Growth Mindset: Changing the Way To Think

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In education, often teachers and administration can get bogged down with standards and objectives, the "what to teach". There are different techniques out there that also talk about the "how to teach". Dewey would argue that the place to start would lie in psychology. "Without insight into the psychological structure and activities of the individual, the educative process will, therefore, be haphazard and arbitrary" (Dewey, 2017, pp. 33). One aspect of educational psychological development when it comes to solving problems is a growth mindset.

Growth mindset is an idea first developed by Carol Dweck. "...growth mindset is based on the belief that your basic qualities are things you can cultivate through your efforts, your strategies, and help from others" (Dweck, 2006, p. 7). Dweck's research started with giving a small group of students a series of tasks while she observed how they completed them (2006). "As the students grunted, perspired, and toiled, I watched their strategies and probed what they were thinking and feeling" (Dweck, 2006, p. 3). She discovered that even though they may have struggled with some of the tasks, they didn't give up, that the children were failing but kept trying. She called this state of mind a "growth mindset" whereas the idea that your abilities are locked and difficult to change is called the "fixed mindset" (Dweck, 2006). "A growth mindset is more than just effort. Students should learn how to try new approaches, use all available resources, and seek feedback" (Stohlmann, 2022, p. 159).

Dweck would argue that growth mindset is not necessarily a novel idea. "We have lots of sayings that stress the importance of risk and the power of persistence, such as 'Nothing ventured, nothing gained' and 'If at first you don't succeed, try, try again' or 'Rome wasn't built in a day'" (Dweck, 2006, p. 9). These commonly used phrases don't take into consideration the intelligence of the person nor the subject matter. They imply there will be failures but keep

persevering to succeed. This is the essence of the growth mindset. Dweck also cites the work of Robert Sternberg and Alfred Binet as contributing toward the idea of growth mindset.

"Robert Sternberg, the present-day guru of intelligence, writes that the major factor in whether people achieve expertise "is not some fixed prior ability, but purposeful engagement." Or, as his forerunner Binet recognized, it's not always the people who start out the smartest who end up the smartest" (Dweck, 2006, p. 5).

After first publishing her book on growth mindset in 2006, Dweck revisited her work in 2015, refining what a growth mindset is and how to implement it. For example, while discussing praising the effort of students, she makes it clear that it's not just about giving praise. "Too often nowadays, praise is given to students who are putting forth effort, but not learning, in order to make them feel good in the moment... It's good that the students tried, but it's not good that they're not learning" (Dweck, 2015, n.p.). She goes on to discuss that teachers should acknowledge effort, but at the same time ask about their process and help them think through what to do to solve problems.

Dweck, along with Yeager, continued to study growth mindset, addressing several concerns published in an article in 2020. "...we hope to navigate the evidence in a way that is illuminating for the reader—that is, in a way that looks at the places where mindset effects are robust and where they are weak or absent" (Yeager & Dweck, 2020, p. 3). After reviewing several studies, they found the "foundations of mindset theory are sound, the effects are replicable, and the intervention effect sizes are promising" (Yeager & Dweck, 2020, p. 18).

In 2019, two books were published about how to use growth mindset in a classroom. Hoskins and her Growing Learners team of education research psychologists take an overall look as to how mindsets can help or hurt student achievement overall, across all ages (Hoskins, 2019). Their focus is not on any one discipline, but education overall. Willis's book is a practical guide for teachers in early childhood and elementary schools, complete with activities and how to implement them to help foster a growth mindset (Willis, 2019).

In Stohlmann's 2022 review article, he researched fifteen empirical studies done on growth mindset with specific emphasis on STEM subjects. "Helping students hold growth mindsets for STEM subjects is important so that students do not feel that only certain people are able to learn the STEM subjects" (Stohlmann, 2022, p. 159). The conclusion of his research is that growth mindset is effective for helping students in STEM subjects, but that further research was needed to learn best practices for teaching growth mindset.

I think if this trend can pick up traction, it could be a game changer for students. Sometimes theories and trends, while they are shown to be effective, can be difficult to implement in the classroom. School policies and objectives can get in the way or classroom sizes and the individual students can influence which theory is more effective. Growth mindset can work with many other theories, and can be easily implemented in the classroom. "A growth mindset can help students strive to do their best, seek to improve, and to be a life-long learner" (Stohlmann, 2022, p. 160). As Dweck and others continue researching how it's used in the classroom, I think we will also see better implementation as teachers also grow their own growth mindset. "...the path to a growth mindset is a journey, not a proclamation" (Dweck, 2015, n.p.).

This will not be an easy change. Yeager and Dweck noted that so far changes have not worked (2020). "As the field begins to tackle this challenge, it will not have to start from scratch but can build on recent studies documenting the role of teachers' mindsets and mindset-related practices in student achievement (e.g. Canning et al. 2019)" (Yeager & Dweck, 2020, p. 18). As

a solution to support teachers, they included the website <u>https://www.perts.net/</u>, hosting modules they've created for teaching teachers how to develop and implement a growth mindset.

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