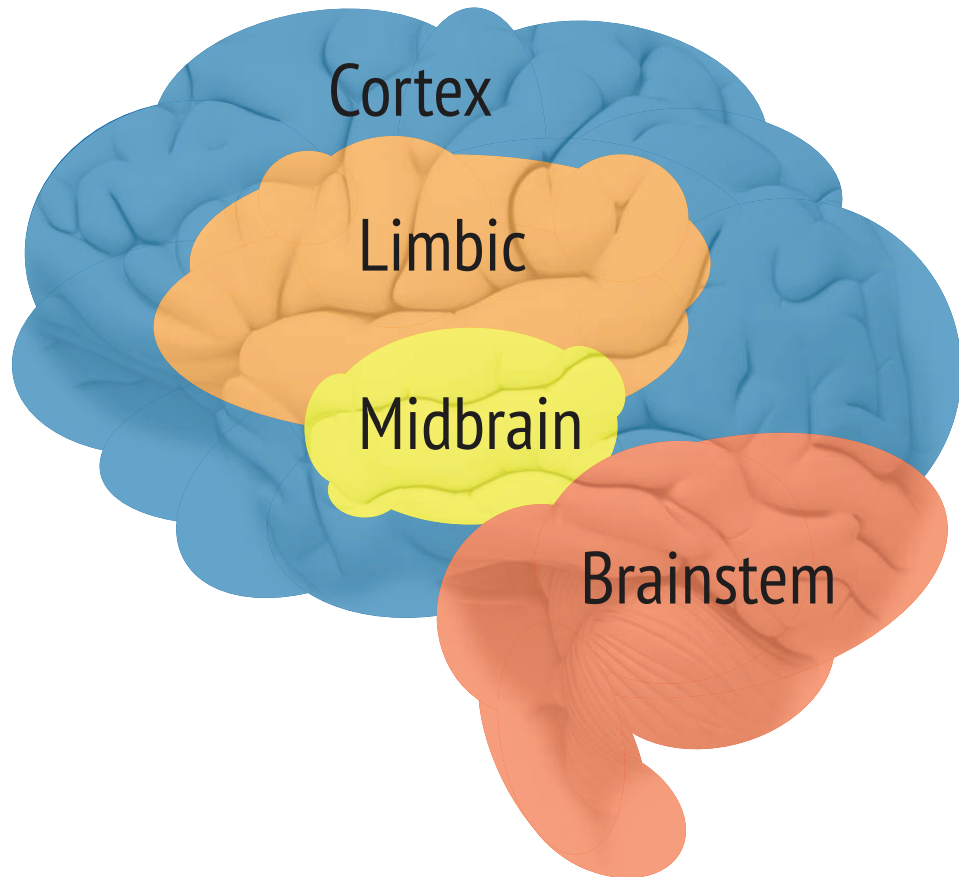
World

Community

Family

Self

Body Integrity



R E W A R D S

Beliefs

Relational

Sweet, Salt, Fat, Sex

Relief of Distress

Rocking, Self soothing



Regulation

Practical definition- The ability to put time and thought between a feeling and a reaction



Role of Regulation in Education

- Dysregulated students have limited access to their cortex, the “smarter” part of the brain
- This limited access greatly inhibits access to both long-term and short-term memory, both sending and receiving information
- In addition to academic difficulties, classroom behaviors will be a significant obstacle



Regulation and Behavior

- “Think before you act” – not always an option
- Behaviors of dysregulated students really are largely “out of control”

** Important to realize above two points when thinking about your relationships with students. Don't take things too personally.



Bottom-up Regulation

- Key method for those whose brains have not fully or properly developed
- Relies on stimulation of lower parts of the brain to clear neural pathways to upper parts of the brain.
- Includes but is not limited to: fidgets, breathing exercises, large muscle movement, music, scent, touch, walking, therapy animals, bi-lateral movement, etc.



Regulate- Relate-Reason

- Whether dealing with behavior or educating your students, it is important to first focus on getting them regulated, then manage your relationship, so you can have the opportunity to reason with your students.
- Dysregulated students will have very little concern for relationship and have very little ability to reason



Reason

Relate

Regulate

Approach your work with students from a bottom up brain perspective.

1. Regulate
2. Relate
3. Reason



Co-Regulation: Focus on Yourself

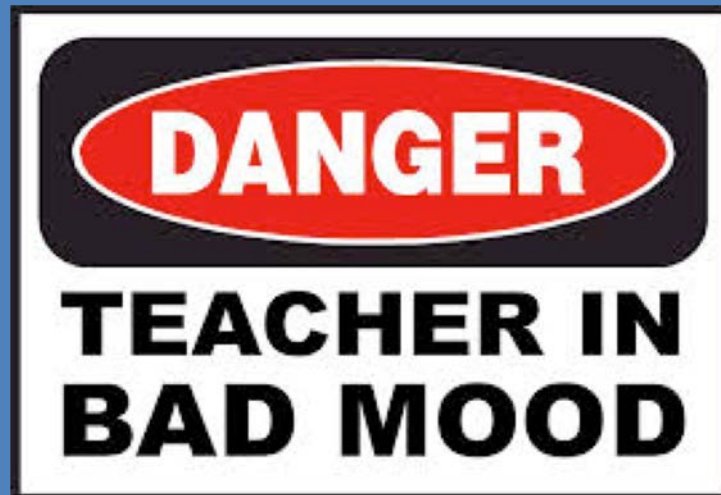
- You are far more useful if your needs are met
- Not selfish to focus on yourself





Focus on Yourself

- Our children are experts at knowing our moods
- Many dysregulated children are operating from limbic part of brain that focuses on non-verbal communication
- On our worst days we might as well be wearing this sign→





What are Mirror Neurons?



- Neurons that respond the same way when either performing or viewing something someone else is doing.
- Neurons that allow us to feel empathy.
- Neurons that allow us to re-enact actions or qualities observed in others.



Co-regulation and Mirror Neurons



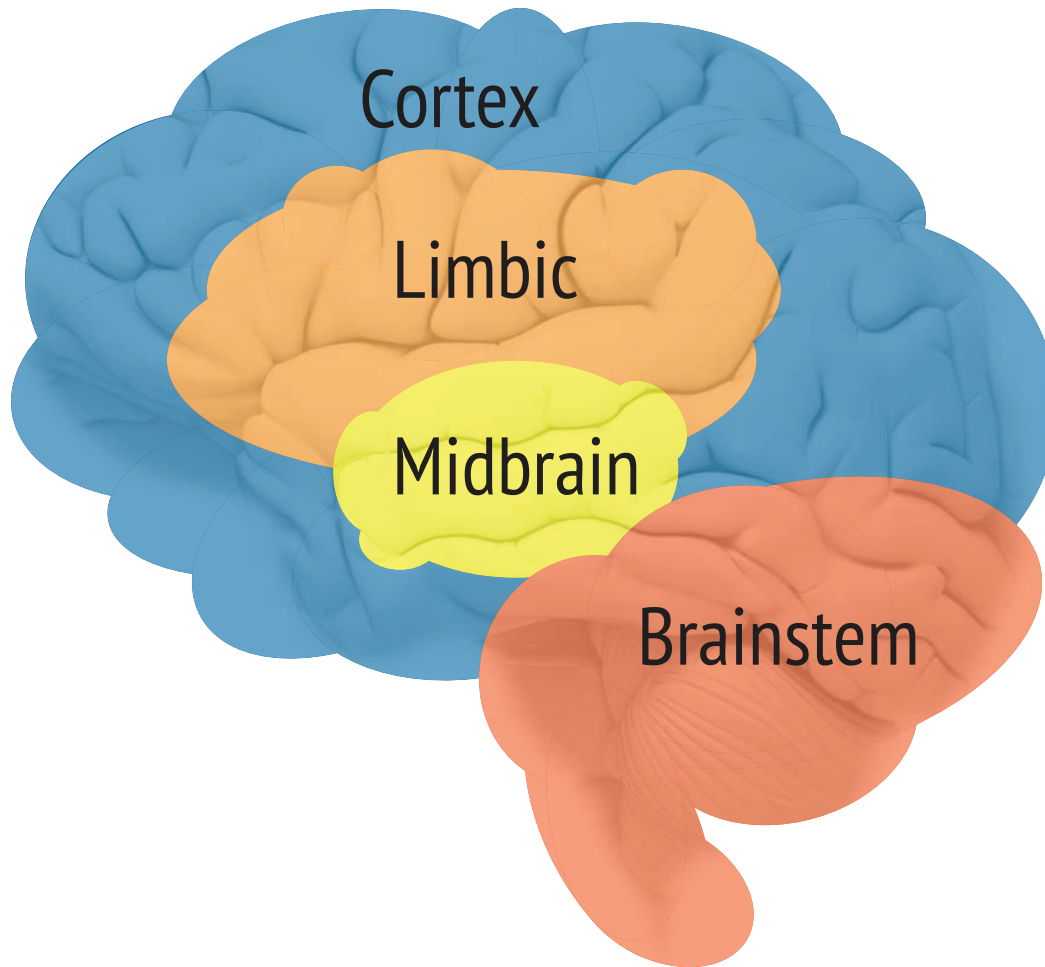
- Students will mirror an adult's level of calm
- Important for helping to regulate dysregulated students
- Important for maintaining regulation in students



Before Choosing Your Response

Attunement is the key

- Know the developmental stage
- Watch the brain state



The more a neural system is activated, the more that system changes to reflect the pattern of activation



Interventions

- The earlier the better
- No part of the brain will change in an organized way unless it is activated
- Many of the primary areas of deficit are in the brainstem, midbrain and limbic areas
- Repetitive, specific and sequential experience can recapture potential



Intervention Dosage

For healing and prevention of dysregulation:

- 3-5 minutes every 20-30 minutes

After dysregulation occurs:

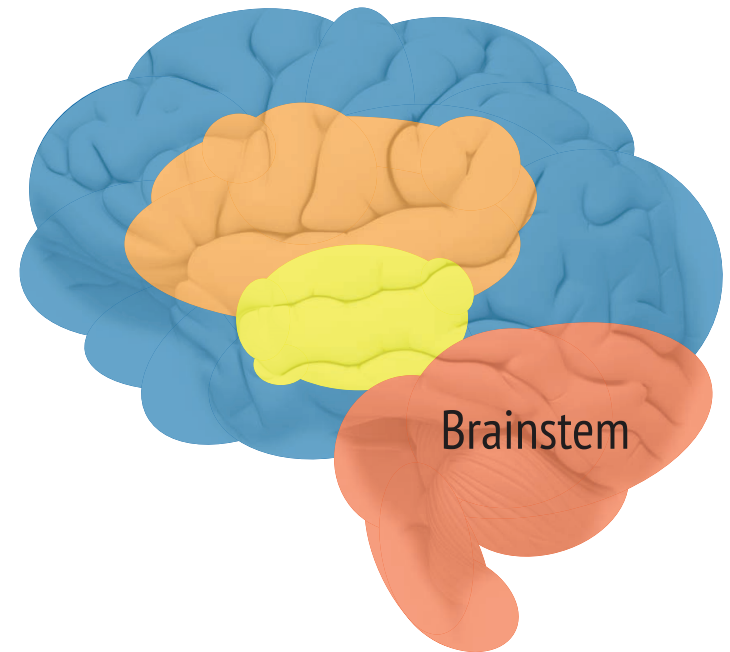
- As long as it takes





Brainstem Interventions

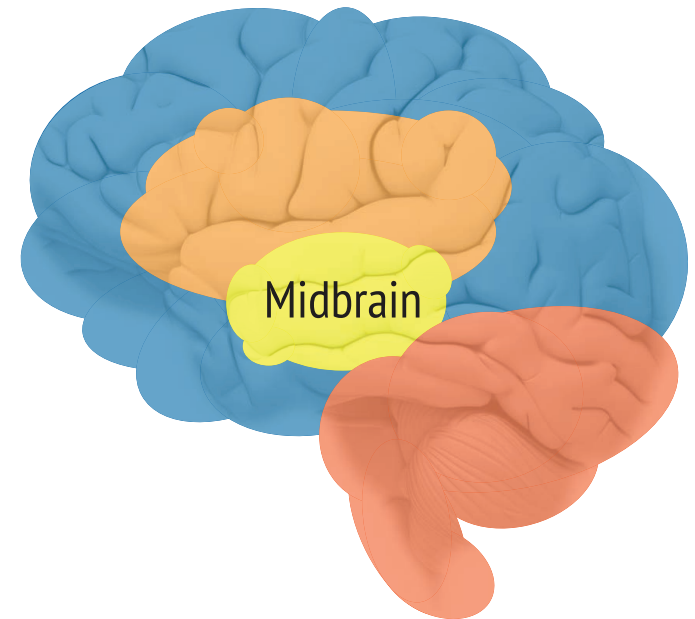
Primary somatosensory
Rocking/ Swinging
Healing touch/massage
Balance/Stretching
Martial Arts
Chewing/ sucking
Music/ drumming
Yoga
Deep Breathing
Animal-assisted activities





Midbrain Interventions

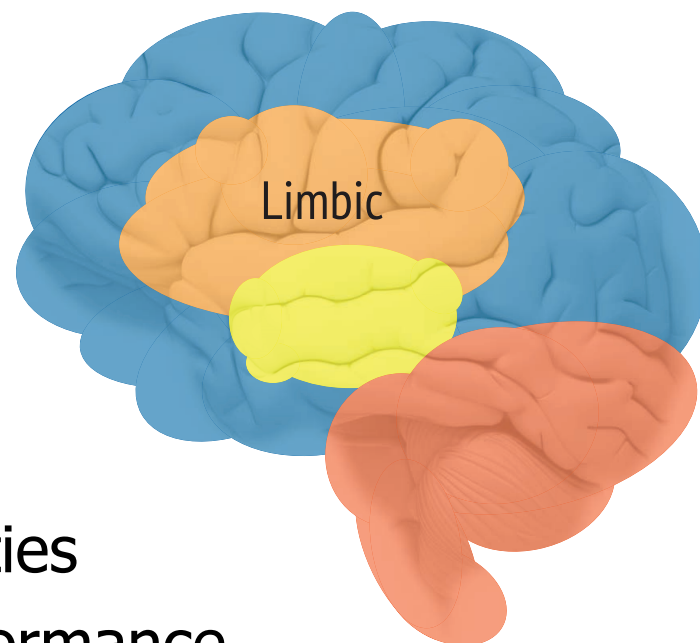
Walk/run/exercise
Bilateral Movement
Creative arts
Music/ drumming
Large muscle movement
Breathing exercises
Dance
Animal-assisted activities
Improving sleep rituals
Transition rituals
Horticulture





Limbic System Interventions

- Parallel interactions (adult)
- Parallel interactions (peer)
- One-on-one attention
- Proximity to caring adult
- Mentoring
- Counseling
- Small group counseling or activities
- Team sports with individual performance
- Social and emotional skills training
- Animal-assisted activities





Cortex

- All learning eventually ends up in the cortex
- Each of these activities are simply utilizing lower parts of the brain to get information in.
- Traditional lecture/ note-taking or reading/ note-taking will be extremely difficult for anyone with under-developed lower portions of the brain.
- Even a fully developed brain will benefit from teaching styles focused on the three lower regions of the brain.



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realizing



[brain]



potential!



NeuroLogic® curriculum

Grades
6-12

A trauma-informed curriculum adapted with permission from the work of Bruce D. Perry and the ChildTrauma Academy.

Teaching Students





Three Keys to Implementation



Key #1 Interventions for all levels of the brain

The following interventions can stimulate all levels of the brain:

- Music/ drumming
- Large muscle movement
- Breathing
- Animal-assisted activities

These can be safe “go-to” ideas when you’re not sure what brain state your students are in, or you have groups that are all over the place.



Key # 2

Regulate-Relate-Reason

Reason

Relate

Regulate

Approach your work with students from a bottom up brain perspective.

1. Regulate
2. Relate
3. Reason



Key #3

Focus on yourself

- Your condition/ brain state will directly impact your students
- Not selfish to focus on self, make sure you are preparing yourself to handle everything the day may throw at you
- Equip yourself with some brain breaks that you can employ throughout the day to handle stressful situations

Thanks for attending!

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