A Study on Student Engagement during Online Learning at Higher Education Level

Dr. Prachi Agarwal
Academic Consultant
Luxembourg
Europe

Dr. Neha Kurhade
Academic Co-ordinator
Symbiosis Centre for Distance Learning
Pune, Maharashtra
INDIA

Abstract

Online learning might become mainstream in the days to come, especially at higher educational level, because it allows student to learn while working full time or part time. Online education arrangement is rather novel and complex in nature. It has been observed that it is difficult to keep student engagement level high in online learning. The present study aims at finding out the reasons behind low student engagement at higher education level and find out ways to increase student participation during online lectures. Study focuses on the behavioral engagement of students encompassing students' interaction with teachers, peers and technology.

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KEYWORDS

student engagement, online learning, student participation and collaboration

Introduction

Online learning was pursued across the world even before Covid-19 happened. However, during Covid-19 pandemic, the online education platform was used most rigorously to ensure continuous learning for students. Now; as the world has recognized the potential of online education, and accepts it as an incredibly beneficial learning platform, it is safe to say that this unconventional style of learning will be used more in the future. Online learning offers flexibility related to location and time. However, it also poses certain challenges. One of the major challenges in online learning is of student engagement. Students' participation during online classes is noted to be inadequate, which impedes students' online learning experience.

From the point of view of a teacher, there is no greater joy than when students respond actively and positively in the class. Student engagement in the class ensures that the students are not merely the recipient of information but the active participant in the learning process. It fosters a successful learning environment.

According to the study by Chapman, 2002; Fredricks et al., 2004, 2016; Mandernach, 2015, student engagement can have multiple dimensions such as behavioral engagement, affective engagement and cognitive engagement. The present study majorly focuses on the behavioral engagement of the students during the online learning.

A desirable student behavioral engagement is reflected through the active participation and involvement of the student during online learning. It can be noted through students' positive reaction to online learning activities or tasks conducted during the lectures; such as asking relevant

questions, being attentive, participating in class activities like giving presentations, taking notes, completing assigned activities, good attendance record etc.

During online learning, a student's academic engagement primarily entails interaction between: student-teacher, student-student, student-content and student-technology. As per the previous studies on students pursuing higher education, the 'student-teacher' interaction has a greater impact on student's learning curve. Students are found to be more engaged and enthused when the student-teacher interaction is profound. Thus, present study attempts to explore the effect of student-teacher and student-student interaction during online learning in promoting students' engagement. However, from a point of online-learning, this study also focuses on student's interaction with technology.

Statement of Problem

Ubarhande P. and Bagade S. (2020) proposed that even though the online learning is becoming more and more popular, the ideal educational outcome of 'online' learning over 'in-person' learning is still questionable. At higher educational level (graduation and post-graduation level), students have been observed to have low online class attendance, disinterested behaviour, less than acceptable level of participation during the lectures. Low student engagement may result in poor course outcome. Teachers find it difficult to engage adult students. The challenge of increasing student engagement in online learning demands immediate attention and prompt solution. Thus, it is important to inquire why students feel disengaged and reluctant to actively participate during online learning.

Objectives of the Study

1. To identify the reasons behind present level of student engagement in online learning.
2. To suggest how student engagement can be increased during online learning.

Methodology of The Study:

Students at higher educational level, i. e. graduation and post-graduation level, studying in different educational institutes in Pune city, formulate the population for this present study. Primary data has been collected by administering an online questionnaire. Data has been collected from 168 student-respondents by using random sampling technique. Questionnaire on online learning consisted of questions on demographic information, interaction with teachers, peers, and technology, and possible reasons for disengagement during online classes. Secondary data is collected from e-journals, online published research papers and web articles related to the research topic.

Review of Literature

Hollister, Nair, Hill-Lindsay & Chukoskie (2022) surveyed 187 undergraduate students to find out their experience with online learning during covid 19. Their study focused on areas of student's interaction with instructors, peers, structure of course and resources available to students.

The study highlighted considerable decrease in student engagement and attendance due to lack of social interaction.

Peng (2017) focused on the 3 types of students' engagement while learning. The study examined the degree of student engagement by analysing student's behaviour towards learning, student's cognitive engagement, and student's emotional experience during online learning. The study also introduced a student engagement model consisting of above-mentioned aspects.

Jacobson (2022) in his thesis suggests various strategies focusing on course design, clearly defined goals for students, online learning activities etc. that can be adopted by academic institutions to increase students' engagement. The study also pointed out that student engagement can significantly influence learning outcomes.

Garrels and Zemliansky (2022) proposed certain online teaching practices to the instructors who are new to online learning environment. Suggested practices for effective online teaching are based on research outcome and researchers' personal teaching experience. The research advocated the use of student-centered design for online learning, increasing social interaction, communication, and feedback for better learning environment.

Analysis and Interpretation of The Data Collected

Out of 168 respondents, 64% respondents were pursuing post-graduation, and 36% respondents were pursuing graduation course through online learning. 61% respondents are females 39% are male respondents. For taking online classes; most of the respondents (86%) prefer using laptops or desktops; followed by mobile phones.

58% respondents reported that their attendance was between 61% - 80% during online learning. It is followed by 29% respondents having attendance between 41% - 60%. Rest 13% respondents had less than 40% attendance. Low attendance reflects that students do not come to online classes regularly. They only strive to fulfill the minimum attendance requirement of their programme. None of the participant reported having more than 80% attendance. This indicates that student engagement level is lower in online classes.

(1) **Open and two-way communication between teacher and students**
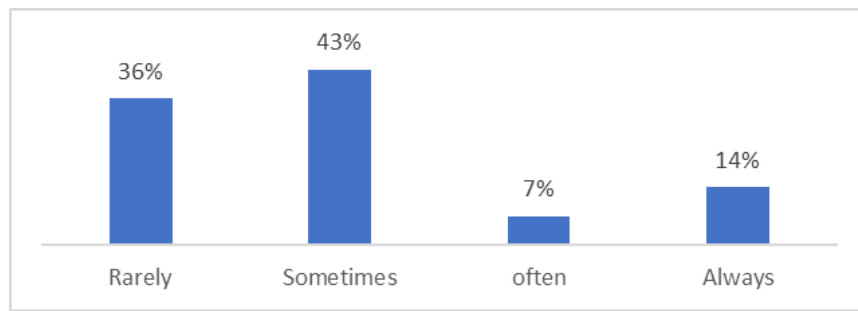
Figure 1: Open and two-way communication

Response analysis: Majority of the students i. e. 43% and 36% respectively have responded that the communication with the teachers is not open very often. Lectures tend to be one way and

students are generally only the recipients of the information; and not a participant in their own learning process. Such environment can demotivate students to be less involved in learning.

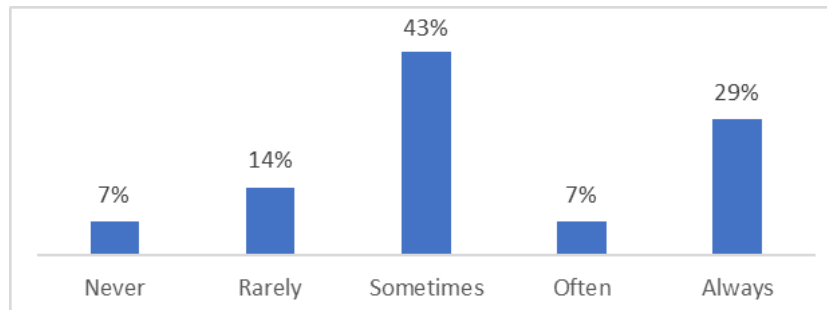**(2)**   **Students receiving regular and timely feedback from teachers**

Figure 2: Regular and timely feedback

Response analysis: Majority of the respondents (43%) have said that sometimes they receive regular and timely feedback from the teachers regarding their online learning progress. It is followed by 29% respondents saying that they always receive timely feedback from teachers. However, 14% respondents say that they rarely receive feedback. Without constructive feedback on student's performance, students may not know how to improve their flaws and their overall leaning experience. This can lead to student disengagement eventually.

(3)   **Frequent discussions opportunities on course topics during online lectures**
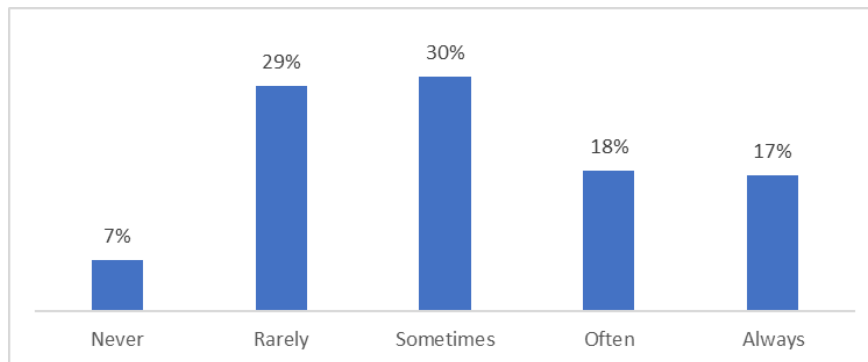

Figure 3: Discussions opportunities on course topics

Response analysis: 30% respondents have reported that only some of the times discussions were held on the course topics during the lectures; on which students were asked to speak or participate actively. It is followed by 29% students saying that such discussions rarely happened. Remaining students have said discussions were often/always held during the online classes. Discussions allow students to speak openly which leads to active participation and higher level of class involvement.

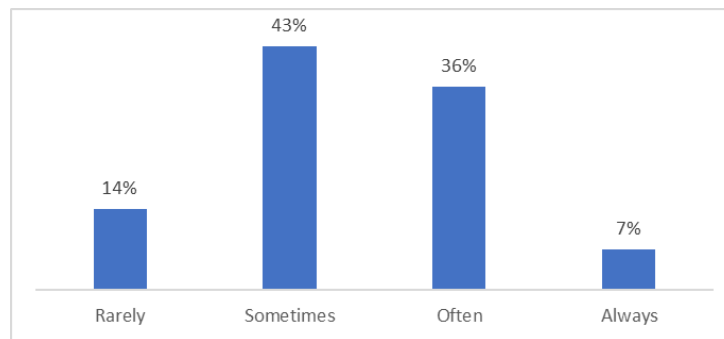**(4)** **Teachers use online learning tools to make lecture interesting**

Figure 4: Use online learning tools

Response analysis: 43% of the respondents said that sometimes their teachers made online lectures interesting with the help of online learning tools like breakout rooms, kahoot, jamboard, canvas, quizzes, pear deck and more. This number is followed by 36% students saying that such online learning tools were often used during the lectures. 14% respondents reported that such tools were rarely used. As online lectures can become tedious and difficult to understand, teachers should regularly use available online learning tools to make content easily understandable, to break the monotony or to encourage students to participate more during the class. Students keeping their videos on during lectures
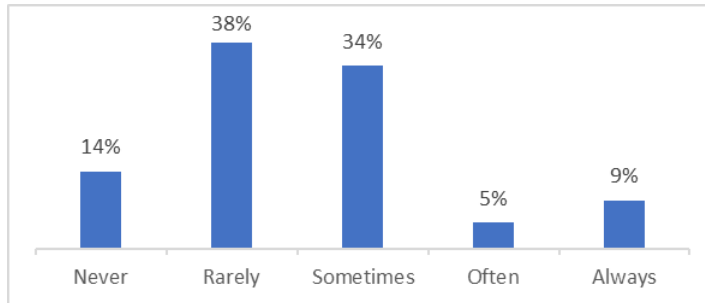
Figure 5: Students keeping their videos on

Response analysis: Most of the students (38%) rarely kept their videos on during the online lectures. It is followed by 34% students agreeing that they turned on their web camera sometimes. 14% respondents do not keep videos on at all. In a physical classroom setting, teachers can easily read the cues and expression on students' faces and comprehend if the students have grasped the concept, if they are engaged enough, or if they are getting bored. However, during online classes, if students' videos are off, teachers face a greater challenge in understanding student engagement level, or even if the student is at all listening to the lecture. Keeping videos on is one of the primary signs that a student is engaged and wants to participate actively.

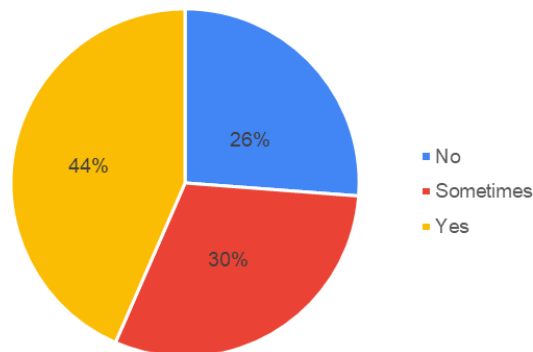**(5)**   **Online lectures unable to hold students' attention longer**

Figure 6: Online lectures unable to hold students' attention

Response analysis: Majority of the students i.e. 44% reported that their online lectures tend to be boring and unable to hold their attention longer. 30% respondents sometimes find their lectures boring. Remaining 26% respondents find online classes interesting. Students' engagement level goes down if they find a class boring. As they attention span of the people is getting shorter in general, it is important for the instructor to understand how to keep students engrossed in the lecture. For engaging the students during online classes, it is imperative to make the content delivery interesting. Content should be delivered in such a way that it is able to hold students' attention throughout the lecture. Traditional teaching pedagogies might not prove successful in online teaching.

(6) **Students distracted by social media, gaming apps etc. while learning online**
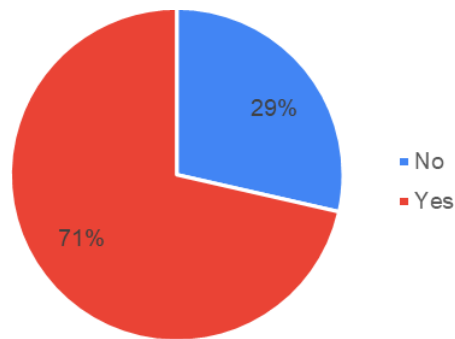

Figure 7: Distraction by social media and online games

Response analysis: Most of the respondents i.e. 71% agree that during online learning they easily get distracted by social media, gaming apps etc. This obstructs successful online learning. Easy access to distractions like online games, social media, entertainment videos etc. while being online pose a great challenge for online education. Students get sidetracked and their attention is diverted.

Because of this, student do not pay proper attention to online learning and their engagement level comes down.

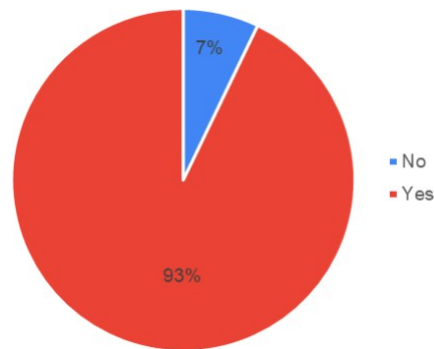**(7)** **Missing peer interaction during online learning.**

Figure 8: Missing peer interaction

Response analysis: 93% respondents have reported that they miss interacting with their classmates during online learning. 'Student to student' interaction or collaboration plays a crucial role in increasing student engagement level. Peer interaction can make class interesting, boosts students' confidence to respond and participate, experience teamwork, and can make overall class environment much more comfortable. In the absence of peer interaction, students can feel aloof and demotivated to participate freely.

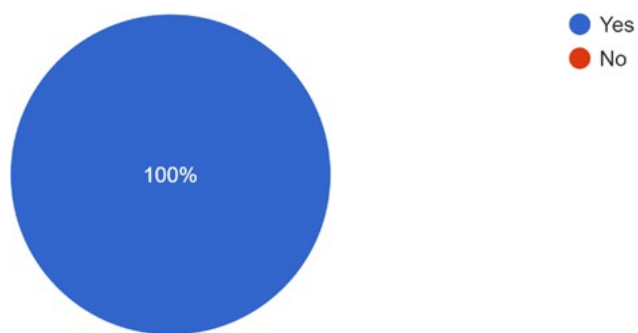**(8)** **Group activities makes online learning better and easier.**

Figure 9: Group activities to makes online learning better

Response analysis: 100% respondents feel that working in groups with their classmates improves their online learning experience. Students feel more comfortable to participate as a part of a group. Collaboration can increase student engagement.
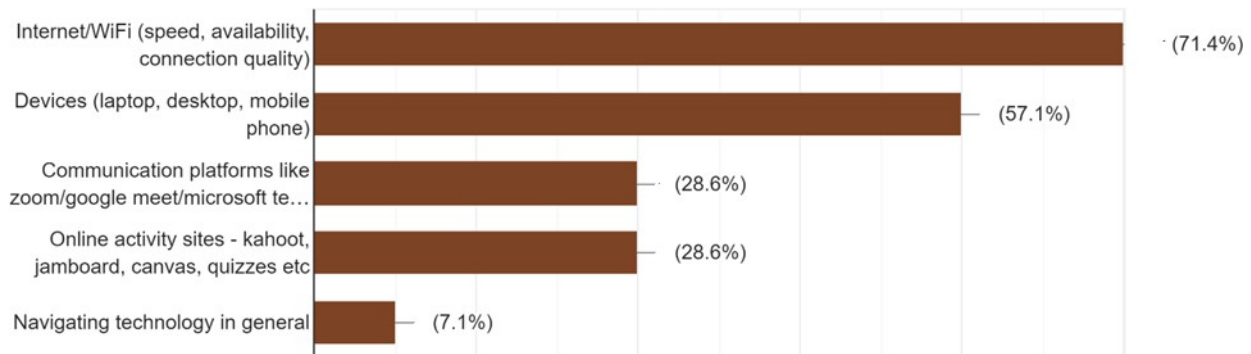
(9)   Issues faced during online learning

Figure 10: Issues faced during online learning

Response analysis: 71.4% respondents faced problems with internet or their WiFi while learning online. It is followed by problems with their electronic devices like laptop and mobile phone that they use to take lectures. 28.6% respondents had issues with communication platform or online learning tools and websites. In general students are able to navigate technology easily. Technology, software, devices, and availability of speedy & uninterrupted internet connection is a necessity for online learning. Many students have to suffer when proper infrastructural resources are not available to them. Technological issues discourage students to participate during online lectures.

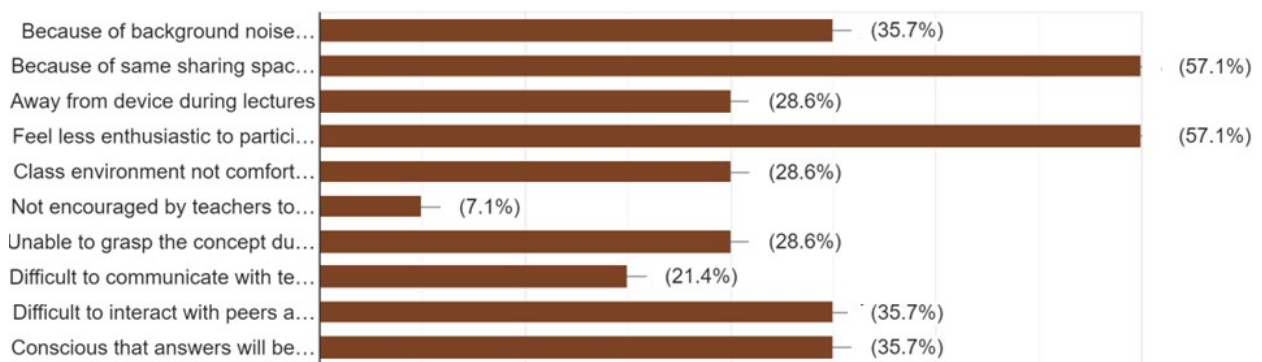**(10)   Reasons for not participating in the class**

Figure 11: Reasons for not participating in the class

Response analysis: During online classes, majority of the respondents (57.1%) are reluctant to participate actively by keeping their video or audio on because more than often they share the same room/space with other family members, it can lead to a lot of background noise as well, and they feel less enthusiastic participate. Lack of interaction with teachers and friends, and less collaborative activities are also demotivating factors. Some students also feel that class environment is not comfortable enough to participate freely. They feel conscious that their responses/answers might get mocked by other students. At times when students are unable to understand the concept, they feel less engaged in the learning process.

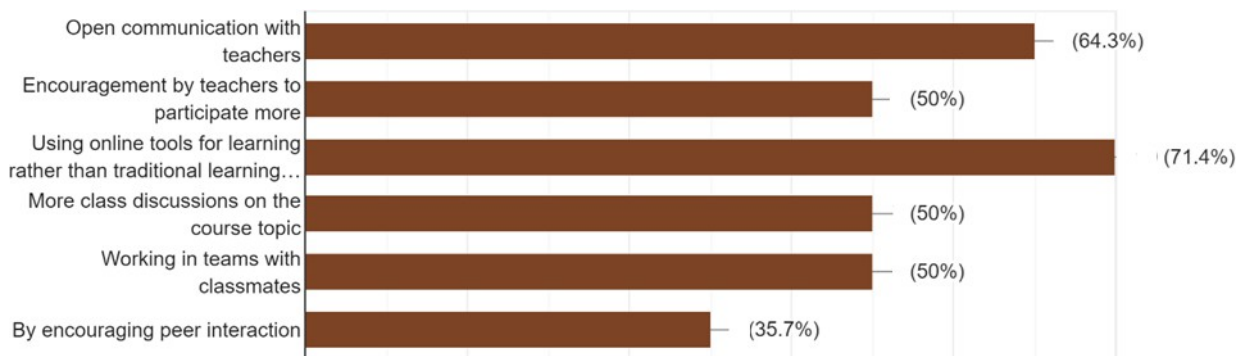**(11)** **Practices to increase students' class participation**

Figure 12: Practices to increase students' class participation

Response analysis: 71.4% respondents feel that using online learning tools like breakout rooms, jamboards, quizzes, videos, class discussions etc. can increase their engagement level. 64.3% respondents want to have more open communication with the instructors. Students also feel that having more group activities and more opportunities to interact with peers can encourage them to participate more in the class.

Findings and Suggestions

Table 1: Findings and Suggestions

FINDINGS (Reasons for low student engagement)	SUGGESTIONS (For increasing student engagement)
Student—Teacher Interaction ⏰ Communication between students and teachers is not always open and two- ways ⏰ Students do not receive frequent and timely feedback ⏰ Students are given less opportunities to voice their opinions as less discussions are held on course topics	⏰ Student interaction can be two-way by introducing discussion boards, encouraging students to present their opinions, and adopting flip classroom approach ⏰ Discussions and ideas presentations can be included as one of the assessment methods over traditional assignment method ⏰ Provide constructive feedback to students on their learning progress. Give timely feedback on the assignments they have submitted and for their efforts ⏰ Feedback should mean more than a 'correct/incorrect' remark. It should guide the student to improve performance further ⏰ Allow students to discuss their issues with teachers other than during online lectures. ⏰ Set aside some student-teacher interaction time separately each week in which any issue can be discussed

Student—Student interaction	Student's engagement through collaboration
⊕ Students miss interaction with their classmates/peers ⊕ Collaboration and group activities are preferred by students to make online learning experience better	can be increased by: ⊕ Finding out ways to let students interact with each other during and after the lecture. ⊕ Making students work in groups or teams and let them come up with creative solutions ⊕ Asking students to work on collaborative projects rather than submitting assignments individually ⊕ Making greater use of breakout rooms but with pre-assigned responsibility to each group member ⊕ Introduce students to online collaborative tools like google docs, whiteboards, google slides etc. for document sharing. Without proper guidance, students may get frustrated while working in teams from a distance.
Issues during online learning	**Foster Student engagement through active participation:**
⊕ Online lectures unable to hold students' attention longer ⊕ Distraction by social media, gaming apps etc. ⊕ Use of creative online learning tools ⊕ Technological issues like slow internet speed, poor WiFi connection, problem with device like laptop, phone etc.	⊕ Break monotony of delivering one-way information through PPTs. Show short informational videos, take breaks from PPT to conduct learning activities, include less content per slide ⊕ Make learning interesting with online learning tools and activities like jamboards, kahoot, quizzes, breakout rooms, pear deck etc. ⊕ Institutes can install software in students' devices; which prevents opening other social media sites while learning online.

Indicators of low student engagement	**Create respectful classroom environment** in online learning allowing students to participate freely by:
⊙ Low attendance rate during online classes	⊙ Instructing students to maintain dignity during class and treat other students with respect
⊙ Students do not prefer to keep their videos on	⊙ Teachers being friendly and understanding towards students; to make them feel comfortable and safe to state their problems
⊙ Reluctance to participate because of background noise at home and space sharing with family members	⊙ Encourage students to always voice their opinions and participate in the class; while not making other students feel uncomfortable
⊙ Fear of being mocked by classmates if responded	

Limitations of The Study

⊙ The data is collected from the students pursuing higher education level (graduation and post-graduation) during online learning. Future studies can include other educational levels such as primary school level, secondary school level, etc.

⊙ The present study is limited to only one aspect of student engagement, i.e., behavioral engagement. More aspects can be explored to understand students' engagement better.

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