

Positive chemicals, the brain & the classroom

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www.ELTandHappiness.com

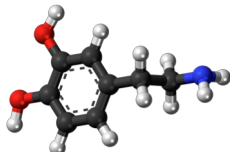
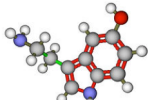
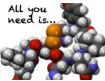
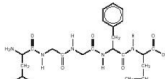
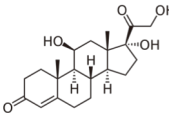
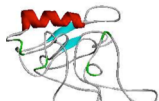
www.HelgesenHandouts.weebly.com

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Remember: "Everything really influences everything else."

– Tracy Tokuhama-Espinosa

 <p>Dopamine</p>	<p>Connected to • memory • motivation • focus Triggered by • emotion • pleasure • goal completion • exercise • sleep (teens need more sleep than adults, not less! Also, sleep is when working memory (short term memory) becomes long term) Classroom applications: • Clear goals • point out goal completion • celebrate small victories (<i>Wow, look at what you just did!</i>) • cliffhangers build interest • Anything novel or unexpected. • Show emotion: stories (<i>Why did you become a teacher? What were the challenges?</i>) Show your <i>passion</i>. Humor. More at: www.tinyurl.com/passion-teach</p>
 <p>Serotonin</p>	<p>Connected to • well-being & happiness Triggered by • feeling respected (praise) • bright light • exercise • meditation/yoga breathing Classroom applications: • praise effort (not intelligence/ability • savor achievements/success/positive experiences • reflect on positive, successful struggles • yoga breathing for use before tests, presentations, etc. • create a "positive classroom culture"</p>
 <p>Oxytocin <i>the hugging hormone/ the cuddle chemical</i></p>	<p>Connected to • love • trust • bonding Negative connections can include envy and tribalism. Contrasting views: see TED.com talks by P.Zak and M.Crockett. Triggered by • appropriate physical contact • eye contact Classroom applications: • eye contact (especially in discussions and presentations) • physical contact activities if appropriate.</p>
 <p>Endorphin</p>	<p>Connected to • relief from pain (e.g., runners' high) Triggered by • pain • laughter • heartwarming stories • spicy food Classroom applications: • stories • humor & laughter</p>
 <p>Cortisol</p>	<p>Connected to • stress & fear This is a stress hormone connected to the "fight, flight or freeze" response. You don't want to encourage it. But keep in mind that it exists to help people survive. Positive psychology is NOT about denying negative experiences. Well-being includes the whole range of emotions. Classroom applications: • avoid cortisol by building a positive classroom culture. Cooperative learning tasks, icebreakers, smiling and learning students' names are good ways to start.</p>
 <p>BDNF Brain Derived Neurotrophic Factor</p>	<p>Connected to • faster & better learning even with subjects that don't seem connected with physical exercise. (Yes, exercise helps science and math!) Triggered by • exercise and movement Classroom applications: • have students move (even when it isn't gym class) • have students stand and move when finding partners or between tasks. • Don't pass out handouts. Have students come to the front to pick them up. • When we sit for 20 minutes, there is a build up of blood in the feet, lower legs and buttocks. 1 minute of movement gives a 15% increase of blood (and therefore oxygen) to the brain. Also see: www.tinyurl.com/ELTEnergybreaks.</p>

ASCD (Assoc. for Supervision and Curriculum Development) <http://inservice.ascd.org/chemical-reactions-in-the-classroom/>

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