

## Self-Efficacy, Implicit Theory of Intelligence, Goal Orientation and the Ninth-Grade Experience

### Resources Shared During Workshop *(submitted by Dan Cordon)*

JO BOALER (2013) Ability and Mathematics: the mindset revolution that is reshaping education, FORUM, 55(1), 143-152. (<http://dx.doi.org/10.2304/forum.2013.55.1.143>)

Even Bright High School Graduates Can Fail First Semester College: Here's Why, By Patricia Gorden Neill - June 13th, 2013 (<http://www.academicinfo.net/campus-life/even-bright-high-school-graduates-can-fail-first-semester-college-heres-why>)

Mindsets and Student Agency, Eduardo Briceño, UnBoxed Issue 10, Spring 2013, Mindset Works, San Carlos CA ([http://www.hightechhigh.org/unboxed/issue10/mindsets\\_and\\_student\\_agency\\_contributors/](http://www.hightechhigh.org/unboxed/issue10/mindsets_and_student_agency_contributors/))

Mind-Set Interventions Are a Scalable Treatment for Academic Underachievement, Paunesku D., Walton G.M., Romero C., Smith E.N., Yeager D.S., Dweck C.S., (2015) Psychological Science, 26 (6), pp. 784-793, doi: 10.1177/0956797615571017

### Suggested Reading

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development*, 78(1), 246-263.

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Dweck, C., Chiu, C., Hong, Y., Hong, Y. Y., Chan, G., Chiu, C. Y. et al. (2003). Implicit Theory Measure. *How are social identities linked to self-conception and intergroup orientation? The moderating effect of implicit theories*, 85, 1147-1160.

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Eccles, J. S., & Midgley, C. (1989). Stage/environ-ment fit: Developmentally appropriate class-rooms for young adolescents. In R. E. Ames & C. Ames (Eds.), *Research on motivation in education* (Vol. 3, p. 139-186). New York: Academic Press.

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- Grant, H., & Dweck, C. S. (2003). Clarifying Achievement Goals and Their Impact. *Journal of Personality and Social Psychology*, 85, 541-553.
- Malaspina, D., & Rimm-Kaufman, S. E. (2008). Early Predictors of School Performance Declines at School Transition Points. *RMLE Online: Research in Middle Level Education*, 31(9), 1-16.
- Heyman, G. D., & Dweck, C. S. (1992). Achievement Goals and Intrinsic Motivation: Their Relation and Their Role in Adaptive Motivation. *Motivation and Emotion*, 16(3), 231.
- Hong, Y., Chiu, C., Dweck, C. S., Lin, D. M. S., & Wan, W. (1999). Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social Psychology*, 77(3), 588-599.
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- Skinner, E. A., & et al. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology*, 82(1), 22-32.

## **Recorder Notes** *(submitted by Steve Beyerlein)*

1. Before start-up, participants rated their familiarity with the concept of a 'growth mindset'. Over 50% had some familiarity and perhaps 20% had lots of familiarity with this concept.
2. At the start of the session, participants took an 8 question mindset survey. Nearly everyone scored above 4/6 with an average close to 5/6. A couple of participants had a perfect score. This was similar to the instrument that Claire used with her 9th graders.
3. Academic struggle in K-12 is most pronounced in 9th grade (lowest GPAs, most missed classes, misbehavior, most repeat enrollments, highest 'failure rate'). Nationwide approximately 25% of 9th grader have 3 or more course failures during their 9th grade year! For those who are retained academic performance improves during the next three years of high school. Similar academic distress tends to occur at the high school to college transition.
4. What is critical for future academic success is how students respond to these failures. Fixed mindset => downward spiral; growth mindset => upward spiral.
5. Carol Dweck's work shows the positive benefits of explicitly teaching about a growth mindset leading to the conclusion that persevering is better than being smart.
6. Grade focus tends to promote a fixed mindset even though students are naturally attracted to learning mastery (growth mindset). Our teaching and course management styles along with school culture can dramatically affect student behaviors about taking risks, accepting challenge, and being self-confident.
7. Techniques for developing a growth mindset among students...
  - be a role model for others, conspicuously growing your skills as a teacher in front of the students
  - provide opportunities for expanded risk-taking w/o judgment/evaluation
  - pay attention to the learning process more than the learning products
  - provide timely and informative feedback on how to improve
  - praise the process, not the person (be sincere)
  - provide opportunities and training in self-assessment