



## Analyzing Students' Engagement in Online Learning Environment

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### ABSTRACT

*Students' engagement is a supporting factor that has an important position in the online learning process to achieve a better and more effective quality of learning. So, this research aims to determine student engagement in online learning. This research used a qualitative descriptive method, and the sample was taken from the English Department Universitas Muslim Maros and consisted of 41 students. The researcher used questionnaires to analyze the students' engagement as a guideline for analyzing and interpreting data and interviews to support the data. The data from the questionnaire will be analyzed using the Likert Scale. The indicators used to measure student engagement in online learning included emotion, participation, behavior, cognition, and skill factors. The data shows that students generally support online education, which is well-received by students.*

**Keywords:** *Students' Engagement, Online Learning, Engagement Aspects.*

### INTRODUCTION

Online learning is the latest and most famous type of distance training since technology is a part of everything we do in our daily lives and at work (Astri et al., 2022). The coronavirus 2019 (Covid-19) outbreak, which has hit 215 nations worldwide, gives a demanding situation for academic institutions, mainly universities. Through the Ministry of Education and Culture, the government has mandated that universities conduct their lectures in a conventional way and tell them to continue attending online classes. (Kemendikbud Dikti Circular Letter No. 1 of

2020). However, one form of alternative learning that can be implemented during an emergency Covid-19 is online learning. It can make it possible for lecturers and students to collaborate from different locations while still carrying out the learning process (Milman, 2015; Firman & Rahayu, 2020). There is no denying that digital technology permeates every part of modern life (Astri, Nur, & Misnawati, 2022)

Online learning is studying that uses the net community with accessibility, connectivity, flexibility, and the cap potential to convey diverse kinds of studying interactions. Therefore, universities throughout the WFH duration want

to reinforce online studying (Darmalaksana et al., 2020). Online learning is learning that uses the internet network with accessibility, connectivity, flexibility, and spawn ability to various types of learning interactions that need a mobile device platform (Sadikin & Hamidah, 2020). While high levels of student participation are necessary for online learning in order for learning to occur successfully and efficiently.

Increasing student engagement in school is one attempt that schools can use to eliminate issues that arise for students. (Appleton et al., 2008) explain that Apart from that, there are students who are involved in the teaching and learning process. Some students do not even attend class by being apathetic, talking to friends, acting bored, failing to pay attention, or even napping (Fikrie & Ariani, 2019) added that Student engagement has psychological components pertinent to students' sensitivity to belonging to the school, admission of school values, and behavioral components relevant to assistance in school activities.

Measures of student engagement in school that have been regularly analyzed in the literature include participation in school activities, accomplishment with good grades, time spent on homework, and quality of homework (Jimerson et al., 2003). One of the facts why student engagement is crucial in schools is that it is an essential factor in student learning and the success of the learning process in schools (Wang & Holcombe, 2010; (Fredricks et al., 2016). There are three aspects of student

involvement in learning differences, such as behavioral, emotional, and cognitive, which have an impact on student's' achievement. There are three main elements that make up student engagement: behavior engagement, emotional engagement, and cognitive engagement (Fredricks et al., 2004) engaging in behavior entails doing tasks and according to regulations, interests, values, and emotions are referred to as emotional involvement and students' emotional responses in class include curiosity, boredom, joy, sadness, and worry, whereas their cognitive involvement comprises drive, effort, and learning tactics. Based on the research background above, the research objectives can be formulated to find out the students' engagement in online learning. (Farrell & Brunton, 2020) in their study used some psychosocial factors such as peer community, an engaging online teacher, and confidence and by structural factors such as life load and course design. Its findings provide insights into how online degrees can support online students to achieve successful and engaging learning experiences, but in this study used five factors to measure students' engagement in online learning such as emotion, behavior, participation, cognitive and skill factors.

## **Literature Review**

### **1. Understanding students' engagement**

The degree of effort or communication between time and learning resources that produces learning outcomes and experiences is known as student engagement, (Lewis et al.,

2011). Student engagement is also a symbol of educational quality and whether active learning takes place in the classroom (Robinson & Hullinger, 2008). Engagement can be defined as students taking an active aspect as participants in teaching and learning procedure. Teachers seek to bring convenience for students to be active such as actively seek, process, and manage their learning. Student involvement is only available if the student is permitted to participate or be involved in the learning process. Increasing student participation in school is one of the things that can do to weaken student problems. In a literature review, (Fredricks et al., 2004) interpreted that dispute such as poor student performance led to expanded student boredom and increased dropout rates as students did not participate in school.

(Appleton et al., 2008) defined that there are students who are not engaged in the teaching and learning process, such as those who are apathetic, talking to friends, not getting enthused, not paying attention, or falling asleep during class. Student engagement in school is defined as the quality and quantity of the student's psychological state, including cognitive, emotional and behavioral, participation and skill responses to the learning process, and the quality and quantity of academic and social activities in and out of the classroom and achieve excellent learning outcomes (Gibbs et al., 2010) Gunuc and Kuzu, 2015). One of the motives why scholar

involvement in faculties have to be of difficulty is due to fact involvement is a crucial thing with inside the fulfillment of students' getting to know and educational tactics in faculties (Wang & Holcombe, 2010; (Fredricks et al., 2016). The arrangement of students' participation in school establishes within a variety of different theoretical traditions. Some experts describe student participation in school to identify relationships between contextual factors, patterns of participation, and coordination of student participation; School on Dynamics (Fredricks et al., 2016)

## **2. Online learning**

Learning is a rule that enables students to learn more fully and diversely. The facilities controlled by the system allow students to study anytime, anywhere, regardless of distance, location, or time. According to Kenji (1998), there are three functions or possibilities of online learning that we can use in our daily life as a communication tool, as a tool for accessing information, as a teaching or learning tool. Online learning media can be interpreted as media equipped with an operable controller by a user so that the user can control and access user requirements (Arnesti & Hamid, 2015)

## **3. Indicators measuring student involvement in online learning**

Some of the indicators used such as (a) Students' emotional involvement in school. Show interest, appreciation, and feelings for the school, for example, feelings in class, feeling towards school and teachers, feeling towards

treatment, discipline and motivation, the sense of belonging, positive feelings, and appreciation of high performers in school (b) Students' cognitive involvement in school, namely recognition of motivation, effort, and usage of strategies. These include psychological investment in learning, motivation to learn, seriousness in school, willingness to work more than necessary, challenging choices, discipline, planning, and learning strategies, flexibility in problem-solving, and working hard, (c) Students' behavior refers to participation and direct involvement in academic activities in neighborhood online learning such as attendance, participation in learning activities, adherence to rules, completion of assignments (Jimerson et al., 2003). Student participation in the online learning environment can take the form of student contributions in forum discussions, student contributions when working in groups, and so on, (d) The Participation Dimension refers to participation and direct involvement in academic activities in the neighborhood online learning, for example, attendance, participation in learning activities, obeying rules, and doing tasks (Jimerson et al., 2003).

(Kahu, 2013) found that the types of student participation in the classroom are related to learning effort, learning interest, subject engagement, feeling part of learning, deep learning, scheduling, and socializing with others. It is explained that it is a relationship of Also, as (Burch et al., 2015) have pointed out

that interest in learning, enjoyment of learning, effort, energy, concentration, and the presence of attention to learning can all have an impact on how students engage in their coursework. Research literature explains that a number of markers, including learning attempts, involvement in the classroom environment, discussion, problem-solving skills, learning satisfaction, a sense of belonging, and learning enthusiasm, are used to gauge student involvement in the classroom learning environment.

## **METHODS**

The method of this study was a qualitative investigation to describe the students' engagement in online learning that students experienced. According to Arikunto (2010), the objective of descriptive research is to describe phenomena and their traits. It does not pose a threat to the subject or skew the data obtained from the sample because the main goal of a descriptive study is to identify the students' engagement in online learning based on the results of the questionnaire that was provided and it was supported by an interview. There were 14 questions that were intended to identify the students' engagement. These questionnaires consisted of some statements and four answer choices, namely (very agree, agree, disagree, and very disagree).

The sample used in this study was all students from the second to the sixth semester of English education, totaling 41 students.

Total

41

**Table 1.** Research Sample

No	Class	Number of Students
1	2 <sup>nd</sup> semester	16
2	4 <sup>th</sup> semester	11
3	6 <sup>th</sup> semester	14

**FINDINGS AND DISCUSSION****1. Findings**

A questionnaire was distributed to 41 English students to know the students' engagement in online learning. It consisted of five aspects such as emotion, participant, behavior, cognitive, and skill.

**Table 2.** The items of Questioners

Factor items	Instrument Items
Emotion	<ol style="list-style-type: none"> <li>1. Following online learning continuously</li> <li>2. keep enthusiastic about learning even though online learning</li> <li>3. Put forth effort</li> <li>4. Satisfied with the online class, I am taking.</li> <li>5. Find ways to make the material interesting</li> </ol>
Behavior	<ol style="list-style-type: none"> <li>1. Communicate with the instructor privately for extra help.</li> <li>2. Ask the instructor about the contents of the lesson.</li> <li>3. Engage in online conversations or chats</li> <li>4. Participate actively in forums to express my feeling or opinion</li> </ol>
Participation	<ol style="list-style-type: none"> <li>1. Participate actively in online learning</li> <li>2. Participate actively in forums</li> <li>3. Interlace communication with others</li> </ol>
Cognitive	<ol style="list-style-type: none"> <li>1. Derive new interpretations and ideas from the knowledge learned in online classes.</li> <li>2. Analyze thoughts, experiences, and theories about the knowledge I have learned in my online classes.</li> <li>3. Get new information related to the knowledge in online learning</li> <li>4. Can develop and convey the ideas or information related to the knowledge learned in my online classes.</li> <li>5. Tend to apply the knowledge I have learned in online classes to real problems or new situations.</li> </ol>
Skill	<ol style="list-style-type: none"> <li>1. study-related learning content by myself after the online lesson.</li> <li>2. Remove all distracting environmental factors when taking online classes.</li> <li>3. Stay up on reading the material</li> <li>4. Take good notes over readings, PPT, and video lectures</li> </ol>

The data was collected from questionnaires related to the emotion, participant, behavior, cognitive, and skill aspect.

**In emotion aspect consists of five statements that aim to determine the involvement of students in terms of students' emotions.**

a. Following online learning continuously

The results of the questionnaire showed that there were 28 of 41 students responded strongly agree, there are 10 students responded to agree with the statement,

there are 2 students responded less agree, and only 1 student responded to disagree with the statement. It can be seen that most students follow learning continuously even though it is done in online learning.

- b. Keep enthusiastic about learning even though online learning

The results of the questionnaire showed that there were 23 of 41 students responded strongly agree, and there are 15 students responded to agree with the statement, there are 2 students responded less agree, and only 1 student responded to disagree with the statement. It can be said that the students enhance their interest in online learning and are motivated to study because online classes are very useful for them in that situation.

- c. Put forth effort

The results of the questionnaire showed that there were 28 of 41 students responded strongly agree, there are 13 students responded agree on the statement, there is no student responded less agree and disagree on the statement.

- d. Satisfied with the online class, I am taking.

The results of the questionnaire showed that there were 12 of 41 students responded strongly agree, there are 23 students responded agree on the statement, there are 5 students responded less agree, and only 1 student responded disagree on the statement.

- e. Find ways to make the material interesting

The results of the questionnaire showed that there were 13 of 41 students responded strongly agree, there are 26 students responded to agree with the statement, there is 1 student responded less agree, and only 1 student responded to disagree with the statement.

**In participation, aspect consist of four statements which aim to determine the involvement of students in terms of students' behavior.**

- a. Communicate with the instructor privately for extra help.

The results of the questionnaire showed that there were 11 of 41 students responded strongly agree, there are 26 students responded agree on the statement, there are 4 students responded less agree and there is no student responded disagree on the statement.

- b. Ask the instructor about the contents of the lesson.

The results of the questionnaire showed that there were 17 of 41 students responded strongly agree, there are 23 students responded agree on the statement, there is 1 student responded less agree and there is no student responded disagree on the statement.

- c. Engage in online conversations or chats

The results of the questionnaire showed that there were 12 of 41 students responded strongly agree, there are 22 students responded agree on the statement, there are 6 students responded less agree and there is

1 student responded disagree on the statement.

- d. Participate actively in forums to express my feeling or opinion

The results of the questionnaire showed that there were 11 of 41 students responded strongly agree, there are 28 students responded agree on the statement, there are 2 students responded less agree and there is no student responded disagree on the statement.

**In behavior aspect consist of three statements which aim to determine the involvement of students in terms of students' behavior.**

- a. Participate actively in online learning

The results of the questionnaire showed that there were 16 of 41 students responded strongly agree, there are 23 students responded agree on the statement, there is 1 student responded less agree and there is 1 student responded disagree on the statement.

- b. Participate actively in forums

The results of the questionnaire showed that there were 22 of 41 students responded strongly agree, there are 17 students responded agree on the statement, there are 2 students responded less agree and there is no student responded disagree on the statement.

- c. Interlace communication with others

The results of the questionnaire showed that there were 23 of 41 students responded strongly agree, there are 17 students responded agree on the statement, there is 1

student responded less agree and there is no student responded disagree on the statement.

**In cognitive aspect consist of four statements which aim to determine the involvement of students in terms of students' behavior.**

- a. Derive new interpretations and ideas from the knowledge learned in online classes.

The results of the questionnaire showed that there were 11 of 41 students responded strongly agree, there are 29 students responded agree on the statement, there is 1 student responded less agree and there is no student responded disagree on the statement.

- b. Analyze thoughts, experiences, and theories about the knowledge I have learned in my online classes.

The results of the questionnaire showed that there were 9 of 41 students responded strongly agree, there are 28 students responded agree on the statement, there are 4 students responded less agree and there is no student responded disagree on the statement.

- c. Get new information related to the knowledge in online learning

The results of the questionnaire showed that there were 17 of 41 students responded strongly agree, there are 22 students responded agree on the statement, there are 2 students responded less agree and there is no student responded disagree on the statement.

- d. Can develop and convey the ideas or information related to the knowledge learned in my online classes.

The results of the questionnaire showed that there were 8 of 41 students responded strongly agree, there are 30 students responded agree on the statement, there are 3 students responded less agree and there is no student responded disagree on the statement.

- e. Tend to apply the knowledge I have learned in online classes to real problems or new situations.

The results of the questionnaire showed that there were 16 of 41 students responded strongly agree, there are 24 students responded agree on the statement, there is 1 student responded less agree and there is no student responded disagree on the statement.

**In skill aspect consist of four statements which aim to determine the involvement of students in terms of students' behavior.**

- a. Study related learning contents by myself after the online lesson.

The results of the questionnaire showed that there were 15 of 41 students responded strongly agree, there are 24 students responded agree on the statement, there are 2 students responded less agree and there is no student responded disagree on the statement.

- b. Remove all distracting environmental factors when taking online classes.

The results of the questionnaire showed that there were 14 of 41 students responded strongly agree, there are 26 students responded agree on the statement, there is 1 student responded less agree and there is no student responded disagree on the statement.

- c. Stay up on reading the material

The results of the questionnaire showed that there were 13 of 41 students responded strongly agree, there are 27 students responded agree on the statement, there is 1 student responded less agree, and there is no student responded disagree on the statement.

- d. Take good notes over readings, PPT, and video lectures

The results of the questionnaire showed that there were 15 of 41 students responded strongly agree, there are 20 students responded agree on the statement, there are 4 students responded less agree and there are 2 students responded disagree on the statement.

From the explanation above regarding how students respond to each item from five aspects, namely emotion, participation, behavioral, cognitive and skill, it can also be seen the average accumulation of each item.



**Table 3.** The Result Aspect Category

Aspects	Category
Emotion	High
Participation	High
Behavior	High
Cognitive	High
Skill	High

The table above shows that the level of students' engagement in online learning can be said to be high based on the three aspects assessed, namely emotional, participation, behavior, skill and cognitive. From the questionnaire distributed to all students, it can be concluded that in emotion aspect, students have good enthusiasm and motivation in online learning. The table also shows that students have a high involvement in learning. Likewise, in the behavioral and participation aspect, students can interact with each other even though it is done indirectly but they can communicate either chat or video, the cognitive aspect, students are able to understand, interpret and develop the material or knowledge they get, and in skill aspect students make some attempt to find more resources of learning.

The data above is supported by the results of the interviews described below. The researchers took six students to find out their opinion about their engagement in online learning, which could strengthen the results of the questionnaire that had been distributed.

*R : "What is your opinion when carrying out the online learning process?"*

*S : "This online learning does require a lot of effort to follow, but I am still very enthusiastic and quite satisfied with this online learning"*

From the interview above, it can be said that the students make several attempts on online learning. Students find it helpful to still get knowledge, even in the current pandemic conditions. Most students think online learning is very effective and more flexible in terms of time.

*R : "How is your participation during online learning?"*

*S : "I did my best. I can build good communication with my lecturers and classmates"*

From the interview above, it can be said that the students make able to build good communication with classmates and with lecturers.

*R : "Can you understand the material presented by the lecturer while online?"*

*S : "yes. I can understand what material is explained."*

It can be said that the students get new information related to the knowledge in online learning and develop and convey the ideas or information related to the knowledge learned in my online classes

*R : "what effort did you put into understanding the material and developing it?"*

*S : "I usually note some important points and look for references on the internet."*

From the interview above, it can be said that the students try to understand learning by taking small notes and also looking for lots of references about the material being studied.

## **2. Discussion**

Data gathering on the outcomes of student involvement is done after identifying the markers to gauge students' participation in online learning. According to the evidence, students respond well to online learning. This research presented to know the students' engagement in online learning. The questionnaires were employed as the instrument to get the data. From the data, it can be shown that there are five aspects that were used as a reference to measure students' engagement in online learning, namely emotion, participation, behavior, cognitive, and skill. The validity and reliability of these five main components are examined by allowing students to respond to an assortment of questions. (Junianto et al., 2020) Validity and Reliability Test student achievement variable valid and reliable items because it's an item on the student scale involvement is considered capable of reflecting the variable of student involvement.

Emotional aspects refer to the sense of ownership in school, curiosity, perception of educational ideals, and favorable and unfavorable responses to teachers, friends, and extracurricular activities. Most students believe that emotions have an impact on their decision to participate in online learning. The students are quite enthusiastic and motivated because

they think that online learning is quite effective and efficient in the learning process. This means that learning can be done anywhere and is not limited by place. As was said by (Putri et al., 2021; Anjarwati & Sa'adah, 2021) the students are really motivated and eager because they believe that online learning is a very effective and efficient way to study. This implies that learning is not confined to a specific location.

Behavior aspect refers to the students concur that the involvement element influences their decision to participate in online learning. They believe that taking classes online during the pandemic aids them in learning. They try to routinely attend lectures, despite it being challenging. They take an active part in all teaching techniques, whether they are listening to the lecturer's content or the group discussion's presentation. They can build communication well with the lecturer when they had difficulty in learning. This is also according to the research of (Nurlisa et al., 2020; Hartini & Martin, 2020) the students were motivated to practice their English and to speak with the teacher if they ran into any problems. When students experience the presence of the teacher, as is the case with online learning, they learn more effectively (Dong et al., 2020)

In participation, the aspect refers to the students considering that learning done online during the pandemic helps them in getting lessons. Although it is difficult, they try hard to attend lectures regularly. They actively participate in every learning method. (Strachota,

2006) said that those types of interactions are essential to online student engagement

The cognitive factor refers to student learning strategies for assignments, accessibility, persistence to learn, consciousness, and obstacles, demonstrating the quality of cognitive processes. Students concur that participating in online learning has positive cognitive advantages (Sofya et al., 2021). The students make the supposition that they can comprehend the material well and interpret the information they receive. Even if they are learning online, they believe they can still follow along, pick up new information, develop it, and effectively communicate it (Hartini & Martin, 2020).

The skill factor refers to students' way of understanding learning. Students agree that during online learning, they had many ways to understand the learning or material presented, such as noting what was heard or displayed in the PPT, reading reference books related to the material, asking, and discussing with friends, and adding knowledge references on the internet.

The level of a student's emotional, participation, behavioral, cognitive, and skill responses to learning both within and outside of the classroom can be described as their level of student involvement in learning (Gibbs & Poskitt, 2010; Sofya et al., 2021).

## **CONCLUSION**

### **1. Conclusions**

After finding the indicators to measure the student's engagement in online learning, then data collection on the results of student involvement is carried out. The data shows that students have a positive response to online learning. In the emotion factor, most of the students' which students assume that emotion effect engagement in online learning. In the participation factor, students agree that participation affects to engage in online learning. In the behavior factor, students agree that it affects to engage in online learning. In cognitive factor, students agree that it affects to engage in online learning. And in the skill factor, students agree that it affects to engage in online learning. Moreover, the students assume that they can understand the learning well and can interpret the knowledge they get during learning.

### **2. Suggestions**

Teachers need to promote a genuine learning setting in the classroom, especially if they want students to be motivated to learn in an online learning environment. Students actively participate in learning when they are highly motivated and vice versa. Additionally, this research is expected to assist teachers in designing distance learning curricula and learning strategies that can reduce dropout and increase student engagement in online learning.

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