



Improving student performance WITH GROWTH MINDSETS

3 MINUTE READ

ABSTRACT

“In a fixed mindset students believe their basic abilities, their intelligence, their talents, are just fixed traits. They have a certain amount and that’s that, and then their goal becomes to look smart all the time and never look dumb.

In a growth mindset students understand that their talents and abilities can be developed through effort, good teaching and persistence. They don’t necessarily think everyone’s the same or anyone can be Einstein, but they believe everyone can get smarter if they work at it.”

—Carol Dweck, Stanford University

Cultivating a growth mindset is the foundation for students being able to improve in their learning and life. Is intelligence and talent something you are born with, or is it something that can be developed over time? Carol Dweck’s research (Dweck, 2006) has identified two ways to explain achievement. First, that talent and ability are inherent (a fixed mindset). Secondly, that talent and ability are malleable (a growth mindset). The trouble with believing in the fixed mindset is that it severely limits our potential. With a fixed mindset, we believe we cannot change our innate abilities – so we don’t.

It matters a great deal what students believe about their intelligence and talent – whether it is dynamic or static. If we have a fixed mindset, we will have no reason to try to improve. Instead, if we understand a growth mindset, we will want to build and strengthen neural pathways by focusing our effort. With a growth mindset, we have a reason to apply ourselves – and this shows in the results of students who hold growth mindsets. In numerous studies, those with growth mindsets have outperformed their peers with a fixed mindset (Blackwell, Trzesniewski, & Dweck, 2007; Dweck, 2009). As mindsets can be changed, it is in the best interests of educators to learn and explain the mindsets to their students.

These beliefs are supported by research in the discipline of neuroscience. It has recently been discovered that from the cradle to the grave, the amazing human brain is constantly rewiring- enabling us to keep learning throughout our lives (Doidge, 2007). When students are taught that talent is malleable, their grades improve. If they are taught that intelligence and talent are developed over time through focused effort and attention, they are able to let go of restrictive beliefs more easily and improve their academic outcomes (Good, Aronson, & Inzlicht, 2003).





Improving student performance WITH GROWTH MINDSETS

Lessons or workshops have been found to be particularly effective for developing growth mindsets. Lessons should focus on teaching students that the brain is like a muscle that gets stronger with use and that every time students work hard and learn new things, the neurons in their brains form new connections (Dweck, 2009). While the formal curriculum should include lessons about growth mindsets, the impact of everyday interactions should not be undervalued.

Research has shown that when adults praise children for their intelligence or talent, as opposed to their effort, it fosters a fixed mindset (Mueller & Dweck, 1998). In one study, 85 percent of the parents polled believed that praising children's ability (i.e. their intelligence or talent) when they perform well is necessary to make them feel that they are smart (Mueller & Dweck, 1996). It might make them feel smart at the time (and they love the praise), but it will actually undermine their performance and simultaneously create a fixed mindset. "Attributing children's good performance to intelligence may have an undesired impact on children's overall achievement" (Mueller & Dweck, 1998). Essentially, praising for ability can do more harm than good. There is a far better alternative.

A study of 53 families over five years demonstrated that praising children's effort, rather than talent, encourages them to adopt a growth mindset—they "believe ability is malleable, attribute success to hard work, enjoy challenges, and generate strategies for improvement" (Gunderson, 2013). Children who received a greater proportion of process praise ("you worked hard") [tended] to believe that the "sources of their accomplishments are effort and deliberate practice", whereas children who heard a greater proportion of person praise ("you're so smart") [tended] to believe that the sources of their accomplishments are fixed traits" (Gunderson, 2013). This study has significant implications for every educator and parent.

Schools who are leading the way in their pursuit of improving student effort and academic achievement are being intentional about fostering growth mindsets.



An Educational Brief
By Luke McKenna



Improving student performance WITH GROWTH MINDSETS

At UPP, our resources and training improve student performance by building mindsets, grit and wellbeing for school communities.

Find Out More

References

Blackwell, L., Trzesniewski, K., & Dweck, C. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: a longitudinal study and an intervention. *Child Development*, 246-263.

Doidge, N. (2007). *The Brain That Changes Itself: Stories of personal triumph from the frontiers of brain science*. New York: Penguin Group.

Dweck, C. (2006). *Mindset: The new psychology of success*. New York: Ballantine Books.

Dweck, C. (2009). Theories of Intelligence. Retrieved from education.com: <http://www.education.com/reference/article/theories-of-intelligence/>

Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents' standardized test performance: An intervention to reduce the effects of stereotype threat. *Applied Developmental Psychology*, 645 – 662.

Gunderson, E., Gripshover, S., Romero, C., Dweck, C., Goldin-Meadow, S., & Levine, S. (2013). Parent Praise to 1- to 3-Year-Olds Predicts Children's Motivational Frameworks 5 Years Later. *Child Development*, 1-16.

Mueller, C., & Dweck, C. (1996). Implicit theories of intelligence: Relation of parental beliefs to children's expectations. Poster session presented at Head Start's Third National Research Conference. Washington, DC.

Mueller, C., & Dweck, C. (1998). Intelligence praise can undermine motivation and performance. *Journal of Personality and Social Psychology*, 33-52.

