Role of Constructivist and Behaviourist Teaching Approaches in Student Engagement

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Abstract-- **This study investigated the relationship between teaching approaches and student engagement. Specifically, it examined how constructivist and behaviourist teaching approaches relate to student engagement. Reviews indicated that student engagement was moderate, while the use of constructivist, student-centred teaching approaches by teachers was relatively low. Thus, the constructivist teaching approaches positively and significantly predicted student engagement, whereas the behaviourist teaching approaches negatively and significantly predicted student engagement. The study concluded that constructivist approaches enhance student engagement, whereas behaviourist approaches are less effective in promoting engagement. Accordingly, it is recommended that teachers prioritise constructivist methods and reduce reliance on behaviourist approaches. The findings offer valuable insights for researchers and policymakers, highlighting teaching strategies that can improve student engagement and informing curriculum development and educational policy.**

I. Introduction

The concept of engagement, from which the term "student engagement" emerged, has long existed in social discourse. Philosophical discussions on engagement began in the 19th century but gained prominence in the 20th century, as individuals were increasingly confronted with the need to shape their social reality independently (Koprivitsa, 2020). Initially, life demanded limited personal engagement, as individuals could rely on social support networks.

In education, the notion of student engagement was first introduced by Astin (1984), who emphasised that the more engaged a student is in learning, the greater the knowledge and progress achieved (Lester, 2013). Student engagement encompasses active participation in learning-related tasks and activities (Lei et al., 2018). In the 1990s, engagement gained popularity through studies such as Newman (1992), which highlighted its impact on student involvement and academic attainment. Teachers increasingly employed interactive and student-centred teaching strategies to enhance engagement (Goodman, 2016). Student engagement has consistently been associated with higher academic achievement and is regarded as a predictor of both student progress and positive learning behaviours (Delfino, 2019).

Studies from countries including the United States, the United Kingdom, Australia, China, and Taiwan have highlighted that low student engagement is a key factor in poor learning outcomes (Bond et al., 2020; Tian et al., 2021). Consequently, policies to promote student engagement have been implemented in universities, including regular national surveys to assess engagement levels.

In India, while initiatives like the National Education Policy (NEP) 2020 emphasise active learning and student-centred pedagogy, evidence of systematic efforts to measure or enhance student engagement remains limited, particularly at the secondary school level. Some studies, such as those by Sharma and Singh (2018) and Verma et al. (2020), have assessed engagement as a predictor of academic performance, but fewer have examined its antecedents, such as teaching approaches.

This study focuses on private universities in India and examines the role of constructivist and behaviourist teaching approaches in shaping student engagement. Constructivist approaches emphasise active learning, critical thinking, and student participation, and are promoted in national education policies (MHRD, 2020). However, many teachers continue to rely on behaviourist approaches, which are more teacher-centred and focused on rote learning and repetition (Kumar & Sinha, 2019). This research, therefore, investigates how these two teaching approaches influence student engagement in MPprivate universities, providing insights relevant for educators, policymakers, and curriculum developers.

II. Theoretical Framework

Concept of Student Engagement

Student engagement is widely recognised as a critical determinant of learning outcomes, academic success, and behavioural development (Astin, 1984; Lei et al., 2018). It encompasses the cognitive, emotional, and behavioural involvement of students in learning activities. Engaged students actively participate in classroom discussions, critical thinking, problem-solving, and collaborative tasks, which in turn enhances their academic achievement and overall development (Newman, 1992; Delfino, 2019).

Globally, low student engagement has been linked with poor learning outcomes, prompting many countries, including the USA, UK and China, to implement policies and surveys aimed at promoting engagement (Bond et al., 2020; Tian et al., 2021). In India, although national policies like the National Education Policy (NEP) 2020 emphasise student-centric learning and holistic development, empirical studies investigating student engagement, especially in private universities, remain limited. Research in MP universities primarily focuses on academic performance, often neglecting the mechanisms that promote active participation in learning (Dagar & Yadav, 2016; Muganga & Ssenkusu, 2019).

Cognitive Constructivist Theory

Cognitive Constructivist Theory posits that learners actively construct knowledge by linking new concepts with prior knowledge (Stapleton & Stefaniak, 2019). Constructivism emphasises that knowledge is not simply transmitted from teacher to student, but reconstructed through critical analysis, reflection, and engagement with content (Dagar & Yadav, 2016). This theory advocates teaching strategies such as active learning, collaborative learning, teacher support, and contextual learning (Alt, 2015; Mugizi et al., 2021b). In the MP context, these strategies align with the National Education Policy (NEP) 2020, which encourages experiential learning, critical thinking, and student-centred pedagogy. This study examines the implementation of these constructivist strategies in MPprivate universities and their relationship with student engagement.

The Cognitive Constructivist Theory, first articulated by Jean Piaget (1936), posits that learning is an active process in which learners construct knowledge by connecting new information with their existing cognitive structures. Knowledge is not simply transmitted from teacher to student; instead, it emerges through exploration, reflection, and problem-solving (Stapleton &Stefaniak, 2019). Learners actively interpret and reorganise concepts based on prior experiences, making learning a personalised and meaningful process.

In the context of education, the cognitive constructivist perspective emphasises student-centred teaching, where learners are encouraged to question, analyse, and apply knowledge rather than passively receive information. This approach involves:

1. *Active Learning:* Engaging students in activities such as discussions, debates, problem-solving tasks, and case studies to promote critical thinking and deeper understanding (Demirci, 2017).

2. *Collaborative Learning:* Encouraging peer-to-peer interaction, teamwork, and knowledge sharing, which fosters social and cognitive engagement (Le et al., 2018).

3. *Teacher Support (Scaffolding):* Teachers guide learners through challenges by providing support, feedback, and encouragement, ensuring that students can progressively achieve learning goals independently (Yu & Singh, 2018).

4. *Contextual Learning:* Connecting academic content to real-world scenarios, making learning meaningful, relevant, and easier to retain (Roza et al., 2019).

Application in the MP Context

In India, the National Education Policy (NEP) 2020 aligns closely with cognitive constructivist principles, advocating for experiential, inquiry-based, and activity-driven learning. NEP 2020 encourages teachers to adopt learner-centric approaches that promote critical thinking, problem-solving, and collaboration in classrooms (Ministry of Education, 2020).Research in MPprivate universities indicates that constructivist strategiessuch as project-based learning, group discussions, and contextual problem-solvingenhance student engagement and motivation (Dagar& Yadav, 2016; Choudhary et al., 2021). However, challenges such as large class sizes, exam-oriented curricula, limited resources, and teacher preparedness can hinder effective implementation (Dagar& Yadav, 2016). Despite these constraints, constructivist teaching remains an essential strategy for promoting active learning, engagement, and holistic development in classrooms.

Relevance to Student Engagement

Cognitive constructivist theory explains why engagement increases when learners actively participate in constructing their knowledge. By involving students in meaningful activities and connecting learning to their prior knowledge and real-life experiences, teachers can foster cognitive, emotional, and behavioural engagement. Studies globally and in India show that constructivist approaches improve motivation, understanding, and retention, making students more likely to participate actively in class and beyond (Choudhary et al., 2021).

Behaviourist Theory

Behaviourist Theory, in contrast, suggests that behaviour is learned through stimulus-response associations and can be unlearned and replaced by new behaviours (Zhou & Brown, 2017). Learning occurs through reinforcement, repetition, and immediate feedback (Mugizi et al., 2020; Juavinet et al., 2018).

Behaviourist strategies are still prevalent in classrooms, particularly in exam-focused environments, where rote learning, drilling, and reward-punishment mechanisms are common. This study explores how behaviourist teaching strategies, such as immediate feedback, continuous practice, and reinforcement, relate to student engagement in private universities.

Behaviourist Theory (Skinner, 1953) emphasises stimulus-response relationships, reinforcement, and habit formation. Learning occurs through repeated practice, immediate feedback, and reinforcement, which aim to shape desired behaviours (Mugizi et al., 2020). While behaviourist approaches have been widely applied in classroom instruction, studies suggest that they may not adequately foster deeper engagement or critical thinking.

Constructivist Teaching Approaches and Student Engagement

Constructivist teaching approaches include active learning, collaborative learning, teacher support, and contextual learning (Alt, 2015; Mugizi et al., 2021b).

- *Active learning* involves students' direct participation in problem-solving, discussions, and reflective activities (Demirci, 2017).
- *Collaborative learning* encourages peer-to-peer interaction and group problem-solving, fostering social and cognitive engagement (Le et al., 2018).
- *Teacher support* refers to guidance, care, and scaffolding provided to students, ensuring they overcome challenges and achieve learning goals (Yu & Singh, 2018).
- *Contextual learning* connects classroom content to real-life applications, making learning relevant and meaningful (Roza et al., 2019).

Studies indicate that these strategies positively influence student engagement. For instance, Arjomandi et al. (2018), reported a strong relationship between constructivist teaching and active student participation. However, certain studies highlight inconsistencies. Darnell and Krieg (2019) found that active learning did not significantly enhance learning outcomes, while Wang and BrckaLorenz (2018) observed limited effects of collaborative learning on engagement. Contextual learning also showed variable impacts on engagement in the study by Qudsyi et al. (2018), suggesting that context and implementation quality influence effectiveness.

Constructivist strategies have been promoted under NEP 2020 to support experiential, inquiry-based, and student-centred learning, though empirical evidence from private universities is limited.

Teachers often face challenges such as large class sizes, exam-oriented curricula, and limited resources, which may hinder effective implementation of constructivist approaches.

Behaviourist Teaching Approaches and Student Engagement

Behaviourist approaches focus on structured learning, repetition, and reinforcement. Immediate feedback, continuous practice, and reinforcement are central techniques (Mugizi et al., 2020; Akpan, 2020). Positive reinforcement rewards desirable behaviours, while negative reinforcement discourages undesirable ones. While these methods can produce measurable outcomes, research suggests that they may not adequately stimulate student engagement, particularly in higher-order thinking, critical reflection, and collaborative learning (Mugizi et al., 2020). Studies by Cooper et al. (2018) report positive effects on engagement in specific contexts, but evidence from MPprivate universities is scarce. Continuous reliance on memorisation, correction, and practice-focused teaching may limit opportunities for creativity and active participation, which are critical for engagement in classrooms (Rogti, 2021; Choudhary et al., 2021).Most global studies focus on higher education or Western contexts, limiting generalisability to MPprivate universities. In India, research on teaching approaches has primarily emphasised academic performance, neglecting engagement as a mediator of learning outcomes (Dagar& Yadav, 2016). Moreover, limited attention has been paid to the contrasting effects of constructivist versus behaviourist approaches in classrooms, highlighting a need for contextual studies.

III. DISCUSSION

Study revealed that constructivist teaching approaches had a positive and significant relationship with student engagement. This finding aligns with research by Havik and Westergard (2020), Knudson (2020), Mentari and Wang and BrckaLorenz (2018), who found that strategies emphasising active, collaborative, and contextual learning significantly enhance student engagement. Constructivist teaching encourages learners to connect new concepts with prior knowledge, engage in critical thinking, collaborate with peers, and relate learning to real-life situations.

However, the findings contrast with some studies, such as Darnell and Krieg (2019), who found that active learning did not improve student learning and reported an insignificant relationship for collaborative learning; and Qudsyi et al. (2018) indicated that contextual learning had minimal impact on engagement.

Despite these exceptions, the majority of evidence supports the positive influence of constructivist approaches on engagement. Private universities are increasingly encouraged under the National Education Policy (NEP) 2020 to adopt student-centred pedagogy; these findings highlight the importance of interactive and participatory teaching strategies. Conversely, behaviourist teaching approaches demonstrated a negative and significant relationship with student engagement. Findings suggest that behaviourist methods positively impact engagement; findings from Mugizi et al. (2020) indicate that continuous practice and immediate feedback may have limited effects. In classrooms, where traditional teacher-centred practices often dominate, these findings suggest that strategies emphasising repetition, correction, and reinforcement alone may fail to sustain active engagement, especially compared to constructivist strategies.

IV. CONCLUSION

This study concluded that constructivist teaching approaches significantly enhance student engagement. Engagement improves when teachers employ active, collaborative, and contextual learning strategies, coupled with strong support for students. Specifically, this includes providing questions at the end of lessons, facilitating group research and idea exchange, and promoting critical thinking, problem-solving, and independent learning. Teachers' care and guidance—such as offering extra lessons, helping students catch up, and supporting their overall progress—also play a crucial role.In contrast, behaviourist teaching approaches were found to be less effective in promoting student engagement. Strategies focusing solely on continuous practice, immediate feedback, and repetition, including continuous revision or correction of tasks, do not necessarily encourage active participation or deeper learning among students. Overall, the evidence suggests that Indian educators and policymakers should prioritise constructivist, student-centred strategies to improve engagement, learning outcomes, and holistic development. Integrating such approaches into curricula and teacher training programs can help create classrooms that are more interactive, meaningful, and conducive to lifelong learning.

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