

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



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Icebreaker



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?

Boredom < Learning > Frustration



“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)

penny

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 Techniques: Promising Directions from Cognitive and Educational Psychology, APS, Psychological Science, (2013) Dunlosky, Rawson, Marsh, Nathan, & Willingham.



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

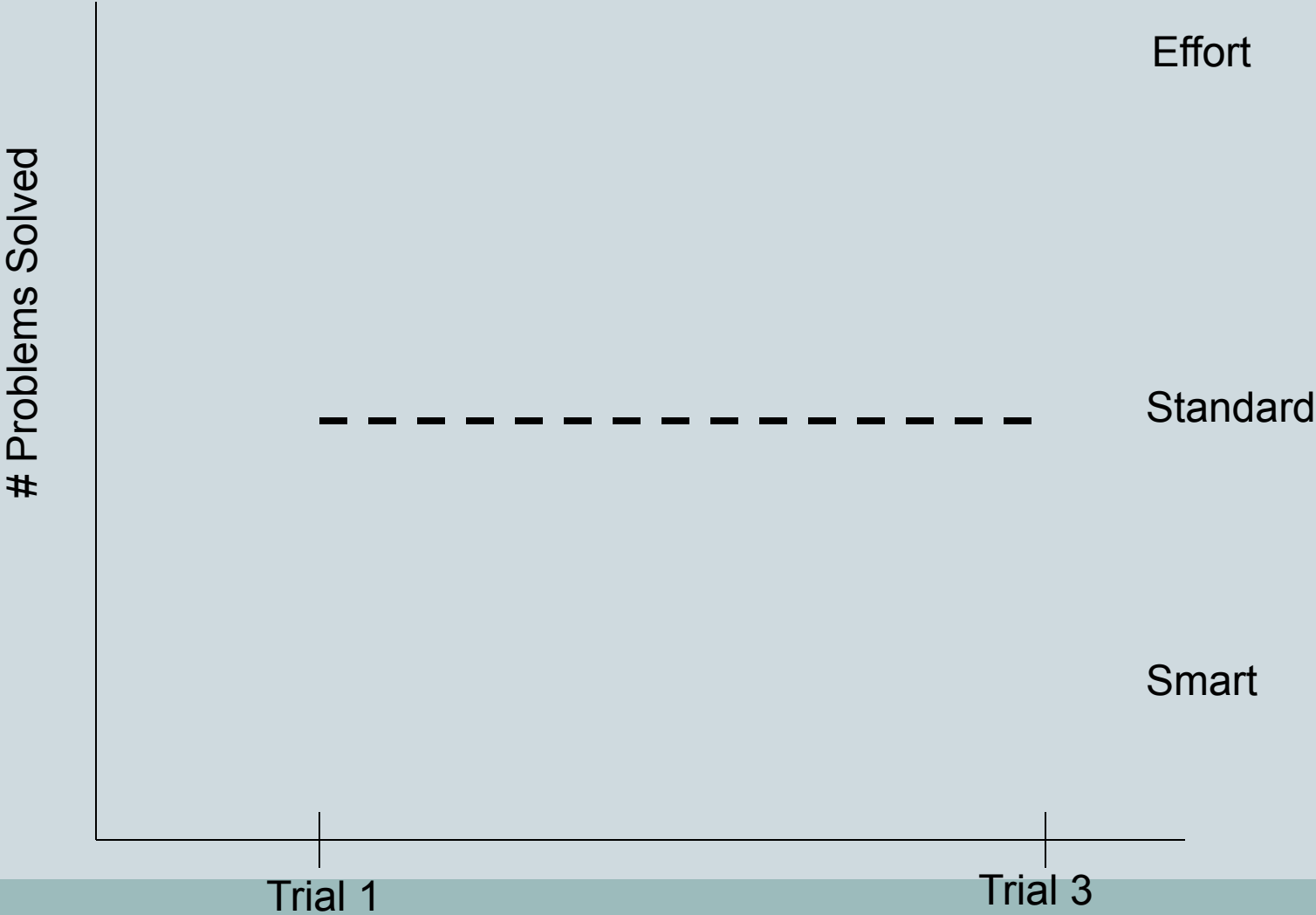
How do we describe the “cause” of behavior???

- Internal (dispositional)

- External (situational)



Carol Dweck, 2006



Carol Dweck, 2006



- Entity – fixed, less risk, look smart, criticism is about self
- Incremental – growth, accepting challenge, failure is opportunity, criticism is about task

