## The Essential Brain: Ten Key Things Everyone Needs to Know about the Brain

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## Let's Connect!

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# Thing 1: Welcome to your Brain

Notes & Take-aways:

Thing 2: The Limbic System

Notes & Take-aways:

# Thing 3: Hippocampus

Notes & Take-aways:

Thing 4: Amygdala

Notes & Take-aways:

# Thing 5: RAS

Notes & Take-aways:

What's the question students and parents need to be asked? What question do you need to be asking yourself?

### Thing 6: You can build a better brain

Notes & Take-aways:		

#### **RAS Activation Tips:**

Firstly, you can make subtle changes in teaching methods:

- Vary the tone, speed or loudness of your voice.
- Move around the room as you talk.
- Gesture while you speak, using animated hand and arm movements or facial expressions.
- Use a story to illustrate important concepts.
- Ask a question and then pause for at least five seconds rather than for a shorter period.
- Use humor or an anecdote.
- Use topic-related visual aids as you talk such as photographs, cartoons or charts.

You can change the activities you use to further involve the audience:

- Get the students to participate in short review activities.
- Ask the students to stand and stretch if they have been sitting for some time.
- Get them to draw simple diagrams on a whiteboard to represent what they have learned.
- Ask them to discuss a question about the material you have delivered.
- Use quiz games.

You can also change the physical environment of the venue:

- Change the layout of chairs from theatre style to classroom style or to round tables.
- Add aromas such as lavender, citrus or apple to create a different atmosphere. Peppermint!
- Play background music that either energizes or relaxes your audience.
- Decorate the classroom. Avoid sensory deprivation tanks that never alter.

#### Adapted from: Sharon Bowman. The Ten-Minute Trainer, pp. 145-146.

Read more about how educators can harness the RAS bit.ly/RAShandout

Thing 7: Stress is a bad idea

Notes & Take-aways:

Why do we need to know this?

# Thing 8: You want dopamine.

Notes & Take-aways:

# Thing 9: What video game designers know

Notes & Take-aways:

Why do students need to feel successful to be successful?

### Thing 10: Brain Loves Patterns

Notes & Take-aways:

How can I infuse this into my life?

### Read More:

Sparking Student Synapses 9-12 by Rich Allen and Nigel Scozzi (Corwin Press: 2012) Engaged Learning by Richard VanDeWeghe (Corwin Press: 2009) Any of the "How the Brain Learns" books by David Sousa (Corwin Press) How to Rewire Your Burned-Out Brain: Tips from a Neurologist: <u>bit.ly/rewire-your-brain</u> How to Plan Instruction Using the Video Game Model: <u>bit.ly/video-model</u> Neuroscience for Kids website: <u>bit.ly/neuro-kids</u> Handout for students: <u>bit.ly/brain-for-kids</u>