

Activating Growth Mindsets in College Classrooms

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Abstract

Decades of research have demonstrated that a student's mindset is a critical factor that impacts how comfortable and motivated they are when posed with a new or difficult problem to solve. The purpose of this study is to investigate the role of growth mindset in classrooms and identify strategies teachers can do to encourage and motivate students to change their worldview from a fixed mindset to a growth mindset. Data was collected through structured interviews with five teachers of higher education, namely teachers of English from different universities. Through the data collection process, different themes were identified. This study found that teachers are using different strategies to fully understand how to foster a growth mindset in their students. These strategies include reflecting their understanding and belief about the malleability of intelligence and the importance of self-confidence to their students. Moreover, they include being mindful of different learning strategies and embracing individuality.

Keywords : Growth Mindset; fixed mindset; teacher' perceptions and strategies; intelligence.

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INTRODUCTION

Students' academic success is influenced not only by their cognitive abilities and content knowledge, but also by non-cognitive factors, such as their beliefs, attitudes, and values. One influential non-cognitive factor is students' beliefs about the degree to which intelligence is a stable trait, termed "mindset" (Dweck, 1999). Mindsets are beliefs—beliefs about yourself and your most basic qualities. Think about your intelligence, your talents, and your personality. Are these qualities simply fixed traits? Or are they things you can cultivate throughout your life? Mindset explains how we become optimistic or pessimistic (Dweck, 2016). A particular mindset shapes our goals, our attitude toward how we educate our students. An education system truly oriented towards learning and personal growth requires students to be able to make mistakes, take risks, and partake in challenges that allow them to correct deficiencies and expand their cognitive abilities (Dweck, 2007). The application of neuroscience research in the classroom can highlight the notion that the brain is capable of making new connections that facilitate deep learning (Garlick, 2003). There is a gap between research on intelligence and the practical implementation of this knowledge in the classroom. As such, some teachers may not be fully aware of the benefits of introducing growth mindset to students which can result in greater confidence, increased self-esteem, and ultimately greater levels of achievement (Grant & Dweck, 2003). The purpose of this research is to learn how teachers define growth mindset and identify strategies used to promote this behaviour.

I. WHAT ARE GROWTH MINDSETS ?

Cognitive psychology focusses on our thinking. It does not deny the impact of biological and genetic factors, but it does focus on cognition -how we think- as opposed to the influence of genes and biology. Cognitive psychologist suggest that our thinking has a significant impact on our behaviour. How we think influences what we do, the decisions we make and the consequences that follow (Gershon, 2018).

When it comes to learning, the argument we can make from Dweck's research is that the mindset a student possesses underpins his working. For example, if a student believes that he simply can't do maths and no amount of effort, persistence or perseverance will change this, then certain behaviours, decisions and consequences are likely to follow. On the other hand, if a student believes that he can get better at maths and effort, persistence and perseverance have an important role to play, then different behaviours, decisions and consequences will follow.

I.1. Fixed Vs. Growth

Dweck (2000) argues that how people view intelligence can be classified into two main types. The first is referred to as a 'fixed mindset', where intelligence is viewed as something that is inherent and fixed, and little can be done to change it. Students with a fixed mindset were more likely to feel hindered by obstacles and less likely to

persevere through them. They ignored negative feedback, even when it could be helpful (Dweck, 2010). Conversely, a 'growth mindset' is the belief that intelligence is a malleable characteristic that can become increasingly stronger with practice (Dweck, 2010). Students with a growth mindset saw obstacles as opportunities and valued feedback from others to help them improve (Dweck, 2006). Dweck's findings suggest that having a growth mindset is associated with better academic achievement, and that it is possible for students to change their mindset. Research has begun to combine these two aspects and evaluate whether interventions to change a student's mindset from fixed to growth can have an impact on their academic achievement. Decades of research have demonstrated that a student's mindset is a critical factor that impacts how comfortable and motivated they are when posed with a new or difficult problem to solve. Figure 1 illustrates how individuals with either a fixed or a growth mindset perceive or respond to challenges, obstacles, effort, criticism, and the success of others.

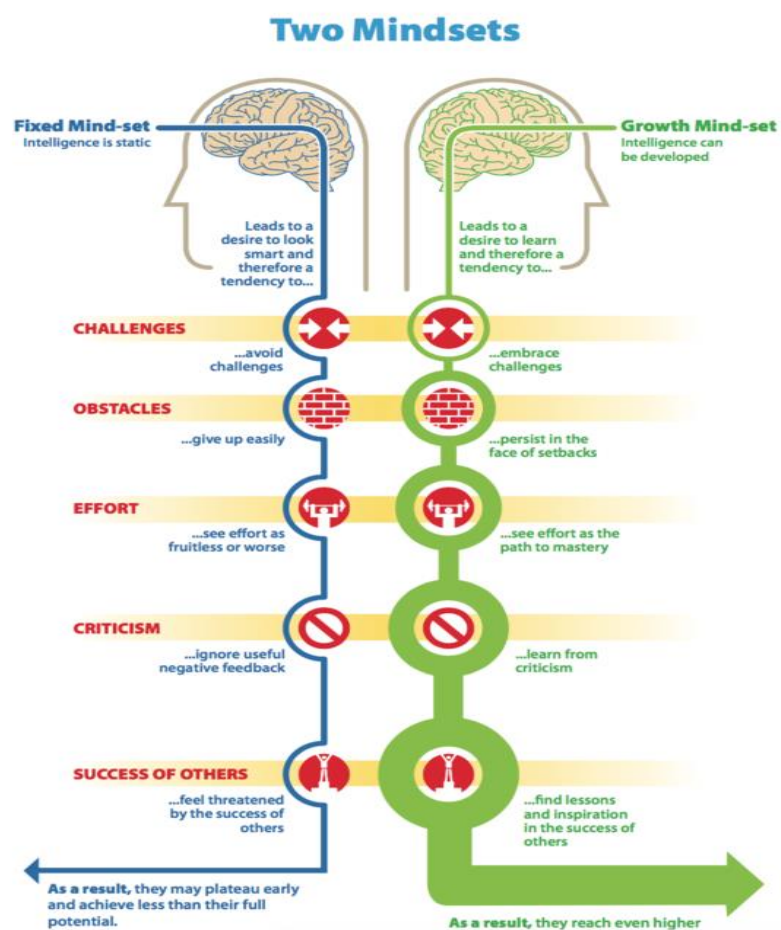


Figure 1. Two mindsets (Dweck, 2016)

Students with a growth mindset begin with the belief that intelligence, talent and ability can go up and down. This tends to lead to some or all of the following habits:

- **Effort:** students believe that by applying efforts and targeting it effectively they can learn, develop and grow.

- Challenge: students understand that challenges push us to do more than we can currently manage. They appreciate that you can learn from challenges and that, over time, the challenge will become manageable and then easy.
- Mistakes and failures are not necessarily loved, but they are seen as something from which you can learn.
- Feedback gives you information you can use to improve or develop your work
- Thinking is seen as open to change. As part of this students see the benefits of thinking about their own thinking. They understand that by attending to your thoughts you can identify what is working and what isn't, before using this to make changes and improvements.
- Persistence in the face of obstacles is a good thing. Students are more likely to persist when faced with obstacles. Therefore, persevering has benefits and is likely to lead to good outcomes.
- Students are more likely to have a go at things and not fear the consequences of being wrong. They understand that we learn through trial and error. And they appreciate that you can't develop and grow unless you try new things (Gershon, 2018)

When teachers promote growth mindset in their classrooms, it is these habits they seek to cultivate. By doing so, they help students become more resilient. The process sees students developing their character as well as their knowledge and understanding.

Thus, a "growth mindset" contrasts with a "fixed mindset," or believing that your qualities are carved in stone. A fixed mindset leads to a desire to look smart. students with a fixed mindset believe that intelligence is static; they avoid challenges, lack persistence, and believe that effort and hard work have little impact on outcomes. These same students tend to ignore beneficial negative feedback and they also feel threatened by the success of others. Overall, these students tend to achieve less than their full potential. Students with growth mindsets, on the other hand, enjoy challenges and value putting effort into solving difficult problems, knowing that initial failure is often a necessary step on the way to acquiring expanded skills and abilities (Aditomo, 2015).

II. A GROWTH ORIENTED CLASSROOM

How do students develop a growth or fixed mindset? The short answer is they learn it. Students pick up messages from the language teacher use, what they choose to teach, the behaviours they reward, and even the classroom environment they establish that teaches them to believe in a fixed or growth mindset. The Thoughtful Teacher is aware of the way their actions reinforce a fixed or growth mindset and teach for the development of a growth mindset.

Learning how to foster a growth mindset in students requires time and practice. The approach requires consistent instruction that reinforces and demonstrates the idea that students can improve their ability. At the most basic level, mindset techniques involve shifting emphasis away from outcomes and toward efforts and

process. Implementation of a growth-oriented classroom is not a single lesson, but something that is demonstrated consistently throughout the day and instilled in the minds of students. There are several strategies that can be used to foster a growth mindset, each of them contributing to a communal classroom shift in thinking.

II.1. Neuroplasticity

When students understand neuroplasticity, their perception of their own abilities also changes. It becomes much easier for them to understand growth mindset and embrace mistakes, obstacles and challenges. Neuroplasticity is the brain's ability to change and grow throughout a person's life. Like a physical muscle, the brain gets stronger the more you use it. When the neurons in your brain are activated in a particular pattern, it's faster and easier for your brain to follow that same pattern in the future (Dweck, 2016).

This means when you use your brain to complete a task, the brain remembers the task, so next time it becomes a little easier. The time after that, it's even easier, and so on. The bottom line is that our brains aren't static. Through repeated practice and continual challenges, we can build pathways that make our brains stronger and smarter.

Neuroplasticity demonstrates how a change in thinking about our intelligence can build confidence and motivation to learn. Being told that the brain is a muscle does not make an individual more intelligent, but reassures them that they have the ability to improve and overcome challenges. Teaching about the brain can be extremely simple and beneficial for students of all ages. Applying the principles of neural plasticity and fluid intelligence can help students understand that one bad test will not hinder their academic success. Rather, they may develop a sense of resiliency and be able to learn and grow from their mistakes (Dweck, 2016). Students will understand that each new learning experience, good or bad, creates greater neural connections that makes them become stronger for subsequent challenges. Thus, one very important way that teachers can foster a growth mindset is by teaching students about brain research.

II.2. Embracing Challenges and Mistakes

Although students may feel more confident after succeeding in an easy task, research indicates that there are no benefits to the learning and growth of the individual. Masters (2013) argues that when students are constantly succeeding in tasks that do not challenge them, they may enter a comfort zone that never really allows them to expand their abilities. Rather, it is maintained that students learn best when they are challenged slightly beyond their comfort zone - a concept known as the zone of proximal development (Masters 2013).

When a student experiences challenges slightly more difficult than they are comfortable with, they are likely to make mistakes in the process. Some students might feel a sense of defeat or lose motivation after failure, but this usually occurs if they possess a fixed mindset (Dweck, 2007). As such, it is important for teachers to positively frame failure and promote the idea that mistakes are essential for growth. Valuing mistakes as learning opportunities can be a great way for teachers to

encourage students to approach challenges. When students make mistakes, fostering a growth mindset can allow them to see failure is an opportunity to improve.

These students may take the necessary steps needed to correct any deficiencies and strive towards progression (Dweck, 2007). With a classroom environment that celebrates mistakes as opposed to punishing them, students can feel comfortable and confident approaching challenges with the knowledge that they may not succeed on the first attempt. Students with this growth mindset will begin to understand the relationship between sustained effort and success, which is how true learning can be developed (Masters, 2013).

II.3. Praise

Many believe that (1) praising students' intelligence builds their confidence and motivation to learn, and (2) students' inherent intelligence is the major cause of their achievement in school. Research has shown that the first belief is false and the second can be harmful. Dweck (2016) says that the impact of praise is closely linked to how students view intellectual ability, and they tend to hold one of two beliefs, Intelligence is a fixed trait and Intelligence can be improved.

Students who think that intelligence is fixed tend to Care a lot about whether people think they are smart or not smart; avoid learning challenges where they might make mistakes; believe that needing to apply a lot of effort means they're dumb. Students who think that they can develop their intelligence and not worrying about how smart they will appear take on challenges and they don't necessarily believe that anyone can become an Einstein or a Mozart, but they do understand that even Einstein and Mozart had to put in years of effort to become who they were (Dweck, 2016). Students with the growth belief system tend to invest themselves in learning; believe that effort is a positive thing, causing their intelligence to grow; try hard in the face of frustration and failure.

Recent research has found that there are two types of praise that can be given to a student after a successful performance, each of them having different effects on the individual's academic achievement and mindset (Kamins & Dweck, 1999). Many teachers believe that commending students for being smart will increase their self-confidence and help them enjoy learning. Not true! "Praising students' intelligence gives them a short burst of pride...followed by a long string of negative consequences." (Dweck, 2016: 36). Thus, the first type of praise that may be given to a student after a successful performance refers to the direct praising of the skill or intelligence level of an individual (Kamins & Dweck, 1999).

Unlike praise that values the natural intelligence of an individual, an alternative form of praise that can be delivered to students after successful performance values effort and determination even when a student is not struggling (Kamins & Dweck, 1999). With this form of praise, a student is able to associate the relationship between effort and success, which can contribute to future successful outcomes.

III. RESEARCH METHODOLOGY

The study was conducted using a qualitative research approach which enables the researcher to identify the underlying themes and patterns in the data. Data was collected through a structured interview with university teachers. Qualitative research was particularly relevant to the current research study, as we

used it to interpret and organize the accounts and experiences of the participants in order to apply it to existing literature and findings.

III.1. Participants

The study sample which includes males and females was not selected randomly. were people. It consisted of (05) teachers of higher education, namely teachers of English from different universities. In this small sample of participants, it was important that the teachers we interviewed had a minimum of five years of teaching experience. we established this criterion because those with more experience are likely to have attained a greater understanding of the different learning needs of students they have taught. The next criterion that we established is that the participants must have experience in the implementation of a growth mindset in their classrooms. This criterion was chosen based on the fact that the purpose of the study was to explore the strategies teachers use to promote a growth mindset.

III.2. Instruments

The study made use of a structured Interview to analyse the pedagogical strategies of teachers when using growth mindset within their classrooms. Moreover, it gives the participants the freedom to comment about their own experiences. A structured interview is highly structured, it involves the interviewer using an outline and asking specific questions within a certain time frame. Thus, the interviewer comes prepared with a list of questions. He relies upon his questions and methods to tease from the informants what they wish to know. The data were elicited orally, that is the researcher read each question to the participants and asked them to respond orally.

The questions were organized into two sections that aimed to elicit a specific dialogue between myself and the interviewee. The first section of questions began with a number of questions pertinent to their beliefs and perspectives of what it means to foster a growth mindset in their students. Subsequently, the following section related to the pedagogical strategies these teachers have used to promote a growth mindset.

IV. RESULTS AND DISCUSSION

In this section, we will describe, synthesize and analyse the key findings that have surfaced through the structured interview process. The interview was intended to answer our primary research question: how can teacher foster growth mindset in their classrooms and what outcomes do they observe from their efforts? We organized the data into 2 main parts that connect the research question to key findings from the interview. The first part, teachers were asked about their perspectives and beliefs regarding Growth and fixed mindset. In the second part, teachers were asked about how they foster students' growth mindset thinking.

IV. 1 Part (A): Teacher perspectives and beliefs

Question 1 How do you define a growth mindset? What does this term mean to you?

The first question guiding this research sought to identify the mindset of teachers. In order for a teacher to create a classroom climate oriented towards personal growth, the participants emphasized how important it is for teachers themselves to truly understand growth mindset and how this is accomplished in practice. It was clear that all teachers recognized the fundamental concepts underlying a growth mindset. First, the participants emphasized that intelligence isn't fixed, which highlighted the idea that each student has their own individual potential that is not limited.

Secondly, the participants maintained that a growth mindset was closely related to an individual's response to constructive criticism in light of adversity. One of the teachers insists that it is less about telling students what to think, and more about showing them. He adds that "Carol Dweck explains that Growth mindset is about embodying it in all the everyday practices that teachers do. Presenting material with students' understanding that you think they can all learn it to a high level. It's collaborating with students, and giving feedback to them on their learning processes. It's about helping children to relish challenges, because the challenges can help them grow their abilities.". Another participant brought attention to the idea that it is more about a teacher's own mindset, the expectations they have for their students, and the way in which they help them to develop an understanding of their thought.

Question 2 Which traits do students with a growth mindset display?

One teacher argued that students with a growth mindset were able to accept critical feedback, learn from failure, and have a positive attitude toward challenging tasks. He added that students with a growth mindset "are flexible and able to learn from mistakes and errors, which is crucial". While another participant also understood the idea of learning from mistakes and feedback, he emphasized the role of risk taking to achieve individual growth. The participant claimed that students need to take risks within their own zone of development in order to get to the next steps". Thus, in addition to brain malleability as an underlying premise of defining a growth mindset, both participants suggested that the way in which students respond to challenges is a major factor attributed to growth mindset.

Most teachers stressed the importance of students engaging in positive self-talk, having an optimistic attitude about their abilities in the classroom. To illustrate, one participant provided an example of a student who would say negative things about herself such as "I'm just not good at grammar", "I can't do this". The participant added "whenever she used this language I asked her to change her thinking with positive language like 'grammar is challenging for me, but I know I can improve', 'I can't do this yet'". The teacher discussed the changes in this student's academics that occurred as a result of this shift in language.

Question 3 What are the factors that may influence students' mindsets?

Most participants reported that students changed their beliefs about the malleability of intelligence when they observed differences among their classmates or watched them either fail or persevere in the face of struggle. One teacher explains that When students saw their classmate fail despite trying their best, they concluded that this failure must be caused by insufficient intelligence. Those students learned a fixed mindset by observing their friends fail. On the other hand, when students observe their classmates overcome failure, they came to believe it was possible for students like them to improve their intelligence.

Question 4 : What role do you believe mistakes and challenges play in learning?

One participant explained that “if students are afraid of mistakes, they are afraid of trying something new, of being creative, of thinking in a different way. They are scared to raise hands when they don't know the answer”. He adds that “students need to learn to make and live with mistakes. The idea is help students to learn to take risks and accept imperfection”. Another teacher expressed a similar perception with the comment “I think teachers can teach students to look at mistakes not as something to be dreaded and avoided, but as an inevitable and often very helpful part of learning”.

Challenge is the core of the growth mindset; without it, students don't get the opportunities to take risks, learn to fail and figure out how to pick themselves up again. This “sense of progress” as Dweck calls it, is central to developing growth mindsets. One participant noted that “we as teachers must provide them with tasks and activities that actually challenge them and force them to persevere”

IV. 2 Part (B) Teacher Practices

Question 5 How do you foster a growth mindset in your students?

Dweck's research has shown that it's possible to teach students how to develop a growth mindset, as a result, student engagement and performance can improve. All participants share the same view and believed that critical thinking is at the core of growth mindset. One teacher mentioned that students with a growth mindset feel comfortable questioning information that does not make sense to them. They believe in their ability to learn new skills and acquire knowledge required in today's rapidly changing environment. Another teacher noted that students with a growth mindset feel comfortable questioning information that does not make sense to them.

One teacher noted the following “personally, I believe that one step toward unleashing students' potential in the classroom is through introducing the terms mindset to students (in this case, it refers to how we think about ourselves and our ability), growth mindset (people believe they can learn anything through their dedication and effort, so they are not afraid of mistakes), and fixed mindset (people

think they have a certain, limited amount of ability, so they are often scared of making mistakes).

Three participants saw value in explicitly teaching students about brain science and intelligence research in order to explain what a growth mindset is. They suggested that teaching students about brain science research can be a relatively simple process that involves having students understand that the brain is a muscle that is able to become stronger with practice and exercise. One teacher added “personally I ask the following question to my students ‘did you know that you can grow your brain?’ And this question made them think about the function of their brain”

Another participant added “teachers should revolutionize their teaching in order to help foster a growth mindset for students in the classroom. Simply observing the different mindsets in their students is a good place to start”. All of the participants explained that we, as teachers, have the ability to make school a place where students look forward to learning and understand that everyone has the ability to reach great levels of success regardless of the barriers that may exist in their lives. we believe that through the implementation of a growth mindset, there is hope that all students will begin to think about themselves as life-long problem solvers, critical thinkers, and learners.

Question 6 How can we use praise and provide feedback to motivate students effectively?

All participants expressed the value in providing feedback to students in multiple ways to facilitate individual progress. It was noted that it is important to provide this feedback not only after a task, but during the task as well. They commented that how educators praise their students communicates implicit messages about the nature of intelligence. Specifically, praising students’ intelligence implies that success is the result of their innate traits and encourages a fixed mindset whereas praising students’ effort implies that success is the result of their behaviours and encourages a growth mindset. For example, one of the participants said “Mistakes help our students grow”. Dweck (2007) stresses the importance of refraining from over-celebrating student accomplishment but rather adding more value to the process or ‘journey’ that each student endures while completing a given task. By acknowledging and providing feedback on the process of work, students can develop a greater awareness of the relationship between effort and success, and will begin to value these mistakes as opportunities for learning.

Dweck (2016) encourages that feedback becomes a regular occurrence in the classrooms. She suggests continuous feedback is better for developing, engaging, and motivating students. Another teacher who held similar view explained “students need to shift their mindset around feedback – it’s not something that should be feared. On the contrary, the opposite should be feared. Not receiving continuous feedback impedes performance”.

In order to foster a growth mindset, however, the participants altered the meaning and implications of challenges, mistakes, and failure by framing these as opportunities to improve. Changing students’ mindsets about failure and how the brain is able to adapt and become stronger. One participant commented “I teach my students that challenge is good. One way I have done this is by delivering a growth

mindset lesson and activity where students experience struggle through a challenging task. This experience serves as a way for them to learn that in life when we engage in challenges we have the opportunity to take risks, learn to fail, and figure out how to pick ourselves up again to persevere through the struggle”.

CONCLUSION

The current study found that teachers are using different strategies to understand how to successfully foster a growth mindset in the classroom. In order to encourage students to adopt a growth mindset, it was stated that it is first reflected in a teacher’s pedagogical behaviour. The participants’ ability to develop a growth mindset classroom was based on their perception of intelligence as a malleable trait and through the belief that student learning is related to resiliency and positive response to critical feedback. In addition, the participants highlighted the idea that encouraging students to alter their language in a positive manner when speaking about themselves allowed them to be more confident and successful in their work. Moreover, A growth mindset is another key characteristic of a critical thinker. Thus, maintaining a focus on critical thinking was suggested as an avenue for student creativity and individuality. Finally, participants perceived students’ challenges, mistakes, and failure as opportunities for learning and growth.

BIBLIOGRAPHICAL REFERENCES

- Aditomo, A. (2015). Students’ Response to Academic Setback: “Growth mindset” as a buffer against Demotivation. *International Journal of Educational Psychology*, 4(2), 198-222.
- Dweck, C. (2016). *Mindset: The New Psychology of Success*. Updated Edition. New York: Balantine Books.
- Dweck, C. (2015). Growth. *British Journal of Educational Psychology*, 85, 242-245.
- Dweck, C. (2010), *Even geniuses work hard*”, Educational Leadership, *Journal of the Department of Supervision and Curriculum Development*, Vol. 68/1, pp. 16-20.
- Dweck, C.S. (2010). Even geniuses work hard. Giving Students Meaningful Work, 68(1), 16- 20.
- Dweck, C.S. (2007). Boasting Achievement with Messages that Motivate. *Education Canada*, 47(2), 6-10.
- Dweck, C. S. (1999). Self-theories: Their role in motivation, personality, and development. Philadelphia, PA: Taylor & Francis.
- Garlick, D. (2003) Integrating Brain Science Research with Intelligence Research. *Current Directions in Psychological Science*, 12(5), 185-192
- Grant, H., & Dweck, C.S. (2003). Clarifying Achievement Goals and their Impact. *Journal of Personality and Social Psychology*, 85(3), 541-553.
- Kamins, M.L., & Dweck, C.S. (1999). Person versus process praise and criticism: Implications for contingent self-worth and coping. *Developmental Psychology*, 35(3), 835-847.
- Masters, G.N. (2013). Towards a growth mindset in assessment. *ACER Occasional Essays*, 1-5.
- Dweck, C.D (2000). Self-Theories: Their Role in Motivation, Personality and Development, *Psychology Press*, New York.
- Gershon, M (2018). *How to develop Growth Mindsets in the Classroom: A Complete Guide*. West Palm Beach, FL: Learning Sciences International.

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