



The following are the main items I reference in my talk, "Let's get physical: The brain/body connection."



If you want to read a book on the topic, a very good place to start: Ratey, J. and Hagerman, E. (2008). *Spark!: How exercise will improve the performance of your brain.* London: Quercus.

#### Humans were meant to walk 10-20 km a day.

Medina, J. (2014) Brain Rules. Seattle, WA: Pear Press

#### Brain/body and neuron, dopamine, serotonin.

Young, E. (Dec. 18, 2012). "Gut instincts: The secrets of your second brain". *The New Scientist*. Retrieved from <a href="http://neurosciencestuff.tumblr.com/post/38271759345/gut-instincts-the-secrets-of-your-second-brain">http://neurosciencestuff.tumblr.com/post/38271759345/gut-instincts-the-secrets-of-your-second-brain</a>

There is a build up of blood in the feet, lower legs and buttocks after 20 minutes. One minute of physical activity in increases blood/oxygen to the brain 15%.

Sousa, D. (2011) How the Brain Learns, Thousand Oaks, CA: Corwin Press.

# When you get multi-sensory input your remember more and are 50-75% more creative at problem solving.

Medina, J. (2014) Brain Rules. Seattle, WA: Pear Press

**Brain/body and neuron, dopamine, serotonin.** Young, E. (Dec. 18, 2012). "Gut instincts: The secrets of your second brain". *The New Scientist*. Retrieved from <u>http://neurosciencestuff.tumblr.com/post/38271759345/gut-instincts-the-</u>secrets-of-your-second-brain

#### Moving together builds rapport.

Building rapport – establishing bonds. Retrieved from http://www.mindtools.com/pages/article/building-rapport.htm

Howard, P. (2000). The Owner's Manual for The Brain: Everyday Applications from Mind-Brain Research. Atlanta: Bard Press.

#### **Energy Breaks**

Helgesen, M. (May, 2015) "Energy Breaks: Physical Tasks for the Language Classroom." Pearson Japan e-newsletter. Retrieved from: <u>http://www.pearson.co.jp/en/english-energy-breaks-physical-tasks-for-the-language-classroom/</u> The free *Energy Break* PowerPoint downloads are available at <u>http://helgesenhandouts.weebly.com/physical-activity-in-the-elt-class.html</u>

#### Aerobic activity in rats leads to learning mazes 2-12 times faster.

Buchner, D. (n.d.) "The Surprising links between Physical Activity, Brain Health and Healthy Aging. *Department of Health and Human Services -USA – Centers for Disease Control and Prevention*. Retrieved from http://depts.washington.edu/adrcweb/BuchnerPresentation061307.pdf

#### People learn vocabulary faster after exercise.

Barker, E. (March 4, 2014) "How To Make Your Kids Smarter: 10 Steps Backed By Science." *TIME Magazine*. Retrieved from <u>http://time.com/12086/how-to-make-your-kids-smarter-10-steps-backed-by-science</u>.

The same study is referred to in the Ratey & Hagerman book, *Spark*, included at the top of this list.

# **Power Poses**

Carney, D., Cuddy, A and Yap, A. (2010). "Power Posing: Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance." *Psychological Science*. XX(X) 1-6. Retrieved from <u>http://pss.sagepub.com/content/21/10/1363.abstract</u>

Amy Cuddy's TED talk on the topic: Retrieved from: http://www.ted.com/talks/amy\_cuddy\_your\_body\_language\_shapes\_who\_you\_are

# Positive Self-Talk and Linguistic Self-Distancing

Kross, E. et al (2014) "Self-Talk as a Regulatory Mechanism: How You Do It Matters" *Journal of Personality and Social Psychology*, Vol. 106, No. 2, 304 – 324. Retrieved from: <u>http://selfcontrol.psych.lsa.umich.edu/wp-</u> <u>content/uploads/2014/01/KrossJ\_Pers\_Soc\_Psychol2014Self-</u> <u>talk\_as\_a\_regulatory\_mechanism\_How\_you\_do\_it\_matters.pdf</u>

# For people with low self-esteem, "affirmations" can make things worse.

Wood, J., Perunovic, W.Q.E., & Lee, J. (2009). Positive self-statements: Power for some, peril for others. *Psychological Science*, *20*(7), 860-866.

# Things good language learners say to themselves.

Rost, M. (2005). *Generating Student Motivation*. Plenary Presentation at Thailand TESOL, January 20-22, 2005. Bangkok.

# Relaxed people do up to 25% better on tests.

Jensen, E. (2008). Brain-based learning. Thousand Oaks, CA: Corwin Press.