# **Growth Mindset**

Middle School

High school

Elementary Education



## **Intervention Overview**

Researcher Carol Dweck discovered that students can have two mindsets regarding learning and intelligence. Students with a fixed mindset believe that their intelligence and abilities are fixed and cannot be changed or improved. These students refuse to be challenged for fear of appearing unintelligent to others. Other students have a growth mindset and believe that intelligence and ability are malleable and. Those with a growth mindset understand that intelligence "can be developed. . . through effort,good strategies, and input from others" and seek out ways to challenge themselves and improve their abilities (Dweck, 2019, p. 21). According to Dweck, students with a growth mindset learn more and face setbacks with greater resilience (Stanford University, 2015). Three ways that teachers can promote a growth mindset in the classroom by: 1) Providing feedback about a student's process and effort, rather than their ability or a successful outcome. 2)Directly teaching students about the difference between a growth and fixed mindset. 3) Teaching students about brain development and its malleability (neuroplasticity) (Hwang & Nam, 2021). We have included a few resources below that can assist you in teaching students these key principles of having a growth mindset. Creating a classroom or school centered on fostering a growth mindset will boost your students' learning and academic achievement, while also reducing negative emotions, improving self-esteem, and fostering resilience (Yeager et al., 2016; Miu & Yeager, 2015; Paunesku et al., 2015).

## **Intervention Guide**

Grade Level:	All
Materials:	Possible materials include growth mindset videos, modules, and activities provided FREE through <u>Khan Academy</u> and the <u>Stanford Project for Education Research that Scales (PERTS)</u> program.
Duration:	Varies

#### Implementation:

- Creating a culture of growth mindset in your classroom begins with first educating yourself and your students about what it means to have a growth mindset. For older students, consider reading with them portions of Carol Dweck's book *Mindset:The New Psychology of Success*.You may also use the instructional videos provided by Khan Academy.
- 2. Help your students practice a growth mindset by praising them for their effort and potential, rather than abilities. Consider providing additional chances for students to revise work before submitting it for a final grade.
- Consider using the age-appropriate activities and teaching tools provided by Khan Academy and the PERTS program frequently throughout the year to continue teaching your students about the principles of a growth mindset.

### Does it work?

Carol Dweck and other researchers at Stanford University, as part of the Project for Education Research that Scales(PERTS), developed an online growth mindset intervention for students that has been assessed in various studies throughout the world (Dweck, 2019). Over 1,000 students across the United States participated in a study to assess the effectiveness of this growth mindset intervention on improving student achievement (Paunesku et al., 2015). Particularly among underperforming students at risk of dropping out, this intervention significantly improved students' overall grade point average (GPA) and achievement in core classes (Paunesku et al., 2015). A study of this same intervention, but focused specifically on ninth grade students, found that 7% of students who were "off track" or behind in their classes began passing their courses after participating in the intervention (Yeager et al, 2016). The World Bank administered the materials for this growth mindset intervention to a group of students in Peru and found that students' test scores were improved in several subject areas following the intervention (World Bank, 2017). Blackwell, Tresniewski, and Dweck (2007) found that with the implementation of a growth mindset intervention at the beginning of junior high school, adolescents' math scores significantly improved over their time in junior high school, as compared to the control group which showed little improvement.

Another group of researchers found that an intervention that teaches adolescents about the power of growth mindsets and neuroplasticity, particularly during their transition to high school, can decrease depressive symptoms. They performed 3 studies with almost 600 students entering high school in which each student self-administered the 30 minute intervention on paper or a computer. The treatment group were taught that " (a) if you are excluded or victimized, it is not due to a fixed, personal deficiency on your part; and (b) people who exclude or victimize you are not fixed, bad people but, instead, have complicated motivations that are subject to change" (Miu & Yeager, 2015, p.731). They were introduced to the idea that "behaviors are controlled by 'thoughts and feelings in their brains' and that such pathways in the brain can be changed" (Miu & Yeager, 2015, p.731). They were introduced to future participants. This practice, asking participants to try to convince someone else of what they learned, is a common practice in adolescent interventions. As a result, those in the treatment condition had less self-reported depressive symptoms, increased self-esteem, and a more positive mood compared to the control condition at the 9-month follow-up. A similar study also found that such an intervention can also lead to perceived control and quicker stress recovery as linked with growth personality mindsets (Schleider & Weisz, 2016).

### **References:**

- Khan Academy (2022). Growth mindset activities. <u>https://www.khanacademy.org/college-careers-more/learnstorm-growth-mindset-activities-us</u>
- Project for Education Research that Scales (PERTS). (2022). Educator resources. https://www.perts.net/resources
- 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. <u>https://doi.org/10.1111/j.1467-8624.2007.00995.x</u>.
- Dweck, C. (2006). Mindset: The new psychology of success. Random House: New York, NY.
- Dweck, C. (2019). The choice to make a difference. *Perspectives on Psychological Science, 14*(1), 21-25. https://doi.org/10.1177/1745691618804180
- Hwang MH., Nam J.K. (2021) Enhancing Grit: Possibility and Intervention Strategies. In: van Zyl L.E., Olckers C., van der Vaart L. (eds) Multidisciplinary Perspectives on Grit. Springer, Cham. <u>https://doi.org/10.1007/978-3-030-57389-8\_5</u>
- Miu, A. S., & Yeager, D. S. (2015). Preventing Symptoms of Depression by Teaching Adolescents That People Can Change: Effects of a Brief Incremental Theory of Personality Intervention at 9-Month Follow-Up. *Clinical Psychological Science*, 3(5), 726–743. <u>https://doi.org/10.1177/2167702614548317</u>
- Paunesku, D., Walton, G. M., Romero, C., Smith, E. N., Yeager, D. S., & Dweck, C. S. (2015). Mind-set interventions are a scalable treatment for academic underachievement. *Psychological Science*, *26*, 284–293. <u>https://doi.org/10.1177/0956797615571017</u>
- Schleider, J. L., & Weisz, J. R. (2016). Reducing risk for anxiety and depression in adolescents: Effects of a singlesession intervention teaching that personality can change. *Behaviour Research and Therapy*, 87, 170–181. <u>https://doi.org/10.1016/j.brat.2016.09.011</u>
- Stanford University. (2015, November 3). Teaching a growth mindset: Carol Dweck [VIDEO]. YouTube. <u>https://www.youtube.com/watch?v=isHM1rEd3GE</u>
- World Bank. (2017, April 25). *If you think you can get smarter, you will*. Retrieved from <u>http://www.worldbank.org/en/results/2017/04/25/peru-if-you-think-you-can-getsmarter-you-will</u>
- Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosa, C., Lee, H. Y., O'Brien, J., Flint, K., Roberts, A., Trott, J., Greene, D., Walton, G. M., & Dweck, C. S. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology*, *108*, 374–391. <u>https://doi.org/10.1037/edu0000098</u>





This content is provided to you freely by EdTech Books.

Access it online or download it at https://edtechbooks.org/addressing\_wellbeing/growth\_mindset.