Research Articles

Learning Styles:

Pashler, H., McDaniel, M., Rohrer, D. and Bjork, R.(2008).Learning Styles: Concepts and Evidence, *Psychological Science in the Public Interest,* 9, 106-119

Discovery Learning:

Mayer, R. (2004). Should There Be a Three-Strikes Rule Against Pure Discovery Learning? The Case for Guided Methods of Instruction, *American Psychologist*, 59, 14-19.

Stereo-Type Threat

Steele, C. M. and Aronson, J. (1995) Stereotype Threat and the Intellectual Test Performance of African Americans. *Journal of Personality and Social Psychology* 69, 797-811.

Spencer, S., Steele, C. and Quinn, D. (1999) Stereotype Threat and Women's Math Performance. *Journal of Experimental Social Psychology, 35,* 4-28.

Mindset (talent vs. hard work):

Dweck, C. (2006) Is Math a Gift? Beliefs That Put Females at Risk, *Why aren't more women in science? Top researchers debate the evidence. Washington, D.C. American Psychological Association.* 1-14

Effortful practice:

Ericsson, A. (2006). The Influence of Experience and Deliberate Practice on the Development of Superior Expert Performance, The Cambridge Handbook of Expertise and Expert performance, Chapter 38, 683-703.

Peer Instruction (clickers):

Smith, M. K., Wood, W. B., Adams, W. K., Wieman, C., Knight, J. K., Guild, N. and Su, T. T. (2009) Why Peer Discussion Improves Student Performance on In-Class Concept Questions. *Science, 323*, 122-124.

Interactive Engagement measured by Concept Inventory

Hake, R. (1998).Interactive-engagement vs traditional methods: A six-thousand student survey of mechanics test data for introductory physics courses.*American Journal of Physics*, 66, 64-74

Attitudes about beliefs about learning science

Adams, W. K., Perkins, K. K., Dubson, M., Finkelstein, N.D. and Wieman, C.E. (2006).A new instrument for measuring student beliefs about physics and learning physics: the Colorado Learning Attitudes about Science Survey*Physical Review, Special Topics - Physics Education Research*, *2,*010101, 1-14.

Problem Solving

Mayer, R and Wittrock, M. (2006) Problem Solving, *Handbook of educational psychology*, *chapter 13* 287-303.

Rubric

25	Summary (1-2 page single spaced summary of the study and the results)
25	Critique (unlimited pages: Do the conclusions come directly from the data? Did they measure all the things you'd like to see measured? Were they consistent? Could they have been clearer in their writing? Etc…)
10	Readability (would you have made it through if it wasn't an assignment?)
15	Apply to teaching (In general and do you plan to use these ideas)
25	Presentation (15 minutes presenting over view with data either as handouts or powerpoint so that classmates understand the study and results of your article)