Neuroscience in the Classroom

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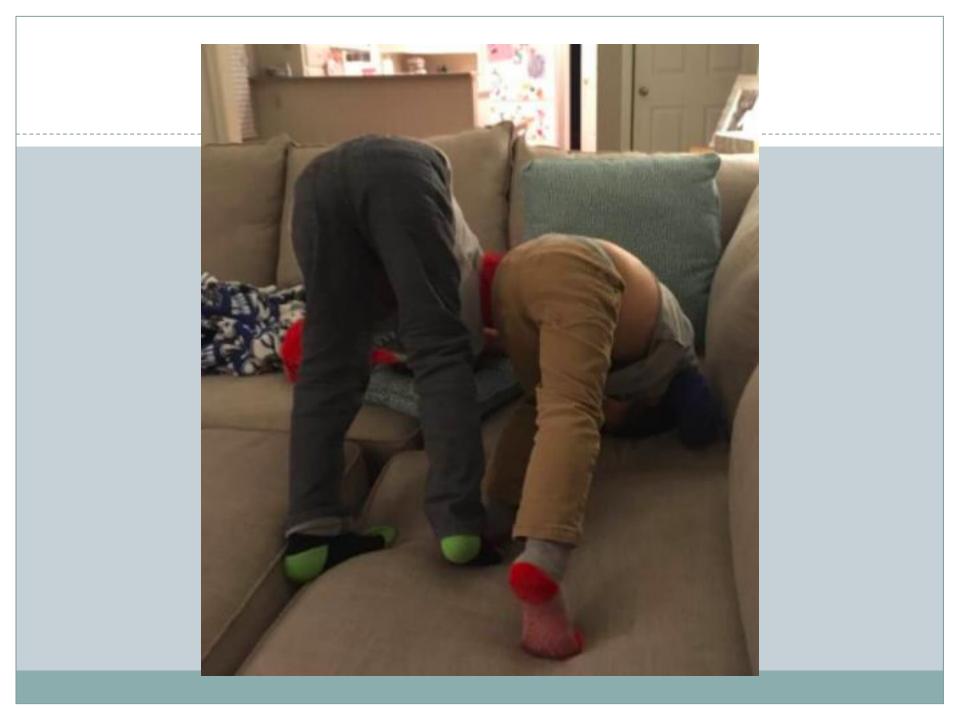
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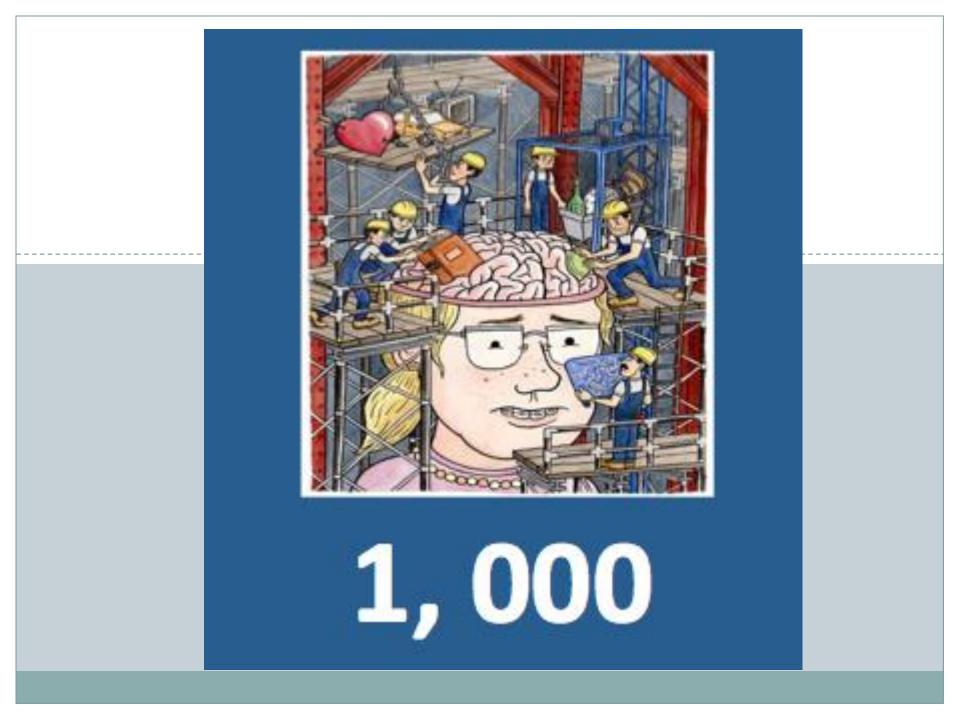




Instagram: wired4connection

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"We are feeling creatures who think." -Dr. Jill Bolte Taylor

• Teacher brain state

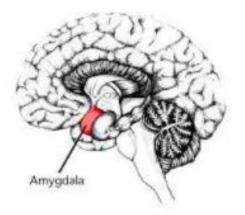
- Attachment to adults is the prerequisite to learning from them. Attachment is the carrier of all development.
- Students and adults who are angry, anxious, depressed or feeling negative emotion struggle with learning.
- What happened v. What's wrong with
- Connection + Purpose = Well-Being
- If you don't meet the need, the behavior will not go away.
- We have to **start** new behaviors.

Where do I begin?

Helping students begins with teaching them about their neuroanatomy.

Prefrontal Cortex-

Where we do life (cognitive, emotional, behavioral functioning)

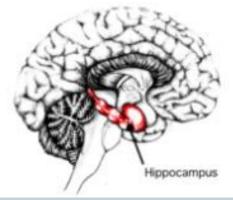


• Amygdala-

Emotional Brain (fight, flight, freeze)

• Hippocampus-

Formation of new memories and learning emotions



Perception Drives Behavior

Perception drives thoughts
Thoughts drive feelings
Feelings drive emotions
Emotions drive behavior

"We see the world not as it is, but as we are conditioned to see it." -Steven R. Covey

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

How do we create an environment that emotionally, socially, and cognitively connects with students?

Classroom/School Environment

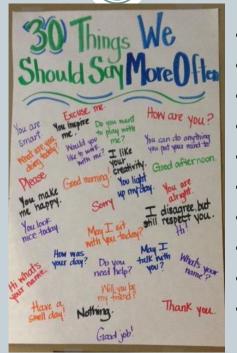
- Take time each day to build relationships
- Organization
- Inviting and calm
- Setup allows for easy movement



- Space for whole group, small group, independent work, calm time, reading, partner work
- Teacher workspace follows expectations for student workspace
- Student voice/choice
- Classroom Routines: morning meetings, inspirational leaders, worry cards, story telling, lighting, smell, color, furniture, wall space, time frames, family pictures, focused attention practices, and brain intervals
- Create positive addictive feelings- "I love you"
- Lead by Practice

Classroom/School Environment

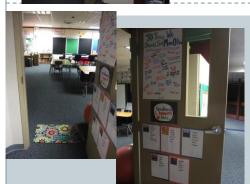
- Greeting students
- Be a Thermostat
- Allow for Wait time
- Essential Agreements
- Classroom Jobs
- Routines and Rituals
- Family Photos
- Student Work
- Student Leadership
- Notice student absences
- Adversity Teams
- Advisory Periods
- Invite Families to Participate



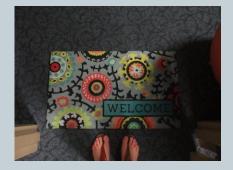
- POWER Songs
- Walkthroughs
- Common Language
- Collaboration
- Simulations
- Accountable Talk
- Handwritten Notes
- Thank Yous
- Lunch Bunch
- Focused Attention Practices
- Brain Intervals
- Amygdala Reset Spaces
- Service for Others

Welcome to Room 18













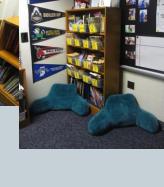
















What we learn with pleasure we never forget.

















Beyond the Classroom







4 Universal Growth Needs

•Am I important here? •Am I good at something here? •Am I able to affect change or my world in here? Can I share my gifts with someone here?

- If a child does not know how to read, we teach.
- If a child does not know how to swim, we teach.
- If a child does not know how to multiply, we teach.
- If a child does not know how to drive, we teach.
- If a child does not know how to behave, we...



ery thing You do

The best part of teaching is that it matters. The hardest part of teaching is that every moment matters, every day. Todd Whitaker

References

- Dr. Jill Bolte Taylor, *My Stroke of Insight*
- Dr. Louis Cozolino, *The Social Neuroscience of Education*
- Dr. Lori Desautels & Michael McKnight, Unwritten: The Story of a Living System
- Zaretta Hammond, Culturally Responsive Teaching & The Brain
- Evelyn Karozos, *There's a Spider in Your Hair*
- Thomas Kersting, Disconnected
- Dr. Matt Leiberman, Social...Why Our Brains are Wired to Connect
- Dr. Peter Levine, *Trauma and Children*
- Kirke Olson, *The Invisible Classroom*
- Dr. Bruce Perry, *The Boy Who Was Raised as a Dog*
- Dr. Allan Schore, *The Neuropsychology of Trauma*
- Daniel Siegel, *The Developing Mind*
- Dr. Bessel Van Der Kolk, *The Body Keeps the Score*
- Center on the Developing Child
- Circle of Courage Model
- Responsive Classroom