



Exploring the Role of Growth Mindset in Enhancing Student Motivation and Engagement

Swathi Nair

School of Education, Gujarat University, swathinair29951@gmail.com

<https://orcid.org/0009-0008-6907-2869>

Abstract

Cultivating a growth mindset in students is pivotal for the future of education, as it encourages resilience, adaptability, & a passion for continuous learning, all of which are critical in navigating the ever-evolving landscape of knowledge & skills. A growth mindset, the belief that intelligence & abilities can be developed through the right amount of effort & perseverance, contrasts with fixed mindset, where intelligence & abilities are seen as fixed. Numerous researches have shown that students with a growth mindset are more likely to embrace challenges, are resilient towards failure & view efforts as a pathway to mastery. These students look for challenges and thrive in them. These behavioural changes are essential for deep engagement in learning & sustained motivation. Educational interventions & initiatives by educators that foster a growth mindset have shown to increase student engagement by encouraging a love for learning & challenges. Different strategies like praising efforts over abilities, encouraging healthy risk taking, teaching brain plasticity & creating a supportive classroom environment where setbacks are seen as learning opportunities, can significantly impact students' engagement & motivation. Thus students are motivated to participate actively in their learning. This intrinsic motivation helps them to set higher goals & develop a persistent approach to overcome academic challenges. Educators can empower students to take ownership of their learning, cultivate resilience & develop a lasting motivation by fostering a growth mindset. This growth mindset will not only result in enhancing the academic outcomes & prepare students to understand & chart the complexities of the modern world with a positive & proactive approach but also develop love for learning & strive for self growth. This paper examines how fostering a growth mindset can significantly enhance student engagement & motivation, leading to improved academic outcomes & personal development.

Key words : Motivation, Intrinsic motivation, Growth mindset, Students' engagement



1.Introduction

In the age of AI and advanced classroom technologies, teachers are investing significant effort to create engaging and interactive lessons. Schools have adopted a range of techniques to make learning more dynamic and effective. Despite this, teachers often struggle to achieve the desired outcomes. One of the key challenges highlighted in research is student motivation. From a young age, students are often incentivized with rewards, such as stars for completing tasks or praise for neat work. But why is it necessary to offer rewards for tasks that students are expected to complete as part of their learning journey?

These rewards can create a dependency, where motivation is tied to external incentives rather than the intrinsic value of learning. When the rewards stop, so does the students' motivation. Over time, students may lose interest in both the rewards and the tasks themselves. This extrinsic motivation can also negatively impact students who may not excel in certain areas or who learn at a different pace, leading them to feel demotivated or disinterested in learning altogether.

Relying on extrinsic rewards does not foster a genuine love for learning. Instead, educators should focus on fostering intrinsic motivation by nurturing a growth mindset. By doing so, students can develop a love for learning that comes from within, encouraging long-term engagement and personal growth, rather than a temporary desire for external rewards.

2 Theoretical Framework

2.1Motivation

Motivation is the driving force which stimulates an individual to initiate and sustain a behaviour. Motivation is a desire that fuels an individual to perform or continue an action based on the needs and wants of the individual. (*Motivation – Definition, Meaning & Types*, n.d.) Motivation is a guiding force that makes human want to do something

It tells us why a person does something, the motive behind the actions. Motivation is a driving force that helps people with their actions. The driving force behind human actions is motivation. It helps people to generate, guide and maintain goal oriented behaviour. (MSEd, 2023). When students are motivated, they tend to learn better. They develop love for learning and are supportive towards teachers. Without motivation



students will not learn and get the desired results. Motivation helps students work towards their goals. Students focus on their learning goal more than focusing on unhealthy or maladaptive behaviours when they are motivated. Motivated students are far more likely to reach their full potential and achieve success. Motivation plays a crucial role in effective teaching and learning, driving not only improved behaviour but also fostering a deeper sense of wellbeing among students. Students who lack motivation are frequently disenchanted or disengaged, which can result in disruptive behaviour (Hawthorne, 2024b).

Motivation can be classified into two types - intrinsic motivation and extrinsic motivation.

When someone is motivated by internal desires, like self-satisfaction, curiosity, or the joy of learning a new skill, rather than external pressures or rewards, like money, grades, or recognition, they are said to be engaging in activities that are intrinsically interesting or enjoyable without the need for external incentives or rewards (*What Is Intrinsic Motivation and How Does It Work? (Examples)*, n.d.) When someone is driven to act because of the fun or challenge involved rather than because of outside goods, pressures, or rewards, they are said to be intrinsically motivated. "Doing an activity for its inherent satisfaction rather than for some separable consequence" is the definition of intrinsic motivation (Ryan & Deci, 2000).

In contrast to intrinsic motivation, which refers to engaging in an activity purely for its own sake rather than its instrumental value, extrinsic motivation is a concept that applies whenever an activity is carried out in order to achieve some distinct outcome (Ryan & Deci, 2000).

2.2 Intrinsic motivation

Most of the time students are kept motivated through offering them rewards. When a student does a task to gain those rewards then it is extrinsic motivation. The motivation is dependent on the reward that is being offered. This motivation of the students is very fragile. It will break with any change in the rewards. The focus here is shifted from learning to gaining the reward. Once the student is over the rewards, their motivation to do the task or learn can easily diminish when the rewards change or lose appeal. In



contrast, intrinsically motivated students are driven by a genuine interest in learning itself, without relying on external incentives or praise. Their motivation is more resilient, remaining steady regardless of changes in rewards, teachers, or external recognition. Intrinsic motivation fosters a deeper dedication and commitment to learning, encouraging students to stay engaged for the long term. They learn with more dedication and commitment. Researches have shown that intrinsic motivation is more powerful and resilient as compared to extrinsic motivation.

2.3 Growth Mindset and Motivation: Nurturing Resilience for Lifelong Learning

The mindset of a person is the way the person perceives different things. The mindset of people are classified into two types - growth mindset and fixed mindset. Fixed mindset where people believe that their abilities and intelligence are fixed and they cannot do anything about it. In contrast to this is the growth mindset where people believe that intelligence is malleable and with the right amount of effort they can get their desired results.

Research has shown that a growth mindset positively impacts student motivation. When students adopt a growth mindset, they develop a new perspective on learning, viewing their intelligence, talents, and abilities as flexible and capable of improvement. They believe that with sufficient effort, they can achieve their goals. Rather than focusing solely on outcomes, they value the learning process itself. Students with a growth mindset are resilient, open to feedback, and eager to embrace challenges, not just seeking them out but thriving in them.

On the other hand, children with a mindset who believes that their intelligence and abilities are fixed, are easily demotivated. When praise was given according to an individual's ability, it was more likely to encourage self-handicapping behaviours and lower performance levels than when participants received praise according to effort or no praise at all. The findings also show that praise based on the value of the work can be very detrimental because it can cause people to put in less effort and eventually fail (Bezerra, 2021)

According to Dweck, students who struggle academically benefit most from the growth mindset. "Equality can happen when educators create a growth mindset environment."



Students who take on difficult tasks see changes in their brain connections and processes that prepare them for future learning. Students from all backgrounds can succeed when they are surrounded by acceptance, possibility, and wonder (Hawthorne, 2024b). According to Dweck, teaching growth mindset to junior high school students resulted in increased motivation and better academic achievement; her findings revealed that students in the growth mindset intervention group outperformed those in the control group (who received excellent study skills training), indicating improved learning and desire to work hard. Several studies have demonstrated the effects of growth mindset interventions on students' achievement at all ages. A growth mindset intervention was especially impactful with student outcomes in particular subjects such as science and mathematics. The intervention teaches students that intelligence is not a fixed quality and that intelligence can be nurtured through challenging tasks, as intelligence grows with hard work on challenging problems. Growth mindset is conceptualised similarly to intrinsic motivation; learners who possess this mindset are more likely to self-regulate their own learning and to succeed in academic tasks (Ng, 2018). When children adopt this outlook towards learning, they become less influenced by external factors such as rewards or praise, reducing their reliance on extrinsic motivation. With a focus on personal growth and effort, they develop an internal drive to learn, which sustains their motivation even in the absence of external incentives. This intrinsic motivation empowers them to face challenges, embrace feedback, and maintain a commitment to learning for the sake of improvement and mastery, rather than simply for rewards or approval. As a result, their engagement with learning becomes more meaningful and self-directed.

When children have such an outlook towards learning they will not be affected by external factors and thus no need for extrinsic motivation.

2.4 Growth mindset and students engagement

Students engagement is students involvement in their learning. In general, high levels of student engagement lead to improved learning outcomes. Student engagement can also be defined as the degree to which students demonstrate cognitive investment in their education, such as participating in class and making a commitment to their



studies. Emotional, behavioural, and cognitive engagement are the three components that make up student engagement. The first type of engagement reflects students' feelings about their instructor, classroom, and sense of belonging. The second type of engagement demonstrates how attentive and invested students are in their classes. The third type of engagement demonstrates students' willingness to participate in and be successful in their learning process (Top Hat, 2020). Growth mindset combined with motivation increases and improves student engagement.

Findings

Research was conducted to study the relationship between growth mindset and students' engagement. The results showed a strong positive correlation between learning engagement, well-being, and growth mindset as well as a fully mediating role for well-being in this relationship. These findings suggest that encouraging students to develop growth mindsets and enhance their well-being through positive education can enhance students' well-being, raise their learning engagement levels, and ultimately improve their academic achievement (Xiao et al., 2023). When students believe their abilities can be developed through effort (growth mindset), and they are motivated to learn, they become more actively involved in the learning process. This combination fosters resilience, encourages them to embrace challenges, and helps them stay committed to their goals. As a result, their overall engagement improves, leading to deeper understanding and more sustained academic success.

Discussion

Techniques used to foster growth mindset can improve and increase intrinsic motivation and students' engagement

a) Praising efforts over innate abilities and intelligence

When educators praise intelligence and innate abilities, children with a fixed mindset believe that their abilities are fixed and so they are demotivated. Contrast to this when educators praise students' efforts over their intelligence, they feel like putting in more effort to improve their performance. Students actively participate in their learning journey as their efforts are valued by the teachers.



b) *Teaching about brain plasticity*

Neuroplasticity or brain plasticity is the ability of the brain to develop with regular work and practice. Just as muscles grow and strengthen through regular exercise, the brain can also develop and improve with consistent effort and practice. This understanding encourages students to persevere and work towards their goals, rather than feeling helpless or believing their intelligence and abilities are fixed. By recognizing their potential for growth, students become more motivated to continue learning and improving.

c) *Encouraging healthy risk taking*

When educators encourage children to take healthy risks in learning, they develop a positive attitude towards learning. With healthy risk taking children develop confidence. A deeper connection to learning occurs when students are allowed to experiment, take on difficult tasks, and learn from their mistakes. This feeling of autonomy and discovery fosters intrinsic motivation, as students become more invested in the process rather than just the outcome. In the end, taking risks in a supportive environment increases students' confidence, enhances their engagement, and fosters intrinsic motivation.

d) *Effective and constructive feedback*

The foundation of both academic progress and student engagement is effective feedback. Students can build on their strengths and identify areas for improvement with timely feedback. To demonstrate that their efforts and progress are valued, offer personalised feedback and encourage open communication. Consistently communicate with students and include them in the process of setting learning goals (*Enhancing Classroom Engagement: Top 10 Strategies for Student Participation*, 2023). This constructive feedback motivates students to work hard and take ownership of their learning. Having a clear understanding of the areas they need to improve fosters intrinsic motivation in students.

e) *Supportive classroom*

Studies have shown that students who feel that their teachers are interested in them and their learning are more likely to be intrinsically motivated. A supportive



classroom environment can help students feel valued and connected, which can lead to greater intrinsic motivation (Simulations, 2024).

Conclusion

When children develop a growth mindset they are not only motivated but they develop love for learning. This improves their engagement significantly. Students not only take up the responsibility of their learning but also become independent learners. When children are intrinsically motivated they do not need constant push. They become resilient towards their learning. Fostering a growth mindset in children significantly enhances their motivation, engagement, and independence in learning. By viewing challenges as opportunities for growth, students develop a genuine love for learning that drives their intrinsic motivation. This passion for knowledge leads to increased engagement, with students actively participating in their educational journey and exploring new subjects with curiosity. As they take responsibility for their learning and set personal goals, they become more self-directed and resilient. Ultimately, a growth mindset cultivates independent learners who are not only self-motivated but also equipped to overcome obstacles and continue growing throughout their academic and personal lives.

Recommendations

Based on the findings, the researcher makes the following recommendations. Educators should prioritize fostering intrinsic motivation in students. To cultivate a growth mindset, teachers should receive appropriate training, and growth mindset development should be integrated into the curriculum. Additionally, parents need to be informed about strategies for nurturing a growth mindset in their children. Finally, schools should implement assessments that effectively measure students' progress and growth.

Reference

- A growth mindset for students. (n.d.). A Growth Mindset for Students.
<https://www.thinkinghabitats.com/blog/a-growth-mindset-for-students>
- Bezerra, L. (2021, April 7). The Power of a Growth Mindset. Life.
<https://www.lifeintelligence.io/blog/the-power-of-a-growth-mindset>



- Enhancing Classroom engagement: Top 10 strategies for student participation. (2023, September 19). Varthana. <https://varthana.com/school/top-10-ways-to-improve-student-engagement-in-the-classroom/>
- Growth Mindset in the Workspace: Meaning and Examples - Humaans. (n.d.). <https://humaans.io/hr-glossary/growth-mindset>
- Hawthorne, H. (2024a, May 2). Understanding the importance of motivation in education. The Hub | High Speed Training. <https://www.highspeedtraining.co.uk/hub/motivation-in-education/>
- Hawthorne, H. (2024b, May 2). Understanding the importance of motivation in education. The Hub | High Speed Training. <https://www.highspeedtraining.co.uk/hub/motivation-in-education/>
- Motivation – Definition, Meaning & Types. (n.d.). <https://www.studyandexam.com/motivation-meaning-types.html>
- MSEd, K. C. (2023, May 3). Motivation: the driving force behind our actions. Verywell Mind. <https://www.verywellmind.com/what-is-motivation-2795378>
- Ng, B. (2018). The neuroscience of growth mindset and intrinsic motivation. Brain Sciences, 8(2), 20. <https://doi.org/10.3390/brainsci8020020>
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: classic definitions and new directions. Contemporary Educational Psychology, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Simulations, S. (2024, June 24). How to Build Intrinsic Motivation in the Classroom. startx. <https://stratxsim.com/recent-posts/how-to-build-intrinsic-motivation-in-the-classroom#:~:text=Giving%20students%20choices%20and%20control,of%20ownership%20over%20their%20achievements>
- Top Hat. (2020, February 4). Student Engagement Definition and Meaning | Top hat. <https://tophat.com/glossary/s/student-engagement/#:~:text=Student%20engagement%20reference%20to%20students,classroom%20and%20science%20of%20belonging.>
- What is Intrinsic Motivation and How Does It Work? (Examples). (n.d.). <https://www.betterup.com/blog/intrinsic-motivation>



Xiao, F., Zhang, Z., Zhou, J., Wu, H., Zhang, L., Lin, M., & Hu, L. (2023). The relationship between a growth mindset and the learning engagement of nursing students: A structural equation modeling approach. *Nurse Education in Practice*, 73, 103796. <https://doi.org/10.1016/j.nepr.2023.103796>

Dweck, C. (2017). *Mindset - Updated Edition: Changing The Way You think To Fulfil Your Potential*. Hachette UK.

