

Exploring Factors Influencing Student Engagement: A Concept Paper

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(Received 19 December 2024; Revised 03 February 2025, Accepted 21 February 2025; Available online 28 March 2025)

Abstract - Student engagement is a key factor for learning results and personal growth in schools. Although many studies have shown its importance, there are still gaps in exploring exactly how internal and external factors affect student engagement. This paper looks at these factors by studying existing research from Google Scholar journals recently. The results show that internal factors like student motivation, self-efficacy, beliefs, autonomy, and learning strategies strongly affect student engagement because they shape how willing students are to take part in learning. Also, external factors such as teacher support, classroom environment, peer influence, parental involvement, and school policies also have deep impact on student engagement. That is, the impact of the environment on individuals in specific setting. By fully exploring these factors, this paper seeks to develop proper variables which could finally improve student engagement.

Keywords: Student Engagement, Internal Factors, External Factors

I. INTRODUCTION

Student engagement is a crucial factor which could influence both academic success and personal development in educational settings. A longitudinal study conducted (Hutain & Michinov, 2022) showed that higher levels of behavioural, emotional, and cognitive engagement in elementary and middle school students were linked to improved academic performance. A meta-analysis (Alonso-Tapia & Ruiz-Díaz, 2022) showed that more engaged students had higher academic performance, better social adjustment, and improved psychological well-being (Bhupesh et al., 2022). Additionally, research also demonstrated student engagement could help to develop essential skills, such as critical thinking, problem-solving, and self-regulation. MacPhail & Lawson, (2020) also emphasized that engaged students who are devoted to deeper learning, demonstrate higher-order thinking and exhibit a growth mindset. All of which would contribute to their academic and personal success. Moreover, a comprehensive literature review (Reschly & Christenson, 2022) emphasized the importance of positive teacher-student interactions. This review fully showed the supportive academic environments in promoting student engagement. That is, students who feel genuinely appreciated, respected, and supported by both teachers and peers show greater emotional commitment and cognitive involvement in their educational experiences.

Fostering student engagement is a vital component of promoting academic success and holistic personal development within educational settings (Wirawan, 2024). Through the application of research-informed strategies and the cultivation of cooperative initiatives across stakeholders, educators would establish conducive educational environment that inspire students to be actively engaged, intrinsically motivated, and empowered to reach their full potential (Alnumay, 2024).

The understanding of student engagement involves a complex and multifaceted gap (Kahu, 2013). Conceptual and measurement challenges exist, as the absence of a unified framework for defining and operationalizing student engagement has resulted in methodological variations and assessment discrepancies across educational research, and a failure to capture the multidimensional nature of the construct (Fredricks et al., 2019). Students' traits like academic preparation, income levels, and cultural background also shape their engagement (Aboorva et al., 2022). Other important elements include their confidence in learning, motivation, and how connected they feel to the school. Thus, to explore the way to strengthen student engagement, schools should consider three key steps: first, clarify how to define and measure engagement; second, better understand how schools influence engagement; and third, use combined strategies to address both personal and institutional challenges (Ferdowsi & Moradi., 2014).

II. DEFINITION OF STUDENTS ENGAGEMENT

"Theory of Student Involvement" (Astin, 1984) posits a conceptual framework examining the correlation between learners' academic investment and educational outcomes. In this theory, student engagement in academic performance and personal development within educational settings encompasses the nature of student engagement. Fostering student engagement is a priority for teachers, schools, and policymakers seeking to improve student achievement and holistic development. Student engagement is a multifaceted concept that refers to the attention, interest, curiosity, and passion when students learn within educational settings (Schnitzler et al., 2021.; Reeve et al., 2025). It is widely recognized as an important factor in promoting academic achievement and personal development (Kuh, 2001;

Fredricks et al., 2004; Fredricks et al., 2019). Therefore, it could be said that engagement is an essential factor in fostering academic success and holistic student development. That is, student engagement is important for student success. Based on the most related literature findings from 1984 to 2025, Fig. 1 shows the evolution of student engagement definitions.






Year & Researcher	Definition
1984 Astin, A.W.	Student involvement theory suggests that engagement is directly proportional to the physical and psychological energy that a student devoted in the learning process.
	
2001 Kuh, G.D.	Student engagement refers to the time and effort students invest in meaningful activities, which contribute to their learning outcomes and personal growth.
	
2004 Fredricks, Blumenfeld, and Paris	Student engagement is the attention, curiosity, interest, and effort students show in learning, shaped by internal factors (e.g., motivation, emotions) and external factors (e.g., classroom environment, teacher support, peer relationships).
	
2022 Fredricks, Reschly & Christenson	Student engagement is the involvement, effort, and interest students put into learning. It includes dimensions such as behavioural (participation in activities), emotional (feelings and attitude), and cognitive engagement (motivation and deep thinking).
	
2021 Schnitzler, Dörfler, & Göllner	Student engagement is active participation, effort, and emotional involvement in learning. It includes behaviours like attending class, feelings of interest, and cognitive investment.
	
2025 Reeve, Basarkod, Jang, Gargurevich, Jang, & Cheon	Student engagement is the combination of how students think, feel, act, and proactively contribute in school.

Fig. 1 Evolution of Student Engagement Definitions From 1984 - 2025

Source: Adapted from various studies on student engagement.

III. FACTORS INFLUENCING STUDENT ENGAGEMENT

Previous findings found that many factors contribute to student engagement. The research outcomes can be systematically classified into two primary categories: internal factors and external factors. These internal factors are such as motivation, self-efficacy, beliefs, autonomy and learning Strategies. Whereas external factors are teacher support and classroom environment, peer influence, parental involvement and school policies.

a. Internal Factors

• Motivation

The level of student motivation substantially impacts their mental frameworks, behavioural patterns, and complete learning processes. Students' motivation exhibits distinct patterns in its educational impact. Intrinsic motivation, as defined by self-determination theory (Deci & Ryan, 2000), demonstrates consistent associations with enhanced multidimensional engagement, particularly in behavioural participation, emotional investment, and cognitive processing. This form of motivation sustains academic persistence through learners' inherent interest in knowledge acquisition, contrasting with extrinsic motivation that relies on external contingencies. Although extrinsic drives may yield short-term task compliance, longitudinal evidence indicates their limited efficacy in maintaining engagement and fostering self-regulated learning capacities.

• Self-efficacy

Research consistently demonstrates the pivotal role of self-efficacy in shaping educational experiences. Defined as learners' confidence in their ability to execute tasks successfully, self-efficacy directly influences academic persistence, engagement depth, and achievement outcomes (Bandura, 1997). This confidence enables learners to overcome challenges through strategic problem-solving rather than avoidance behaviours. Giving students chances for learning experiences, verbal encouragement, and vicarious learning helps boost their self-efficacy. This, in turn, promotes their engagement and success in learning (Jin & Yule, 2019).

• Beliefs

Student beliefs about their intellectual capacities, educational purposes, and achievement determinants critically influence their academic engagement and development. Found that students viewing intelligence would consistently demonstrate greater task persistence and academic achievement compared to those who tend to avoid challenges. Therefore, when students are more proactive, it helps them to succeed.

• Autonomy

The research found that students who perceive control over learning processes showed greater initiative in problem-solving compared to peers in restrictive instructional settings

(Korpershoek et al., 2020). Student autonomy promotes academic ownership while maintaining learning coherence. This evidence showed that where calibrated autonomy-supportive practices enhance both academic performance and personal growth.

- *Learning Strategies*

Research (Carless & Boud, 2018) found that active student engagement in feedback cycles could enhanced their self-directed learning behaviours. This aligns with (Mandouit & Hattie, 2023) findings that process-oriented feedback, when specific and focused on task improvement rather than personal evaluation, significantly strengthens students' capacity to identify learning gaps and refine strategies. Therefore, when teachers do reflection in classroom, it could stimulate and motivate students to be more active and improve themselves (Carless & Boud, 2018). Through these methods, student would be more engaged in the learning environment, and this support the idea of acknowledging the effectiveness of individuals in their roles is key to the success (Saidin et al., 2024).

b. External Factors

- *Teacher Support*

Reschly & Christenson, (2022) Found that positive relationships between students and teachers could increase levels of student engagement. When students perceive supportive from their teachers, they feel a sense of belonging led to more engagement. Lawson & Lawson, (2021) Teachers need to create learning environments to make their students more active. Teacher support was a significant predictor of students' behavioural, emotional, and cognitive engagement (Wang & Eccles, 2012; Saidin et al., 2020). Teachers' support critically shapes student engagement through active learning strategies. Fredricks et al., (2019) demonstrate collaborative group work and technology-enhanced problem-solving activities transform passive learning into engaged knowledge construction, particularly benefiting marginalized students. By aligning pedagogical expertise with cultural responsiveness, educators convert compliance-driven participation into intellectually empowered engagement with lifelong implications.

- *Classroom Environment*

The classroom environment affects student interaction and engagement. Turano, (2005) found that classrooms with warmth, support, and a sense of belonging were linked to higher student engagement. When students feel safe, respected, and valued, they are more likely to be emotionally and cognitively involved in their learning. A proper environment influences student participation in learning (Dabbagh & Kitsantas, 2012) and a positive environment helps the holistic development of students (Lawson & Lawson, 2021). It is critical to provide and facilitate students to be more engaged in classroom activities Fredricks et al., (2019). Therefore, it is challenging for teachers and educators

to plan their teaching and conduct classrooms to promote peer interactions and more hands-on group activities.

- *Peer Influence*

Hofkens & Pianta, (2022) found that students perceiving peers as supportive collaborators showed more engagement such as participation in class activities conducted by teachers. This behaviour as (Shin, 2021) stated could affect student academic performance. Students felt support from peers improved their motivation and confidence, therefore improving engagement and academic performance. To encourage students to engage, teachers should plan teaching activities that require students to engage such as giving certain tasks for students to communicate and solve together (Kohler, 2020). With this approach, it will cultivate classrooms where peer interactions among students.

- *Parental Involvement*

A study found that schools can make a difference by building strong home-school connections. Teachers working closely with families to share learning tools and invite parents into classroom activities help improve student outcomes (Lawson & Lawson, 2021). Such as regular parent-teacher meetings, homework guidance workshops, and family reading programs create shared responsibility for student success. When parents actively help with schoolwork, show high hopes for their child's education, and create a supportive home environment, students become more motivated, confident, and likely to succeed

- *School Policies*

School policies that focus on student well-being, support inclusive practices, and encourage active participation can have a significant impact on both academic performance and personal development (Konold et al., 2018). School policies that focus on issues like discipline, attendance, and mental health support can create a positive learning environment. Solving these issues would enhance student engagement and academic performance in return. Moreover, school policies that promote collaborative decision-making, student voice, and shared responsibility would empower students. With this method, the sense of belonging and the time and energy students put into learning would highly increase. That is, these school policies provide an inclusive and supportive educational atmosphere that could improve student engagement.

Below is the summary of internal and external factors affecting student engagement based on the previous research (1997-2023), as shown in Table I.

TABLE I FACTORS INFLUENCING STUDENT ENGAGEMENT

Factor Type	Factors	Description	Scholar & Year
Internal Factors	a. Motivation	Intrinsic and extrinsic motivation influence students' engagement levels.	Deci & Ryan, (2000)
	b. Self-Efficacy	Students who have high self-efficacy and demonstrate strong self-belief in their academic capabilities tend to participate more vigorously in learning.	Bandura, (1997)
	c. Belief	Individual cognitive skills affect engagement and learning outcomes.	Yeager & Dweck, (2020)
	d. Aautonomy	When students maintain command of their learning process, they demonstrate higher motivation, engagement, and self-regulation.	Korpershoek et al. (2020)
	e. Learning Strategies	Effective strategies like self-regulation and goal-setting increase engagement.	Carless & Boud, (2018); Mandouit & Hattie, (2023)
External Factors	a. Teacher Support	Supportive relationships with teachers improve student engagement.	Lawson & Lawson (2021); Saidin et al., (2020)
	b. Classroom Environment	A stimulating and inclusive environment fosters active participation.	Fredricks et al., (2019); Lawson & Lawson (2021)
	c. Peer Influence	Positive peer relationships encourage engagement, while negative ones hinder it.	Kohler, (2020); Hofkens & Pianta, (2022)
	d. Parental Involvement	Parental encouragement and support influence student engagement.	Lawson & Lawson, (2021)
	e. School Policy	Effective policies that prioritize student well-being, inclusivity, and engagement foster academic success. Curricula that are relevant, challenging, and interactive enhance student motivation and participation.	Konold et al., (2018)

Source: Adapted from various research on student engagement.

IV. METHOD

Bibliographic methodology involves collecting, organizing, and evaluating sources related to a research topic. It is a key step in conducting literature reviews. This approach ensures the sources are thorough, relevant, and academically credible (Tranfield et al., 2003; Cooper, 2017). The bibliographic methodology is essential in establishing a strong and reliable foundation for the research. This paper would use bbibliographic methodology studying existing research to intent to find the gaps in understanding exactly how internal and external factors affect student engagement.

The methodology for this concept paper draws on recent articles from Google Scholar, focusing on recent publications recently. This ensures a thorough review of the latest research on student engagement. The search uses keywords like "student engagement," "motivation," "self-efficacy," and "beliefs." "autonomy," "learning strategies," "teacher support," "classroom environment," "peer influence," "peer relationships," "parental involvement," and "school policies" to seek articles, which are selected based on high citation counts and relevance. This approach provides a solid foundation of empirical findings and theoretical progress. It captures a wide range of perspectives on student engagement. During the analysis phase, the articles are reviewed to identify key themes, definitions, and influence factors. The synthesis of these findings highlights gaps in the literature. The findings also generate areas for future research. The analysis covers internal factors and external factors related.

By integrating recent findings, this methodology improves our understanding of student engagement and proves gaps in exploring exactly how internal and external factors affect student engagement.

V. RESULTS

The complex nature of student engagement and its multiple influence factors require an educational system which would combine psychological growth with contextual supportive surroundings. Proper learning strategies are needed to foster intrinsic motivation through the learning process. For example, self-efficacy and beliefs could be developed through guided skill improvement of students, and flexible thinking and student autonomy could be encouraged by the development of the meta-cognitive guidance they received (Deci & Ryan, 2000; Bandura, 1997) Other factors that work in the learning process such as teacher support could promote intellectual curiosity by creating positive teacher-student relationships. Students also could benefit through collaboration among peers through the shared learning time. Also, supportive help from families, classroom environment and school policies help to strengthen consistent learning habits (Klem & Connell, 2004; Epstein, 2018). Schools could set policies that focus on students' overall development rather than just meeting some standards only focusing on the school management level. Schools that use responsive assessments and discipline practices show clear improvements in both student engagement and learning fairness, especially for disadvantaged student groups. As shown by long-term studies

on attendance and academic performance, districts that implement trauma-informed strategies have seen a significant decrease in systemic obstacles while still maintaining high academic standards (Sheppard, 2023). Successful implementation of school policies depends on three interconnected principles: aligning teaching methods with the changing needs of students, ensuring consistency between classroom and community environments, and continuously improving strategies based on data-driven feedback. These principles are put into practice through conversations that could improve in student-led learning process. Curriculum and co-curriculum learning, and family involvement in designing the teaching methods would help to enhance engagement by balancing student responsibility with supportive systems (Eccles & Wigfield, 2020).

By viewing education process as a dynamic interaction between students and available resources surrounded, educational institutions can help learners to taking challenges while creating a lifelong curiosity for them. This paradigm shift demands sustained commitment to research-driven innovation, culturally grounded practices, and the involvement of collaborative stakeholders.

VI. DISCUSSION

Student engagement is influenced by both internal and external factors. Internal factors are motivation, self-efficacy, student beliefs, autonomy and learning strategies. Intrinsic motivation drives students to learn for enjoyment and satisfaction which is closely linked to higher engagement, academic success, and personal growth. On the other hand, extrinsic motivation, which relies on rewards or avoiding punishment, can reduce engagement and promote shallow learning. And motivation normally correlates with sustained cognitive engagement (Ryan & Deci, 2022). That is, supporting student autonomy boosts intrinsic motivation and can improve student engagement. Moreover, students with strong self-efficacy tend to be more employ adaptive learning strategies and show greater persistence in overcoming academic obstacles (Zimmerman, 2002). When students have strong self-efficacy, they are more willing to take on challenges. They keep working through difficulties and perform better in learning. Their beliefs influence student engagement by affecting their choices, effort, persistence, emotions, and thoughts. In addition, students who have strong beliefs and view intelligence as malleable show greater persistence would highlight the importance of positive engagement in achieving learning success. That is, these beliefs can create self-fulfilling prophecies. Students' beliefs about the value and purpose of education, along with their reasons for learning would influence their engagement and academic performance. Autonomy of students fosters greater problem-solving initiative, academic performance, and personal growth (Korpershoek et al., 2020). When students feel empowered to make decisions about their education, they are more likely to take ownership of their learning and develop a stronger sense of control. This can lead to increased self-efficacy and a growth belief. Autonomy should be provided along with a supportive

environment. Also, active engagement in feedback cycles enhances students' self-directed learning behaviours, which could be seen as the key to effective learning strategies. Process-oriented feedback, focused on task improvement rather than personal evaluation would strengthen students' ability to develop learning strategies and motivate them to improve through classroom learning reflection.

External factors such as teacher support would enhance students' engagement through multiple strategies in planning instruction design. Teacher support is important in order to make student to be more active and engage in school (Klem & Connell, 2004). Such implementing questioning techniques to individual needs create more inclusive participation patterns and behaviors (Klem & Connell, 2004). Other factors, such as peer influence by encourage collaborations among students will improve students' understanding. Peer influence operates through collaborative and exclusionary mechanisms. The classroom environment mediates students' engagement through physical and pedagogical design. In the context of the classroom environment, a combination of learning strategies could motivate students to participate. The involvement of parents in school programs and activities strengthens student engagement when home practices align with school activities and expectations, particularly through structured learning routines (Epstein, 2018). Policymakers and educational leaders should adopt a comprehensive and student-centered approach to policy development and implementation. School policies must prioritize student well-being by integrating mental health support, fostering inclusive practices, and encouraging collaborative decision-making among administrators, teachers, and student. Curriculum reform should emphasize relevant, challenging, and student-driven learning experiences, incorporating project-based and interdisciplinary approaches to enhance engagement and critical thinking (Rissanen et al., 2018). Beyond the classroom, expanding and equitably funding extracurricular programs can further support student engagement and personal growth. To measure the effectiveness of these policies, curricula, and extracurricular offerings, schools should establish collaborative governance structures and accountability mechanisms. Regular evaluation and data-driven decision-making will help refine educational strategies and improve student outcomes (Domen et al., 2020). Addressing issues of equity and access is also important in reducing disparities in students' engagement to ensure that all students have the resources and opportunities necessary for success. By adopting this holistic and inclusive approach, the education system can cultivate a more engaged, motivated, and well-prepared student population, ready to navigate the challenges of the future.

VII. CONCLUSION

Student engagement has become a key part of successful learning in schools and is significance in improving academic performance. (Ithnain & Saidin, 2021), enhanced retention and persistence, positive attitudes and emotional well-being development of analytical reasoning and solution-oriented

competencies. Also improved classroom dynamics and instructor effectiveness that fostered student engagement. It was found a positive correlation between student engagement and enhanced academic success. (Teo et al., 2023). This correlation between student engagement and improved academic outcomes has been consistently observed across various educational settings. By promoting engagement, institutions can improve student retention rates and reduce attrition. This is particularly crucial for institutions seeking to support student success and reduce dropout rates. Engaged students typically exhibit more positive attitudes towards learning and their educational experiences. (Jones & Wilkins, 2023). High engagement in learning activities fosters the development of these necessary skills. Engaged students in feedback cycles boost their self-directed learning. Feedback focused on task improvement, rather than personal evaluation, help students identify learning gaps and refine learning strategies (Carless & Boud, 2018; Mandouit & Hattie, 2023). Teachers who incorporate reflection in class motivate students to become more active which definitely would improve their learning (Carless & Boud, 2018).

By prioritizing student engagement, educational institutions can enhance their capacity to develop students' skills aligned with evolving employment market needs. Engaged students also help create better classroom environments that improve teaching results. When students participate actively, teachers can more easily guide learning and meet their lesson goals (Kuh et al., 2005). That is, the positive relationship between student engagement and teaching effectiveness is based on creating successful learning environments. For example, teachers implementing practical strategies such as group discussions to foster a supportive classroom atmosphere could enhance the level of student engagement. When schools focus on student engagement, they not only help students reach their learning potential, but also enhance the overall quality of personal development (Fredricks et al., 2022).

In conclusion, recognizing the diverse factors that influence student engagement is essential for improving educational outcomes and personal development. By thoroughly examining these factors, we can develop methods that promote a more dynamic and participatory learning environment. The insights provided in this paper offer a solid foundation for future research and practical applications aimed at fostering student engagement and improving educational practices.

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