

Efficacy of a Growth Mindset Intervention to Increase Student Success

Intervention: This Department of Education funded study is testing the efficacy of Brainology®, a research-based educational intervention designed to teach students a growth mindset and effective study skills. It is based on research showing that a growth mindset—the understanding that one can develop one’s intelligence through learning and effort—leads to increased motivation and achievement, and that teaching a growth mindset leads to improved academic performance.

Brainology® is a blended learning curriculum combining an animated, interactive internet-delivered software program and classroom activities. In 20 lessons, Brainology teaches students how the brain works and how it becomes stronger and smarter through practice and learning. It shows them how the challenges they experience in school—with attention, emotion, learning, and memory—can be understood and managed by using effective study strategies, and provides activities to reinforce and apply this learning to their school work.

Research design: To test the efficacy of the intervention, participating middle school/junior high school teachers and classrooms in 6th and/or 7th grade will be randomly assigned to one of two conditions:

1. **A Growth Mindset Training group**, in which teachers and classrooms will implement Brainology;
2. **A Comparison group** in which teachers and classrooms proceed with their customary practices.

Schools will participate in all data collection except that related to study implementation. (Those in the comparison group will be eligible for free Brainology services upon completion of the study.)

Timeline: Prior to October 2018, we will collect baseline achievement and demographic data; conduct random assignment; obtain required consents from districts, schools, teachers, and parents; and implement pre-measures. The Intervention phase will begin in the 2018 Fall/Winter term and continue through the academic school year. Following program completion in the Spring of 2019, participating schools in both conditions will also complete post-measures, and data on impact (including short- and longer-term academic outcomes) will be collected. Final data collection for both conditions will occur in late Fall of 2019.

Key measures and outcomes: Well-established measures of beliefs, goals, and attitudes will be used to assess student and teacher mindsets. Behavioral outcomes will be assessed through a combination of self-report surveys, teacher reports, and attendance data. Achievement outcomes will include grades and test scores.

Data analysis and reporting: We will compare the outcomes of groups in the Growth Mindset Training group with those in the Comparison group on all of the above measures. All data will be kept confidential and results will be reported in aggregate form only.

Compensation: All program resources are covered by this grant and will therefore be provided for free to participating teachers and their classrooms for the study duration. (Teachers in the Comparison group will be provided with the resources after the study period in Winter 2019.) Stipends will be provided for schools and participating teachers who complete program and research activities. Participating students in both groups will receive a small gift for completing surveys.

Potential Benefits: Findings from this study can provide meaningful information about the effectiveness of this approach in transforming students’ mindsets, motivation, and achievement, and whether it fosters higher expectations, challenge-seeking, love of learning, and greater success for all students. It also has the potential to help illuminate the mechanisms by which growth mindset training impacts student achievement, and could provide insights into the level and types of supports that are optimum for effecting significant, lasting change. More broadly, findings and products from this research have great potential for informing research, education, and policy. For example, findings could contribute to schools’ understanding of effective non-cognitive approaches that have the potential to serve as viable solutions for districts. It may also inform practice and assessment by providing an understanding of how academic beliefs and behaviors, as well as classroom practice, interlink and contribute to academic success. Findings gleaned may also shape educational policy around effective approaches and assessment.

Additional Information: This study would begin in Fall 2018. **If interested, please complete the brief interest form <https://goo.gl/forms/pPKvOh7mbKl03K9o2>.** For any questions, you may contact us at research@mindsetworks.com or check out <https://ies.ed.gov/blogs/research/post/a-growing-body-of-research-on-growth-mindset>.