

Regulate to Educate: Developmental Trauma

PBIS and MTSS-B

Objectives

- Differentiate between PTSD and developmental trauma
- Understand the impact of trauma on multiple domains of functioning
- Understand the students' states of arousal and how it impacts their functioning in school
- Key skills in working with children who have experienced developmental trauma
- Increase understanding of alignment between trauma informed schools and PBIS

Polling Question #1

- How many participants have had some training on developmental or complex trauma?

Grounding Principles

Trauma-Sensitive Schools benefit all children – those whose trauma history is known, those whose trauma will never be clearly identified and those who may be impacted by their traumatized classmates.

Schools are the Central Community for most children.

Multi-tiered System of Support

VT MTSS is a coherent continuum of evidence based, system-wide practices that support:

- proactive preventative core instruction for all;
- a rapid response to academic and behavioral challenges;
- frequent data-based monitoring; and
- instructional decision-making

so that each Vermont student achieves high standards.

The triangle – Academic and social/emotional interventions



Definitions

What is trauma?

Trauma is not just the event itself, but rather a response to a stressful experience in which a person's ability to cope is dramatically undermined.

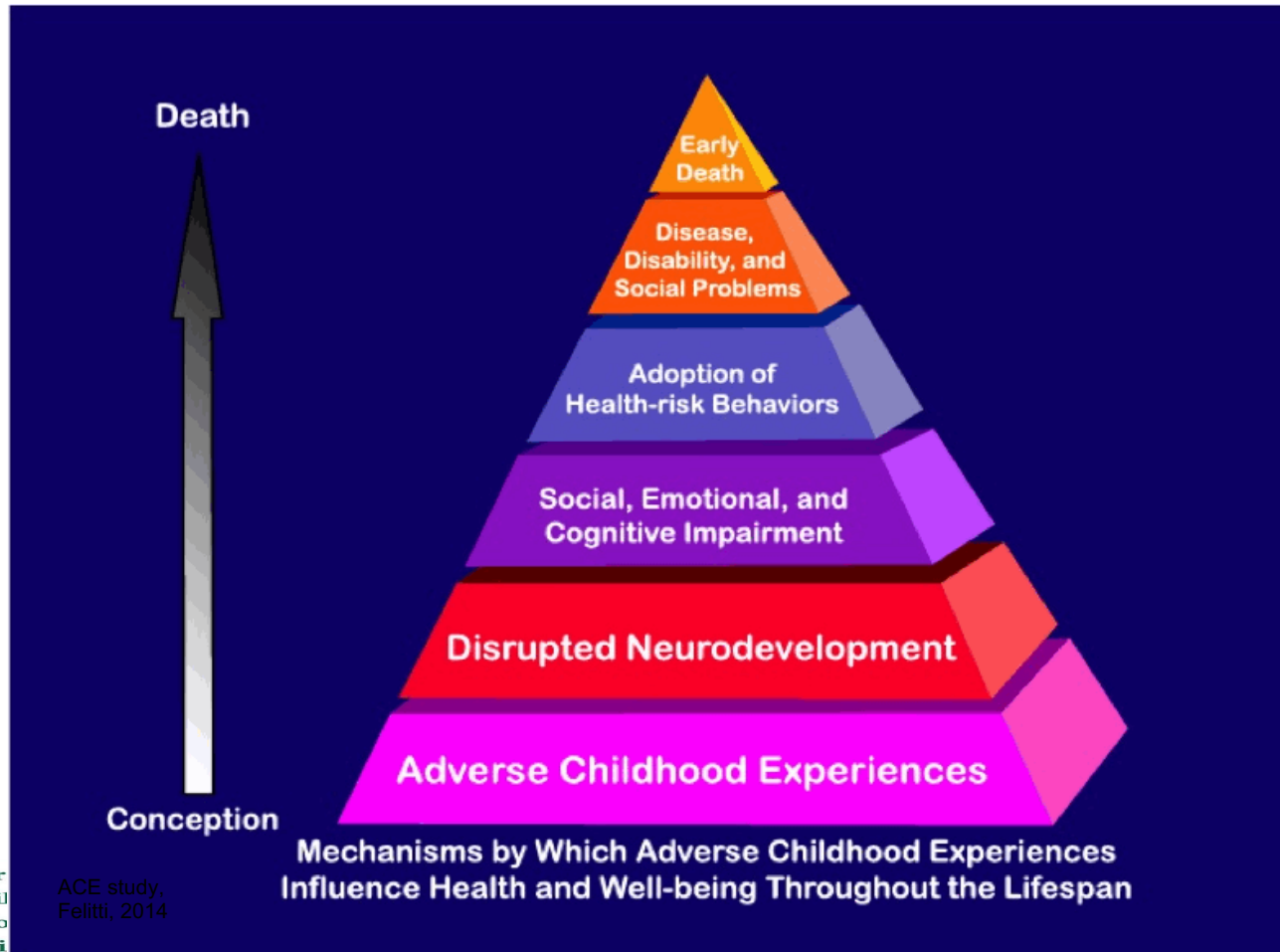
What is Developmental Trauma?

- A psychological and neurobiological injury that results from protracted exposure to stressful events
- Derails typical development across all domains (attachment, affect, biology, behavior, cognitive, dissociation, self-concept)
- Experiences often occur in the caregiving system.
- Impact is immediate and long term
- Effects will require all tiers of intervention

“Trauma is not a story of what happened to you a long time ago, it is what is in your body.”

Bessel van der Kolk

Toxic Stress Pyramid



ACE study,
Felitti, 2014

Pervasiveness in children

- 1,892,000 substantiated abuse (Vermont = 3,919)
- 26% of children experience trauma before 4 (Vermont 59.3%)
- 11.3% increase in reports in Vermont
- 77.2% neglect (Vermont = 4%)
- 17% physical abuse (Vermont = 46%)
- Sexual Abuse = 8% (54% in Vermont)

Sources of Trauma

- Sexual abuse
- Physical abuse
- Emotional abuse
- Neglect
- Domestic Violence
 - Neighborhood violence
- Torture
- Bullying
- Prolonged exposure to traumatic stress
- Intrauterine stress
- Epigenetics

Epigenetics

<https://www.youtube.com/watch?v=AvB0q3mg4sQ>

Impact Areas:

- ☐ Acts without thinking, interrupts
- ☐ Overreacts to small issues
- ☐ Upset by changes/ transitions
- ☐ Overwhelmed, easily frustrated
- ☐ Resists change or tasks that are not interesting
- ☐ Does not notice the impact of their behavior
- ☐ Does not see their part in problems
- ☐ Easily over-stimulated, difficulty calming down
- ☐ Forgetful, loses things, disorganized
- ☐ Loses steam quickly, cannot sustain on challenging tasks

7 domains of impairment

Biology and
the brain

Attachment
and
relationship

Emotional
Regulation

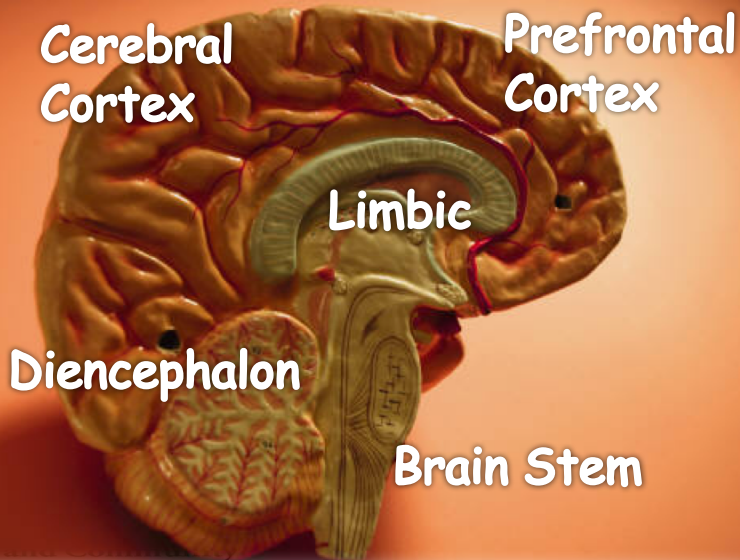
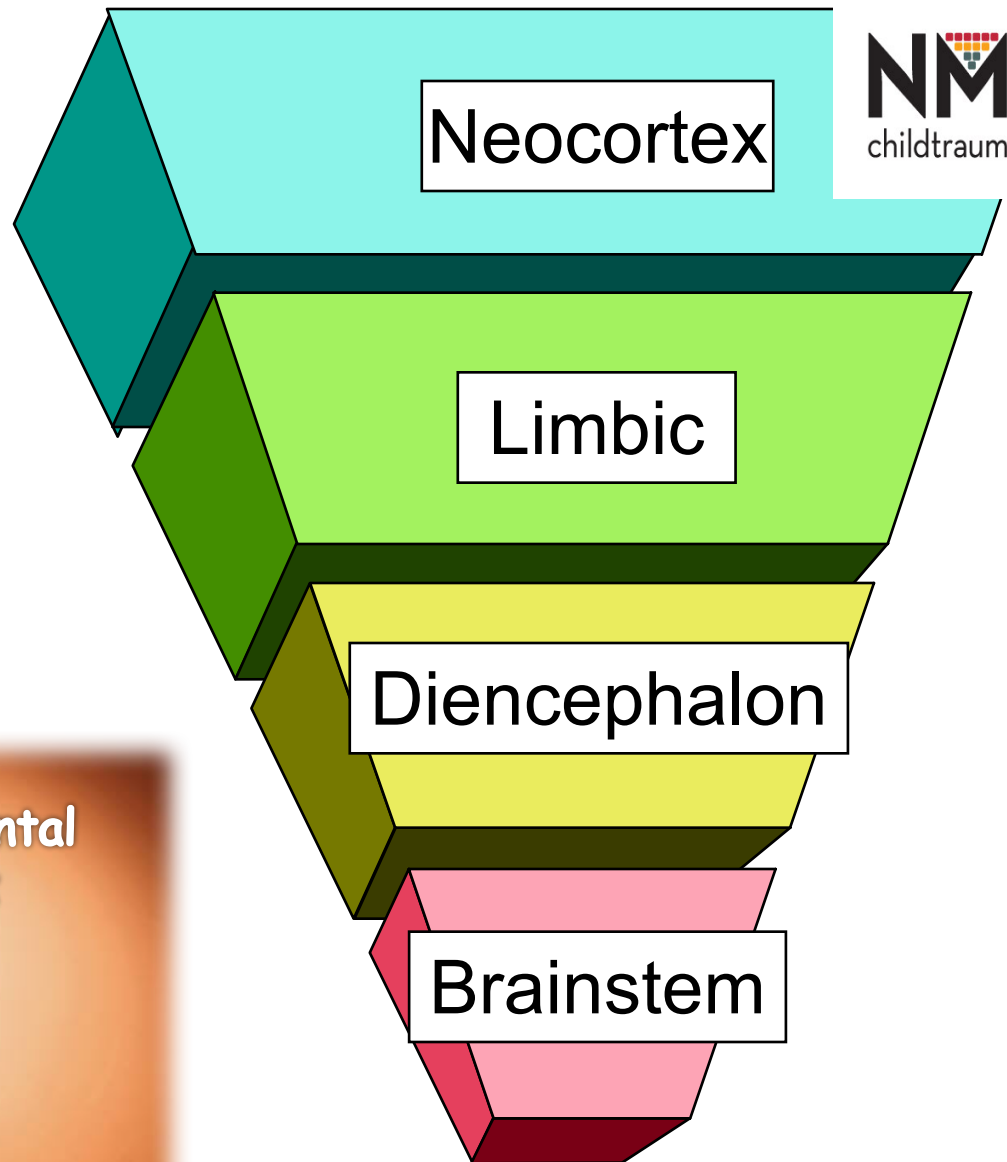
Cognition and
Learning

behavior

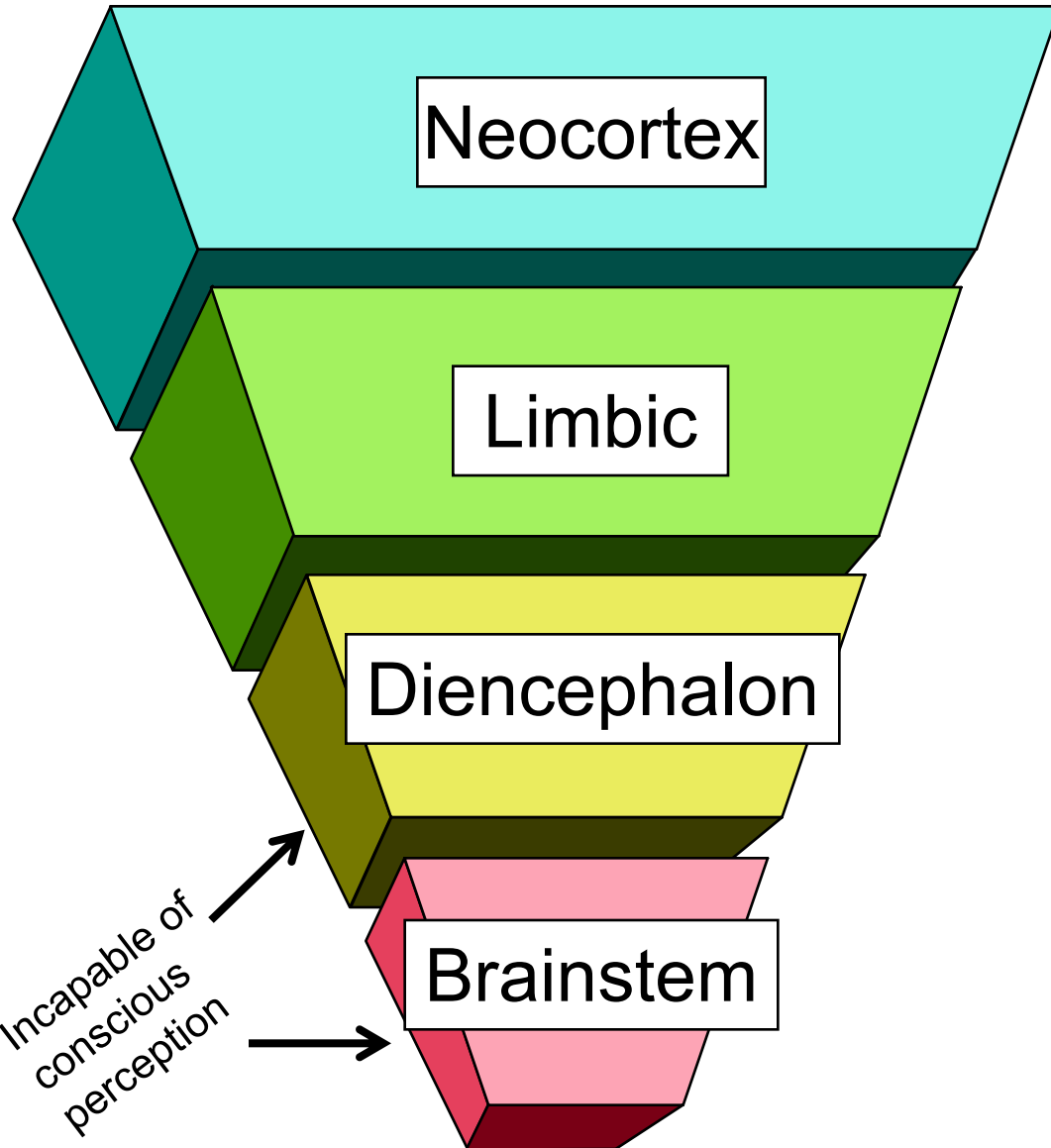
dissociation

Self-concept

**The brain
develops from
the
bottom up**



**and the
inside out**



Abstract thought

Concrete Thought

Affiliation

"Attachment"

Sexual Behavior

Emotional Reactivity

Motor Regulation

"Arousal"

Appetite/Satiety

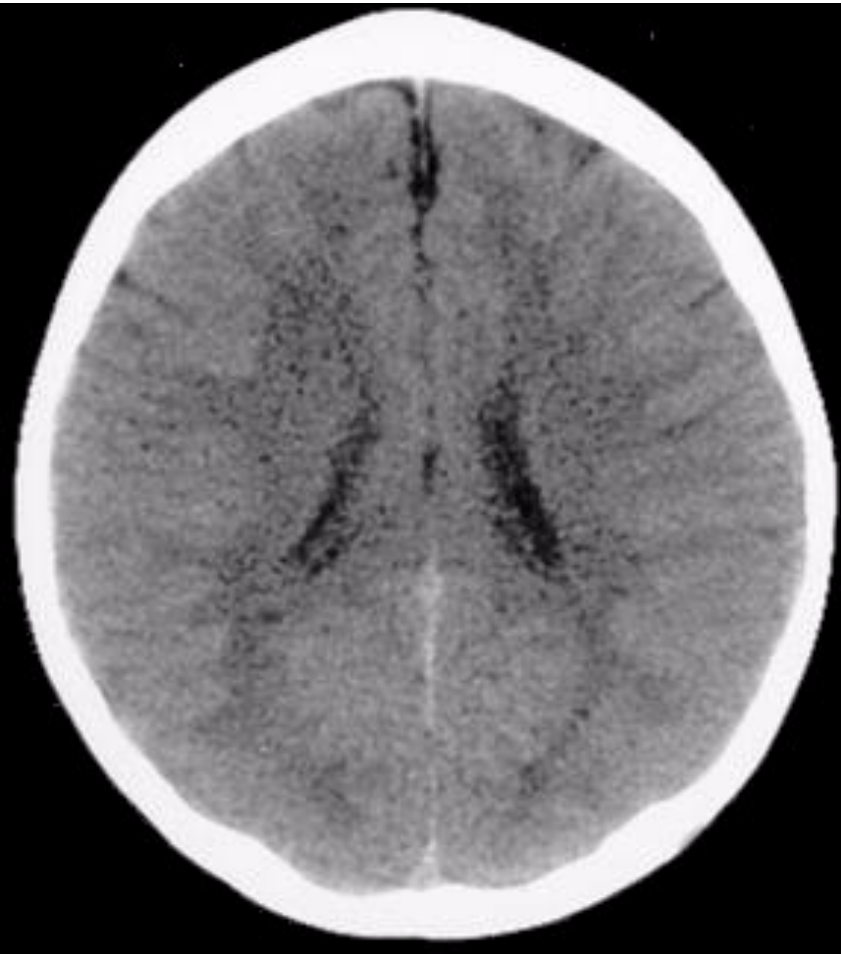
Sleep

Blood Pressure

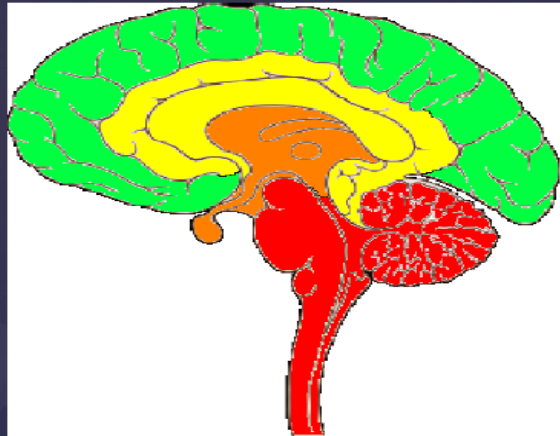
Heart Rate

Body Temperature

Impact of Neglect on the Brain

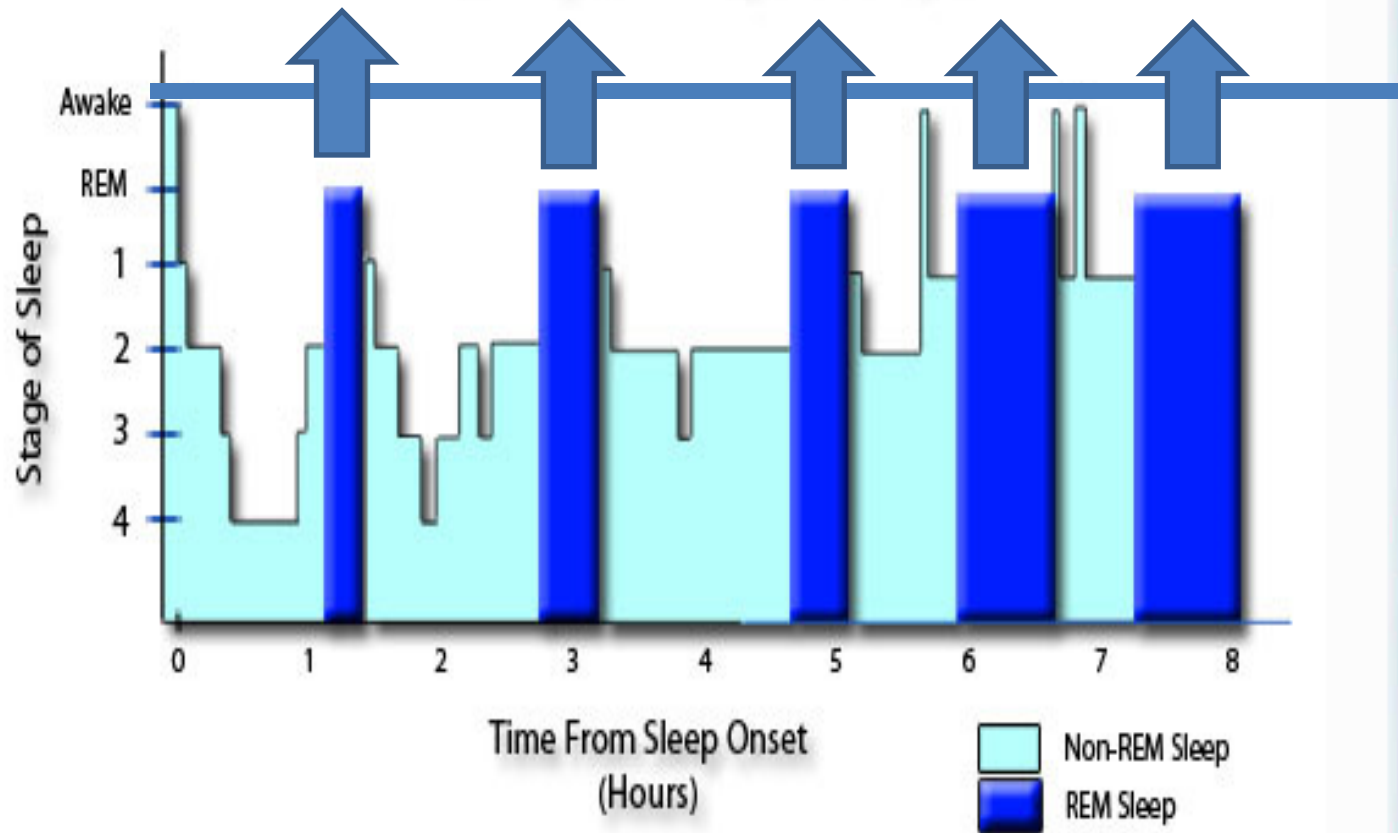


Bottom up, Inside out

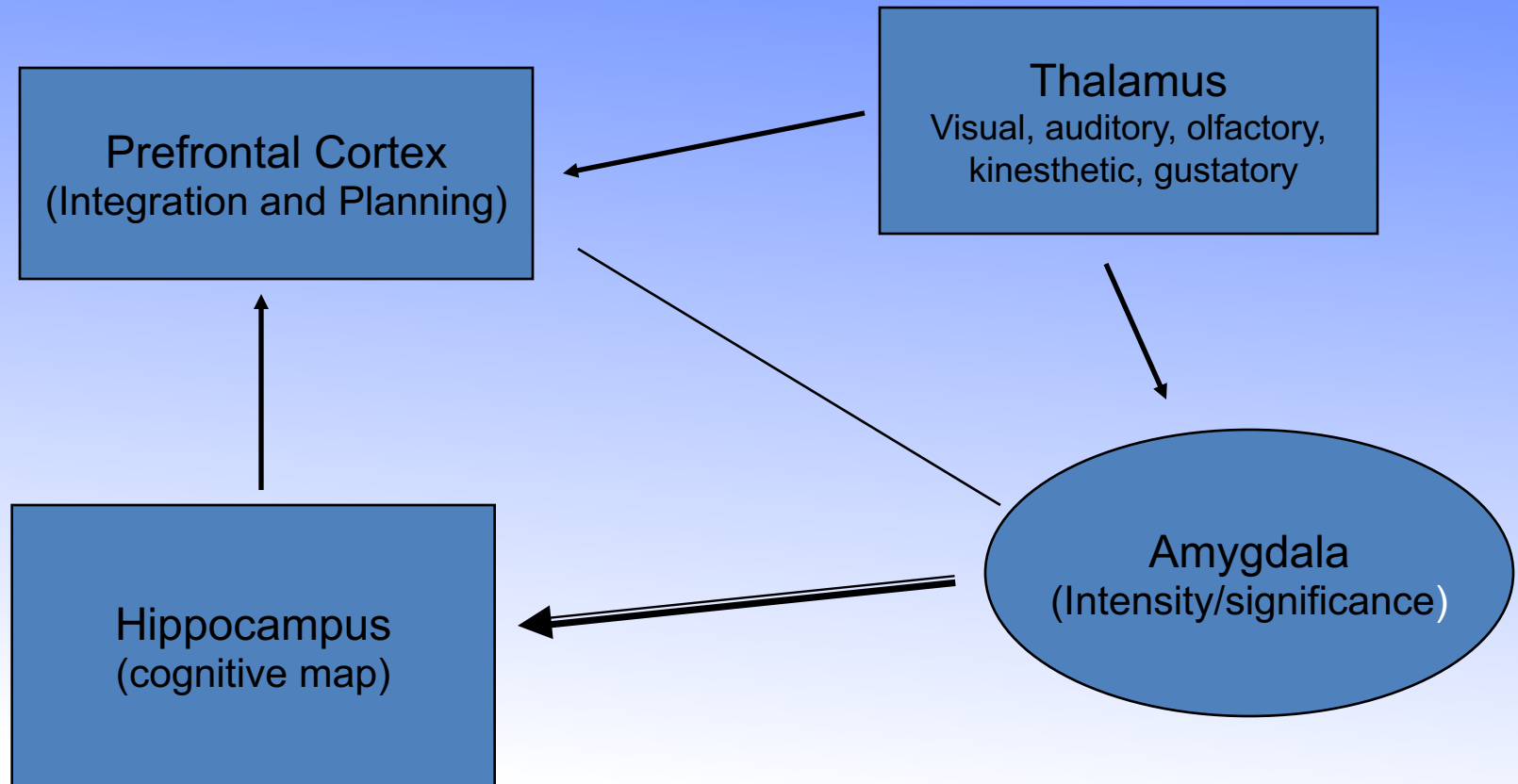


Cortex
Limbic
Diencephalon
Brain Stem

Stages of Sleep



Effects of Trauma on Brain Functioning





What can we do about Developmental Trauma in our kids?

In order to help youth heal from Developmental Trauma, we must provide opportunities,
every day, for
patterned, repetitive experiences that counteract
established functioning.

Potential Interventions: Think about brain regions

- Touch
- Rhythmic
- Patterned
- Eye Contact
- Drumming
- Body-based
- Music and Movement
- Yoga
- Somatosensory
- Parallel play/learning

Polling Question #2

- How many participants use movement when working with students?

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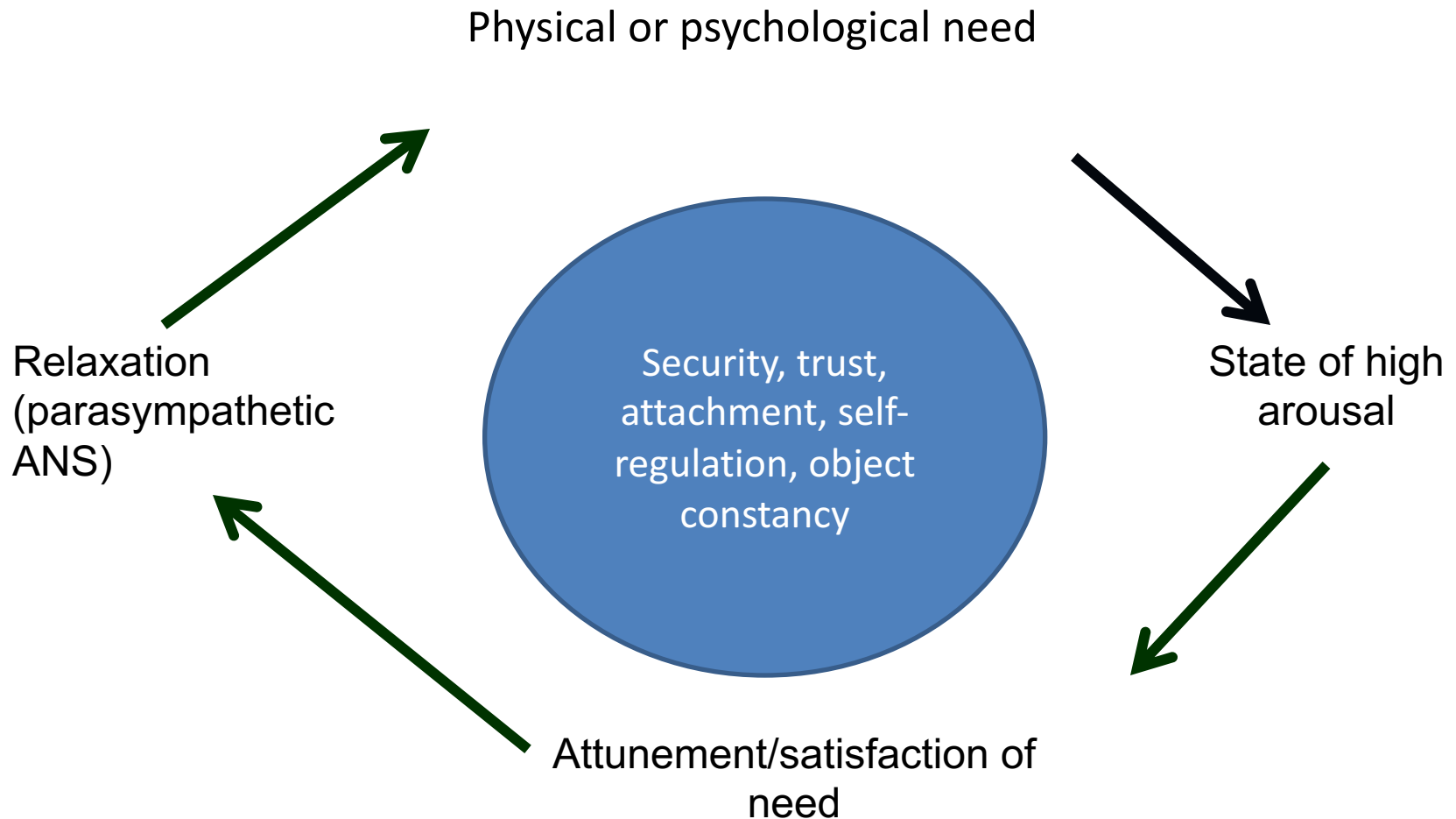
Self-concept

4 Key Principles of Attachment

- Build school staff capacity to ***manage affect***
- Build school staff-child ***attunement***
- Build ***consistency*** in school staff ***response*** to child behavior
- Build ***routines*** and ***rituals*** into classroom and school



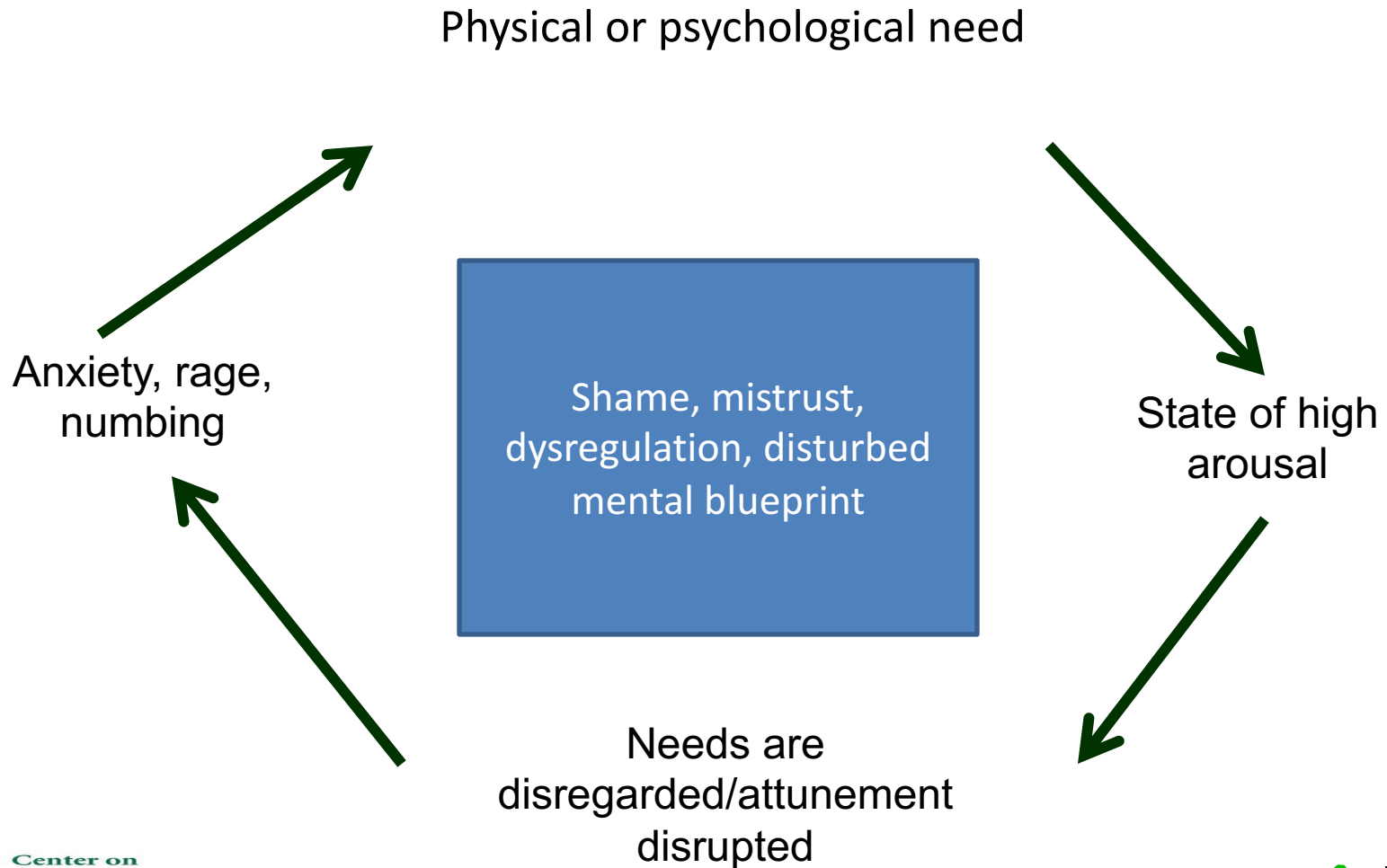
Healthy Attachment Sequence



Disrupt and Connect: The still face experiment

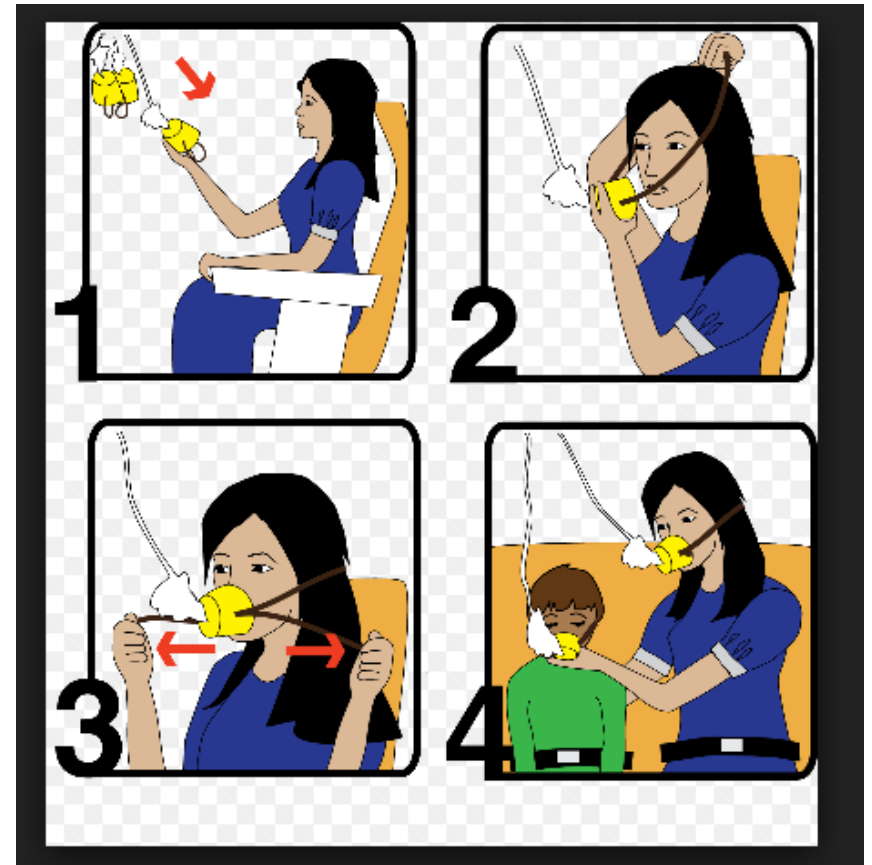
<http://www.youtube.com/watch?v=apzXGEbZht0>

Unhealthy Attachment Sequence



Affect Management

When caregivers modulate their own affect and emotional responses, they can create an emotionally safe environment in which children can learn



ATTUNEMENT

- Reading and responding to the cues of another
- Synchronous and interactive
- Helps prevent mismatch between need and provision
- Reading the non-verbal, social-emotional “language” of another

Tantrums

- What did you notice?
- What worked well?
- What did not work well

<https://www.youtube.com/watch?v=oa6znIKBFAg>

CONSISTENCY

- EVERY DAY
- EVERY GRADE
- EVERY BODY
- EVERY ENVIRONMENT

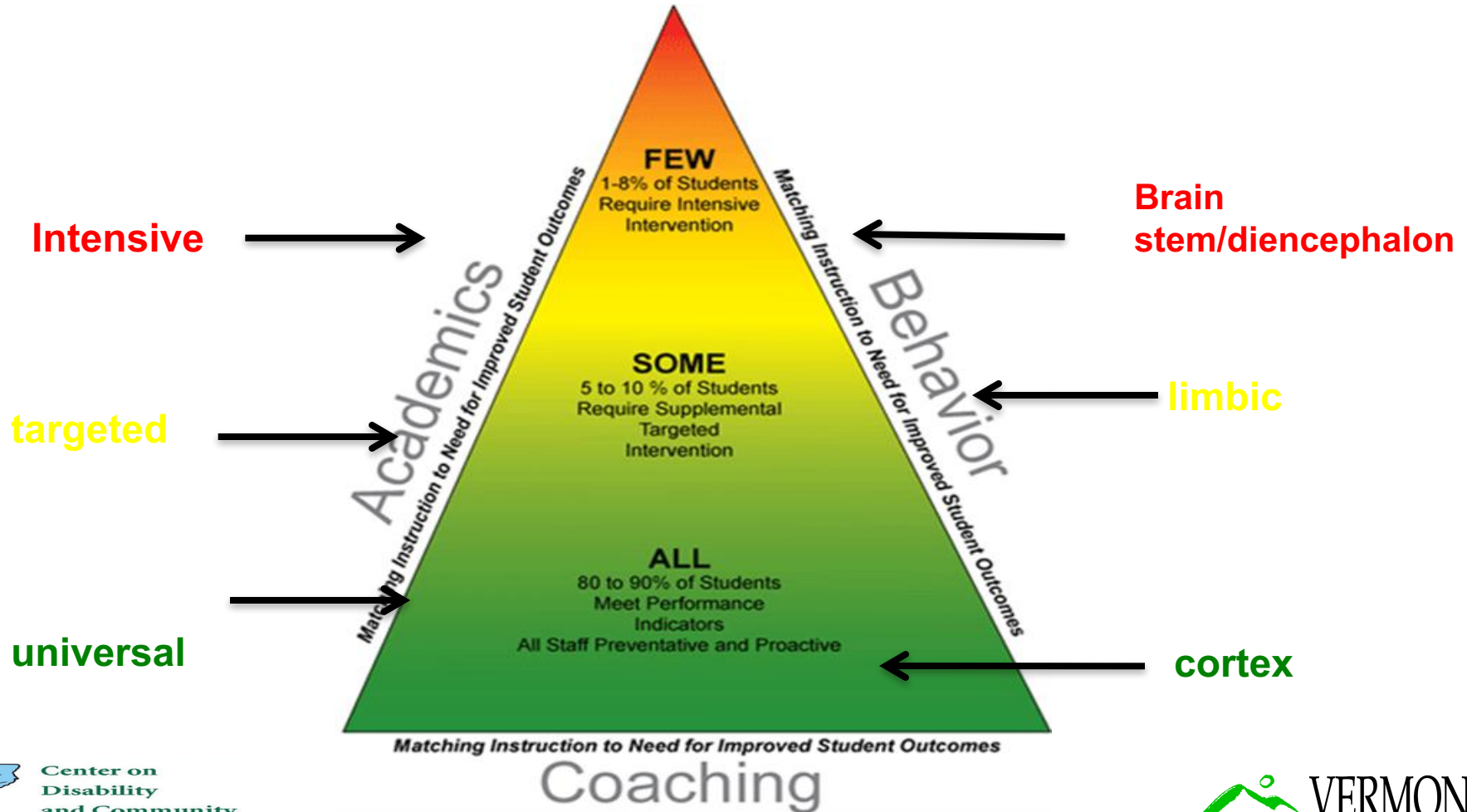
Routines and Rituals

Routines increases predictability and the child's ability to anticipate next steps. Establishing classroom and school-wide routines helps reduce trouble spots (transitions, substitute teachers, unstructured activities/days).

Interventions

1. Dowel
2. Silent Simon says
3. Rope circle of safety
4. Choo Choo Train game: games that enhance body control
5. Say “no” with your body, say “yes” with your body
6. Jumping rope
7. Drumming
8. Mirroring or attunement activities
9. Feelings games

Targeting the Tiers, PBiS approaches



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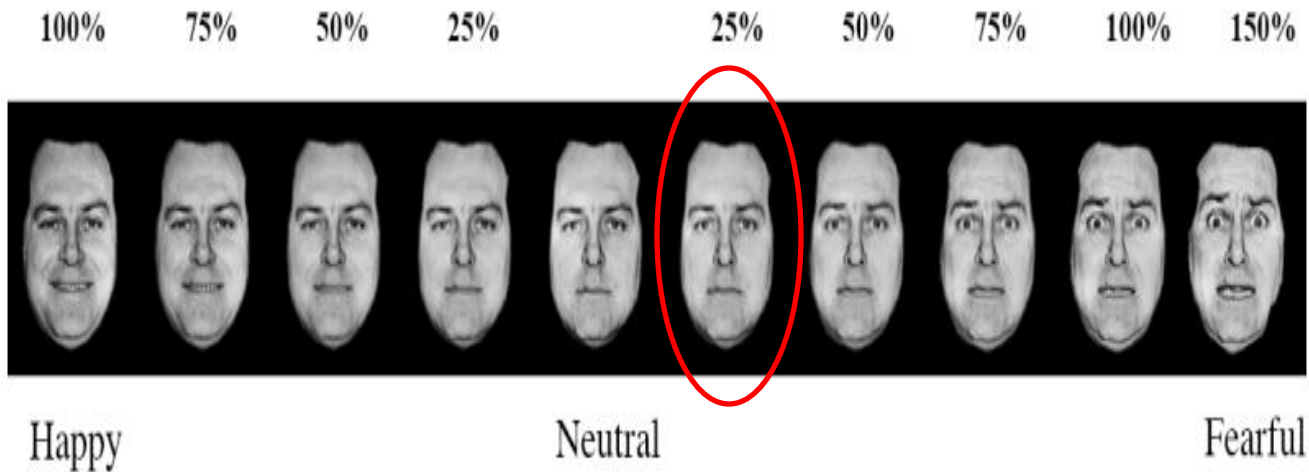
Normative Danger Responses

Autonomic Nervous Response System

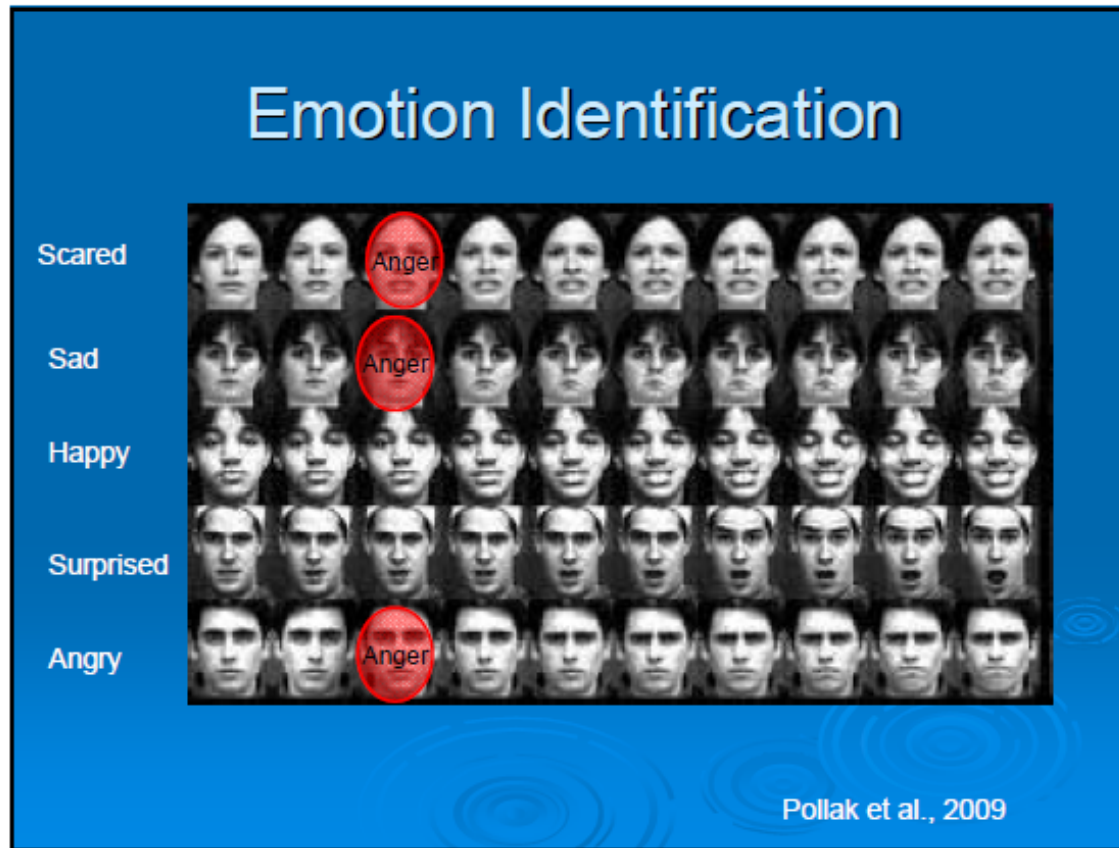
- Fight
- Flight
- Freeze
- Flock



Recognizing Affect – Emotional Identification



Facial Expression Recognition



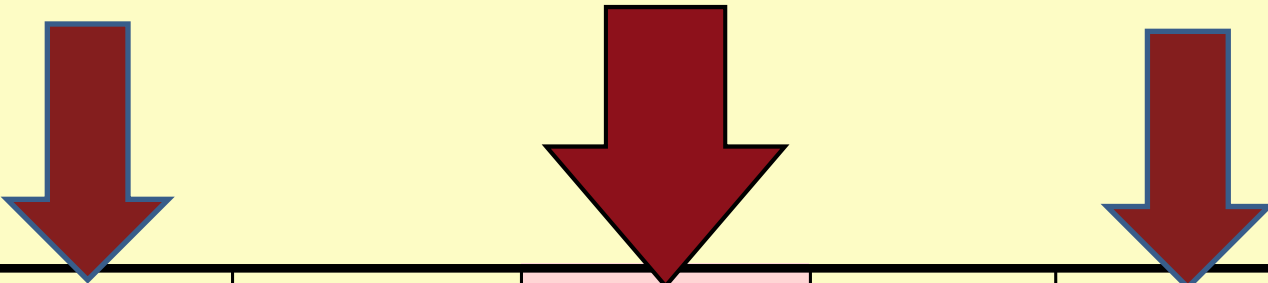
Reason

Relate

Regulate

Sequence of
Engagement





Sense of Time	Extended Future	Days Hours	Hours Minutes	Minutes Seconds	Loss of Sense of Time
Primary secondary Brain Areas	NEOCORTEX <i>Subcortex</i>	SUBCORTEX <i>Limbic</i>	LIMBIC <i>Midbrain</i>	MIDBRAIN <i>Brainstem</i>	BRAINSTEM <i>Autonomic</i>
Cognition	Abstract	Concrete	“Emotional”	Reactive	Reflexive
Mental State	CALM	ALERT	ALARM	FEAR	TERROR

Impact Areas

It is often not the task or request
that leads the child to
misbehave...

it is the feeling and negative
thoughts that is evokes...

Potential strategies

- Movement
- Mindfulness
- Non-verbal communication
- Reflectively listen
- Validation
- Shhhhhh
- Attunement
 - Match affect without replication

More strategies

- Using a song, words or other cues to help prepare change in activity
- Patterned, repetitive proprioceptive OT activities such as isometric exercises (chair push-ups, wall-sits, bear hugs while child tries to pull the adults arms away, applying deep pressure),
- Weighted vests, blankets, ankle weights

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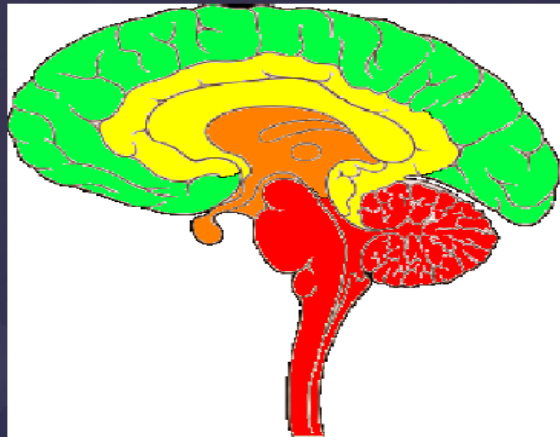
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Bottom up, Inside out



Cortex
Limbic
Diencephalon
Brain Stem



“No matter how exciting
and meaningful
and supported
the learning experience
is designed to be,
a child cannot reap
the cognitive benefits of it
unless she feels
calm enough to be curious.”



(McMahon, 2011)

Polling question #3

- How many participants have a morning, coffee routine?

Sequential Thinking

A child's successful completion of many academic tasks depends on the ability to bring a linear order to the chaos of daily experience. Traumatic experience can limit this ability to organize material sequentially, leading to difficulty in reading, writing and communicating verbally.

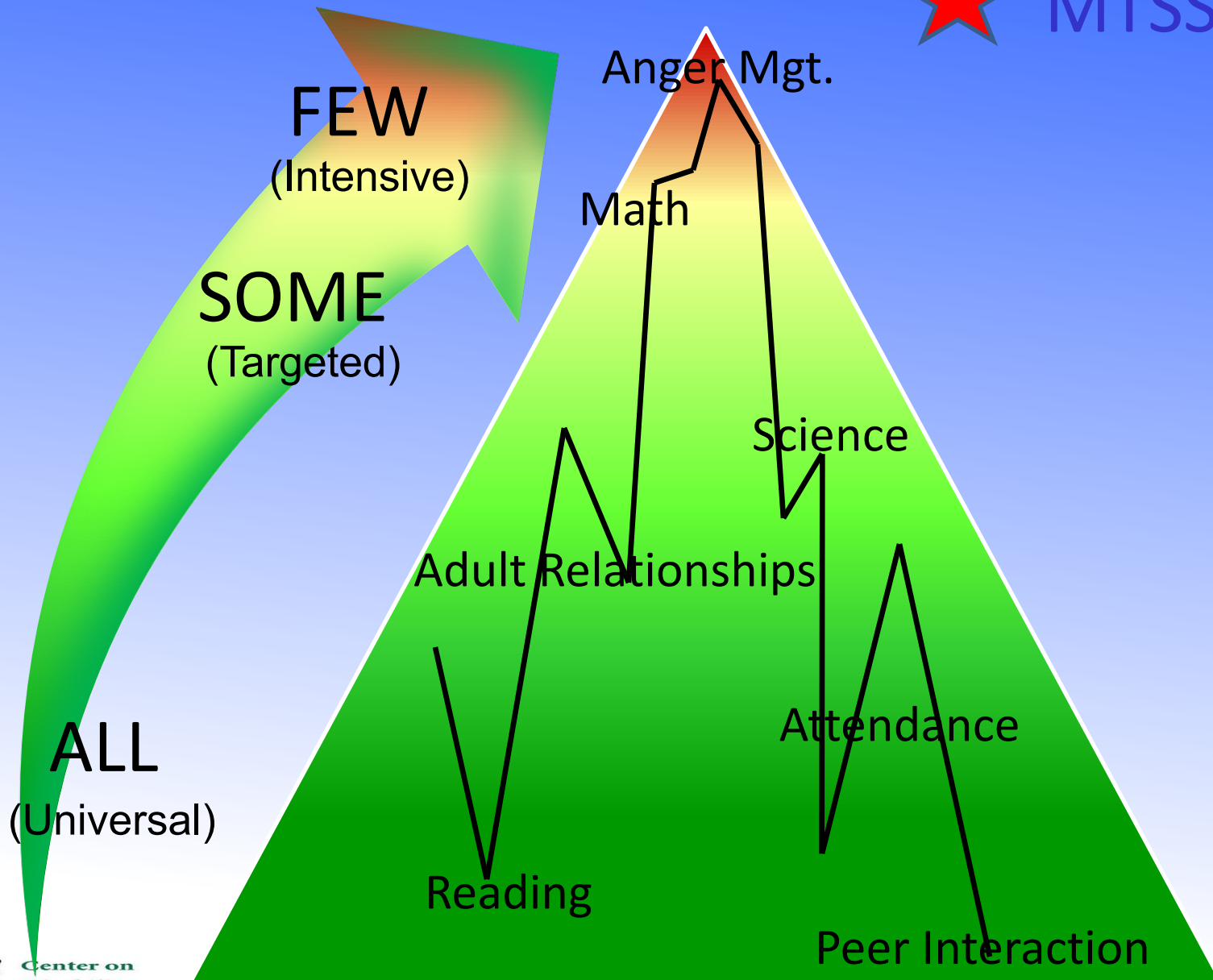
From Helping the Traumatized Child Learn

Competency

3 Key Principles

- Build student executive functioning skills
- Target self-development and identity
- Target additional key developmental tasks

The child develops an ability to evaluate situations, inhibit impulsive responses and actively make choices.



Competing Demands

Survival vs. learning

It is nearly impossible to dedicate your full attention and energy to survival and learning at the same time.

Potential interventions

General strategies

- Multi-modal learning
- Regulate to educate
- Build on competencies
- Multiple motor breaks
- Brain breaks
- Differentiated instruction/Differentiated Discipline

Facilitating sequential thinking

- To do lists
- Visual schedules
- Repeat directions (tone of voice)
- Give notes

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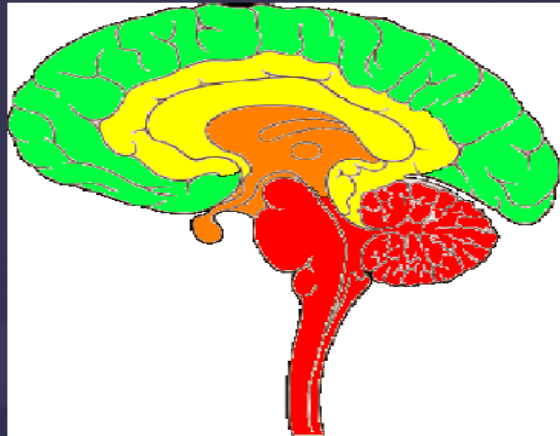
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Polling question #4

- How many people have used some source of heat in their homes in the last week or so?

What do you see and why?



Key Triggers

- Lack of power or control
- Unexpected change
- Feeling threatened or attacked
- Feeling vulnerable or frightened
- Feeling shame

And...

- Relationships – even positive ones
- Intense feelings of any kind

But...what about consequences?

Relational and relevant

Restorative and reparative

Potential interventions/considerations

- Behavior is about survival
- Function AND feeling behind behavior
- Skill deficit
- Validation/attachment/comfort seeking vs. attention seeking or manipulative
- Focus on connection, not consequence
- Connect, rupture, repair
- Ritualize transitions (with movement)
- Evaluative process (even praise) can create defensiveness
 - Remember where they are likely in their brain

Helpful Reframes:

Child Says:

Student Believes:

“this is stupid”

→ “I am stupid”

“I can’t do this”

→ “I am powerless”

“You’re an _____”

→ “I am not safe”

“why do you always...”

→ “I am to blame”

“I’m outta here”

→ “I am overwhelmed”

“I won’t do this”

→ “I can’t do this”

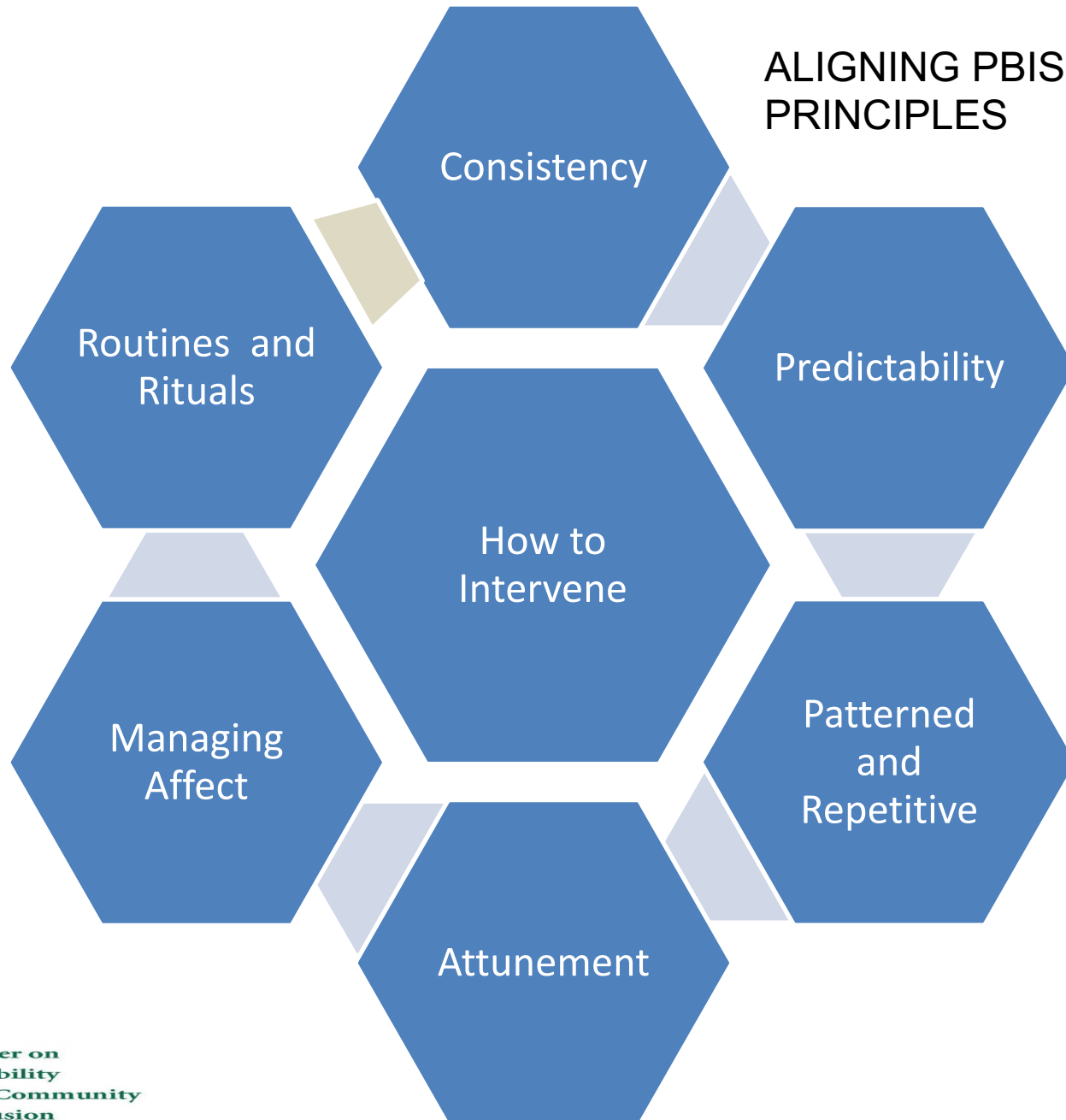
“You can’t make me”

→ “I need to protect myself”

Possible Collision Points at School

- Schools focus on preparing children for and information related to the external world
 - Students with DT focus on the present and internally to stay safe.
- Much of school is motivated by connection and participation with others
- Schools often use delayed gratification
 - Students with DT are focused on the present to stay safe. Delaying gratification is dangerous and unpredictable.
- Teachers often set limits/goals for the common good
 - Youth with DT don't operate with a template that understands the common good.

ALIGNING PBIS PRINCIPLES



Questions?????

