How Students Learn: Strategies for Teaching from the Psychology of Learning

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Think of something you feel you do REALLY well.
Index card drop...

1. Person A – lay arm across desk with hand over the edge. Put index finger and thumb $\frac{1}{2}$ inch apart.

2. Person B – hold index card with bottom edge even with fingers. Drop without warning three times.

3. Note how many times card is caught.
Thinking vs Recall

It takes more time and energy to think than to recall.

When it is better to not think?
“Every beginning instructor discovers sooner or later that his first lectures were incomprehensible because he was talking to himself, so to say, mindful only of his point of view. He realizes only gradually and with difficulty that it is not easy to place one’s self in the shoes of students who do not yet know about the subject matter of the course.” Piaget (1962)
Attention Challenges

What can you do? Anyone?
- Attention Grabber
- Social Contagion
What do you do in your class to capture attention of students or increase the energy in the room?
Popular Study Techniques

1. ___ Elaborative Interrogation
2. ___ Self-Explanation
3. ___ Summarization
4. ___ Highlighting/underlining
5. ___ Keyword Mnemonic
6. ___ Imagery for text
7. ___ Rereading
8. ___ Practice Testing
9. ___ Distributed Practice
10. ___ Interleaved Practice

Learning Styles: Concepts and Evidence

-- vision and olfactory very important

Pashler, McDaniel, Rohrer, & Bjork, 2009
Power of Social Norms

Your heritage is being vandalized every day by theft losses of petrified wood of 14 tons of wood a year, mostly a small piece at a time.
Both Self-Esteem and Self-Efficacy are Important

“We used to think we could hand children self-esteem on a platter,” Stanford University psychologist Carol Dweck said. “That has backfired.”
What behaviors illustrate or are good examples of something an unmotivated student might do?
Attribution

How do we describe the “cause” of behavior???
- Internal (dispositional)
- External (situational)
• Entity – fixed, less risk, look smart, criticism is about self
• Incremental – growth, accepting challenge, failure is opportunity, criticism is about task