How the Brain Learns: A Brief Overview for Students

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Question of the Day?

What does a Tree, Waterslide and Airport have to do with the way you learn??
The Garage Door of the Brain: The Limbic System

- Am I Safe?
- Is this interesting or relevant?
- What should I pay attention to?
Little Prior Knowledge or Practice
LOTS of prior knowledge and practice!
Growing Dendrites = Learning
Knowledge and Ceiling Level Increase with Neural Network Growth

- Little time and effort → Low ceiling level
- More time and effort → Medium ceiling level
- Much more time and effort → High ceiling level

Ceiling Level
Ticket Out

1. Write a reflection on your notecard:
   Possible Topics:
   - What new information did you learn today?
   - What might you do next with what you’ve learned?
   - What other questions do I have?
Citations/Resources

- Encouraging metacognition: Supporting learners through metacognitive teaching strategies; Patricia Liotta Kolencik & Sheila Hillwig.
- Faculty development with Chris Jernstedt
- Student engagement techniques: A handbook for college faculty; Elizabeth Barkley.
- Understanding how the brain naturally learns; Rita Smilkstein, [http://www.borntolearn.net](http://www.borntolearn.net)
- How the brain learns best: Strategies that make learning stick; Free webinar by Edutopia featuring Judy Willis (neuroscientist turned teacher)
- [http://www.youtube.com/watch?v=eMZnfFD1maU](http://www.youtube.com/watch?v=eMZnfFD1maU)
- [http://www.mindmapping.com](http://www.mindmapping.com)
- [http://www.edpsycinteractive.org/topics/cognition/infoproc.html](http://www.edpsycinteractive.org/topics/cognition/infoproc.html)
- Big Questions, Worthy Dreams: Mentoring Emerging Adults in Their Search for Meaning, Purpose, and Faith by Sharon Daloz Parks.