What’s the Brain Got to Do With It?

10 Brain Facts for Educators

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1. Brains do not fully develop in girls until about age 20, in boys, as late as 25.

2. The last part of the brain to develop is the Pre-Frontal Cortex—it controls impulses, organization, moral reasoning, emotional stability, concentration and prioritizing.

3. Adolescents often do not fully process cause & effect (another skill of the pre-frontal cortex) so they really DO NOT know why they just did something stupid or why they got in trouble for it.

4. Kids need 9-13 hours of sleep daily to concentrate, metabolize sugar and retain information effectively.

5. Foster “Growth Mindset” in students—praise learning from mistakes, using strategies, effort and perseverance instead of praising natural talent.

6. When kids act out or zone out, it is an INVOLUNTARY response to stress or boredom AND boredom is stressful to the young brain.

7. Increase esteem and achievement by promoting skill advancement and service learning opportunities.

8. Optimal brain engagement occurs when there is a positive emotional connection between student and teacher-relationship, relationship, relationship—it makes a considerable difference in the learning environment.

9. Children overuse their amygdala, which results in extreme emotional responses to EVERYTHING. Validate their feelings but explicitly teach them how to identify and manage their feelings in a productive way using SEL.

10. Numb buns = lame brains. Young brains need LEARNING breaks to reset their attention span clocks. Every 4-8 minutes, engage students in a learning task such as turning and talking or retelling (first, then, finally) what was just learned with another student. Every 10-30 minutes, students need to be moving around, even for just a minute or two, to reset their attention-use an ENERGIZING brain break to get their blood pumping.

*Recommended Resources: Research-Based Strategies to Ignite Student Learning (Judy Willis), Your Child’s Growing Mind (Jane Healy), Teaching Smarter with the Brain in Focus (Sarah Armstrong), The Primal Teen (Barbara Strauch), Teaching with the Brain in Mind (Eric Jensen), Brain Rules (John Medina), Secrets of the Teen Brain (Sheryl Feinstein), A Framework for Understanding Poverty (Ruby Payne)