

# **Emergency remote teaching during COVID-19 crisis: An analysis of EFL students' engagement in Aceh**

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## **ABSTRACT**

To prevent the spread of the coronavirus (Covid-19) and its pandemic, emergency remote teaching must be implemented. This has brought significant problems and difficulties for students due to this unusual circumstance, EFL students must learn to adapt their abilities. Because of the widespread use of technology in education, the quick transition to complete online learning necessitates some adjustment. EFL students must be able to handle online learning that is performed through technology integration and utilizing technological tools they have never used before in a short period of time. In response to emergency remote teaching, this study examined how engaged EFL students are, as well as their perceptions of such engagement. One hundred ninety-one students from four state Islamic universities in Aceh filled out an online questionnaire adapted from McColskey (2012). Both descriptive and thematic methods were used to analyze the data. EFL students demonstrated their level of engagement in all three categories of engagement: behavioral, emotional, and cognitive engagement. Positive responses and feelings of satisfaction were shown during emergency remote teaching. It indicates that EFL students have a better grasp of how to use technology in education. It is essential to constantly enhance their skills and have enough equipment and infrastructure to facilitate online learning.

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**Keywords:** *Emergency remote teaching; Behavioral engagement; Emotional engagement; Cognitive engagement*

## 1. Introduction

The increasing spread of Corona viruses (Covid-19) globally pandemic limited people's ability to move and meet each other, and seriously affected the teaching-learning process. Initially, the teaching and learning process was conducted traditionally or face to face (*offline*), immediately switching to *online*. Accordingly, applying technology in teaching is indispensable to facilitate educational activities (Rayuwati, 2020), but this has brought significant problems and difficulties for students. These issues are tied to current technology, such as download failures, installation issues, and login issues, among others. As a result, students may perceive the teaching-learning process to be tedious and unengaging at times (Dhawan, 2020). Although student engagement is widely recognized as crucial in the learning process (Harunasari & Halim, 2019) and is regarded as the major indicator in the learning process and outcome (Senior et al., 2018), research by Duffy and Elwood (2013) indicated that 15 focus groups of students who were participating in educational institutions were identified as disengaged.

Several experts have investigated students' engagement during emergency remote teaching (Abou-Khalil et al., 2021; Jelińska & Paradowski, 2021; Khlaif, Salha, & Kouraichi, 2021; Schutte, 2021). The study on students' engagement links with emergency remote teaching focuses on topics such as the effects of the emergency transition to remote teaching on student engagement (Perets et al., 2020), effective students' engagement strategies (Abou-Khalil et al., 2021), and technology acceptance perspective in emergency remote teaching (Xu, Jin, Deifell, & Angus, 2021). Initially, research conducted by Senior et al. (2018) also focuses on the rule of students' engagement and motivation to improve the quality of learning. More recently, studies have investigated learners' levels of engagement (Suharti & Suherdi, 2021; Oraif & Elyas, 2021). Due to several previous research concerning emergency remote teaching and students' engagement, subjects' perspectives, including their reasons and ability to adopt technology and their problems in using it, which lead them to disengagement, were less thoroughly analyzed. As emergency remote teaching is a shifting of instructional delivery through integrating technology to facilitate learning temporarily. Therefore, this study emphasizes students' engagement as a research object in the practice of emergency remote teaching. In this article, students' engagement is examined in terms of (1) categories of engagement and (2) causes for their engagement. Students' engagement suffers when technology is used for emergency remote teaching. In other words, the goal of this study is to examine students' engagement in online learning through integrating technology during emergency remote teaching.

This article departs from the premise that a sudden transition in learning delivery to a technology-based environment does not necessarily benefit students in terms of

learning; rather, it may raise new challenges that must be taken into account. Technology integration into education must be accompanied by ongoing reflection on the distinguishing qualities of technology in order to be utilized to its full potential (Cloete, 2017). It thus requires students to learn to adjust, which leads to the development of new issues for them.

## **2. Literature review**

### *2.1. Emergency remote teaching*

The massive transition to fully online delivery system in education has brought about new term to distinguish carefully planned delivery process from the unexpected or unplanned content delivery of fully online due to crisis. Hodges, Moore, Lockee, Trust and Bond (2020) defined emergency remote teaching as a temporary shift of instructional delivery to an alternate delivery method owing to crisis conditions. Schools and universities closing due to the Covid-19 pandemic in Indonesia, the quick switch from a face to face to online learning can be considered an ERT mode. Responding to a such condition, currently the teachers perform the teaching with minimum sources in hurry.

Emergency remote teaching should be considered as a temporary solution to an immediate problem (Bozkurt & Sharma 2020; Toquero 2020). Since emergency remote teaching uses computer networking technology, mainly over the internet to convey information and instructions. So, applying technology become an integral part of teaching-learning interaction. As a result, using technology has become an essential component of the teaching-learning process. Such options include replacing chalkboards with interactive digital whiteboards and studying during class time using students' own smartphones or other devices. Furthermore, the "flipped classroom" approach, in which students view lectures on their computers at home and use classroom time is regarded for more interactive.

However, the need for technology integration in emergency remote teaching has created a new issue. According to research from Becta (2004) many teachers believe they are incompetent owing to their lack of technology skills. Some of them are described as "technophobic." Other challenges in introducing ICT in schools in some developed countries include a lack of access to technology resources, overburdened teachers, technical issues, and certain attitude and belief hurdles (including unsupportive belief and negative assumption about the presence of ICT in classroom). The similar conclusion was demonstrated by Shim and Lee (2020) that network instability, unilateral interactions, and decreased focus were causes of students' concerns.

Using technology in education necessitates time, effort, and commitment from lecturers and institutions in order to deploy ICT effectively, reconceptualize teaching, and establish communication and interaction with students. So, such understanding is also expected to recognize how to teach with ICT (Schutte, 2021). Therefore, teaching in emergency remote teaching which delivering content through online learning is not

only required teacher's clear instruction but also good access to the internet. Liang and Chen (2012) stated that online learning is useless and non-existent if the learners do not have access to the course learning materials through technology. And it has previously observed that Students also have issues including shortage of discipline, adequate teaching resources or a healthy learning atmosphere when they are at home alone (Bao, 2020).

Despite the limitations, Suharti and Suherdi (2021) recommend that universities to implement online learning since it leads to increased student engagement. To this end, teachers must be more innovative in order to successfully teaching online (Schutte, 2021). Institutions implementing emergency remote teaching should consider support that is easy to access, effective, and addresses distance learning factors such as interactions with students and their parents or guardians, required infrastructure, and the personnel's ability to operate emergency remote learning (Shim & Lee, 2020).

## 2.2. Engagement

It is not avoidable that students' engagement has a significant role towards instructional quality and outcome. Engagement has been identified as influential moderator (Virtanen et al, 2015). It is proven by Deschaine and Whale (2017) that student engagement towards instructional process lead to a positive change in students behavior. Moreover, Students' engagement at school plays a critical role in their learning and career achievement (Suharti & Suherdi, 2021).

Students' engagement is described as their level of attention, curiosity, enthusiasm, optimism, and passion when studying or being taught, which extends to their level of motivation to learn and develop in their studies (Deschaine & Whale, 2017). Furthermore, Wong and Chong (2018) defined learner engagement as the investment of time, effort and other relevant resources by both students and their institutions intended to optimize the student experience and enhance the learning outcomes and development of students, and the performance and reputation of the institution.

Students' engagement is defined as their level of participation and effort in learning (Pan, Cheok, Mueller, & Zhang, 2015), which would improve students' academic achievement (Alrashidi, Phan, & Ngu, 2016). It is critical to keep pupils engaged in an emergency remote teaching situation. The reason for sustaining student involvement is because it may promote retention, performance, and perseverance (Bergdahl, Nouri, Fors, & Knutsson, 2020; Bond, 2020). Furthermore, students' engagement and participation are regarded as having a significant influence on learning and performance, particularly in online learning. Previous research findings emphasize the significance of engagement in reducing dropout rates, student isolation in the online environment, and retention (Ansong, Okumu, Bowen, Walker, & Eisensmith, 2017; Fraysier, Reschly, & Appleton, 2020; Martin & Bolliger, 2018). Anderson (2017) ) said that students' engagement and its effect on learning is a difficult component in learning performance that should be examined using data from the online learning environment.

Tao, Zhang, Ka, and Lai (2018) discovered that achievement, happy learning, and amount of effort are important determinants in students' engagement in online learning environments.

Although engagement is relatively diverse in terms of definition and scope, there has been an agreement among scholars that engagement construction is multidimensional and it includes different aspects such as behavior, emotional, and cognitive engagement. Behavioral engagement is concerned with learning and participation, which includes participation in academic, social, or extracurricular activities (McColskey, 2012). The level of positive (and negative) emotions to instructors, classmates, academics, or school is the subject of emotional engagement (McColskey, 2012). While cognitive engagement is defined as the degree of investment a student has in learning. It comprises students' attitudes toward their school activities as well as how much they value academic work. It refers to the desire to put out effort in order to grasp complicated topics (Bergdahl et al., 2020; Goldspink, Winter, & Foster, 2008; Martin & Torres, 2012; Zimmer, 2012).

In evaluating students' engagement towards online learning, this study focus on those three subconstructs behavioral, emotional, and cognitive engagement as described by McColskey (2012). Accordingly, students' success in learning online, those engagement considered as benchmarking for evaluating (Zimmer, 2012). In this study, students' engagement is defined as students' behavioral, emotional, and cognitive response to emergency remote teaching activities and participation in learning activities.

### **3. Method**

#### *3.1. Research context and design*

This study overall goal is to investigate students' engagement in emergency remote teaching. A case study approach is used, and the data is collected qualitatively from several groups of students conducting emergency remote teaching in different college settings situated in different locations throughout Aceh, Indonesia. A descriptive research was conducted in order to describe an intervention or phenomenon in the context of a real-life situation in which it occurred (Creswell, 2012). For purposes of this study, the occurrence involved a mandated shift from traditional face-to-face instruction to emergency remote teaching in a short period of time with no prior preparation. The research was undertaken approximately six months following the start of an emergency remote education program in Aceh, Indonesia.

#### *3.2. Participants*

Subject of the study is included 191 (*one hundred ninety-one*) of second semester of English foreign language students at five Islamic universities in Aceh. Choosing those subjects due to student are currently experiencing the significant impact of immediate switching of learning process from traditional (*offline*) to online mode.

**Table 1**

Participants home university.

<i>No</i>	<i>Subject of Research</i>	<i>Number of Subjects</i>	<i>Percentage</i>
1	IAIN Langsa	69	36.10%
2	IAIN Lhokseumawe	58	30.40%
3	IAIN Meulaboh	36	18.80%
4	UIN Ar-Raniry Banda Aceh	28	14.70%
		<b>191</b>	<b>100%</b>

### 3.3. Data collection

The main data which collected via an online questionnaire through applying google form were distributed to students. These questionnaires using Likert scale with 4 responses (Always, Usually Seldom and Never) are used to collect information about students' engagement (behavioral, emotional and cognitive). It is a closed-ended questionnaire was distributed to each group of participants to explore students' respond covering those three kinds of engagement which occurred among students' during emergency remote teaching. This questionnaire was written in Bahasa to help English language students better understand the questionnaire. In addition, this instrument had also been validated previously by several other researchers and experts in this field, before it is distributed electronically to participants.

**Table 2**

The scaling of EFL students' engagement.

<b>No</b>	<b>Percentage</b>	<b>Category</b>
1	0% - 25%	Disengagement
2	26% - 50%	
3	51% - 75%	Engagement
4	76% - 100%	

### 3.4. Data analysis

Descriptive statistics were employed to analyze the questionnaire data considering the research questions and current literature about students' engagement in emergency remote teaching. The results of questionnaire data analysis were finally displayed and discussed in detail to give answers on each research question as follows: (1) How do EFL teachers engagement in emergency remote teaching during pandemic covid-19 in Aceh, Indonesia? (2) what are the reasons for engagement or disengagement in emergency remote teaching during covi-19? To ensure the validity of this research, methodological triangulation was employed by carrying out the interviews after the questionnaire had been responded by all the participants (Miles & Huberman, 2014).

#### **4. Findings and discussion**

The current paper was addressed to describe EFL students' engagement among four different group of students-participant in emergency remote teaching during covid-19. The results were presented based on three criteria of engagement which cover to answer the research problem. The first research problem was about EFL students' engagement. It explores participants' behavioral engagement which covers learning participation, emotional engagement includes positive and negative reactions toward learning and cognitive engagement which cover feelings about school activities in emergency remote teaching during covid-19.

##### *4.1. Behavioral engagement*

Even though emergency remote teaching completely different from traditional or offline learning and may occurred several problems as mentioned by Khlaif et al.(2021) in his research findings that most of EFL students' engagement during covid-19 in Palestine reported that online learning has broaden digital inequality and threaten their digital privacy which negatively influence their engagement Almost the same problems also occurred in the study from Atmojo (2021) who analyzed EFL teachers' online professional development experiences amidst the COVID-19 pandemic that the finding stated that the problems mentioned such as (1) instability internet connection; (2) time limited; (3) shortage of internet quota; (4) lack of interaction; (5) and limited facilities and infrastructure.

But EFL students in Aceh to be found themselves were no difficulties in learning through employing technology during emergency remote teaching. It proven by the data in table 3 that EFL students were generally provided a response to be engaged (71.73% - 86.92%) on the category of behavioral engagement when the learning through technology during emergency remote teaching. It means that the EFL students involved regularly in a course. As the result of the study by Shim and Lee (2020) that students noted some positive features of emergency remote teaching such as comfortable educational environments, smooth interactions, and efficient time utilization. Those positive features can be considered as reasons for EFL students to be engaged in emergency remote teaching.

**Table 3**

Descriptive data for the students' behavioral engagement.

No	Category	Items	Engaged			Disengaged		
			A	U	%	S	N	%
1	Behavioral Engagement	Participate actively and regularly in online learning	40	97	71.73%	31	23	28
2		Actively involved in discussion during online learning	75	89	85.86	18	9	14



3	Completing all task of online learning	113	53	86.91	17	8	13
4	Studying seriously during online learning	91	59	78.53	28	13	21

Students' behavioral engagement can be as an implication that EFL students in Aceh showed their eagerness and having sense of needing to succeed and getting deeper understanding to the subject. EFL students' engagement in online learning during emergency remote teaching also stated in the interview. Due to Covid-19 pandemic there is no other alternative we can do except online learning. We engaged regularly as the lesson delivered was useful for us (P21).

The finding proven that students take part in online learning and value the learning as a beneficial thing for them to deeper understanding on the lesson carried out.

#### 4.2. Emotional engagement

On the category of emotional engagement, majority of EFL students from each group chose 'Always' and 'Usually' toward given statement. The respond on 'Seldom and Never' gained a small number of percentages.

**Table 4**  
Descriptive data for students' emotional engagement.

No	Category	Items	Engaged			Disengaged		
			A	U	%	S	N	%
1		Finding ways to make the course material relevant to my life	61	61	63.87	35	34	36
2	Emotional Engagement	Finding ways to make the course interesting for me	88	63	79.06	26	14	21
3		Thinking about the course between class meetings	82	83	86.39	19	7	14
4		Really desiring to learn the material	122	40	84.84	17	12	15

It can be seen in table 4 that 61 EFL students stated, "always finding ways to make material relevant to their life", and "61 EFL students stated usually finding ways to make the course relevant to their life". Meanwhile there were only 35 students stated seldom and 34 EFL students stated never finding ways relevant to their life. Achieving high percentage in engaged 63.87% indicate that the EFL students emotionally engaged in emergency remote teaching.

It was surprising on the criteria of desiring to learn the material, there were 122 EFL students stated always and 40 EFL students stated usually really desiring to learn the material. It means that 84.84% of EFL students stated that really desiring to learn



material in online learning during emergency remote teaching. The EFL students' desiring to learn the material in online learning can be traced from EFL students' statement in the interview. "I am more curious towards online learning. I find myself accessing online learning and materials improve" (P 12).

I made an effort to attend every session, and I liked the instructors' methods of instruction. Thus, at least for me, the learning of new concepts was made easier, and the lecturer allowed every one of us to express our thoughts and views (P 84).

### 4.3. Cognitive engagement

The data for students' cognitive engagement which deal with students' feeling towards emergency remote teaching can be seen in table 5. Participant had both positive and negative feeling towards emergency remote teaching. from the data it showed that 39.27% of students provide "somewhat satisfied" response in emergency remote teaching and 75 respondent or (28.80%) of respondent gave a positive response that they put their satisfied towards emergency remote teaching during covid-19. It is only 31.94% respondent stated "not satisfied" with emergency remote teaching during covid-19.

**Table 5**  
Descriptive data for students' cognitive engagement.

No	Category	variables	Category	N	%
1	Cognitive Engagement	Feeling about attending English classes virtually	Satisfied	61	31.94
			Somewhat satisfied	75	39.27
			Not satisfied	55	28.80

EFL students had both satisfied and not satisfied feelings about online learning during emergency remote teaching. In other studies, negative feelings affect performance and health (Bolton & Houlihan, 2009). For those who had negative feeling all participating students reported that the students felt stressed out, frustrated, overwhelmed, bored, and pressured. It was to be expected that such negative feelings should increase in an emergency remote teaching situation considering the uncertainties in education and life at large brought about by the pandemic (Hodges, 2020). They attributed those feelings to the number of assignments, the lack of computer and/or Internet access, boring classes, and lack of understanding and learning. The problem occurred during online felt by the participant stated in interview: "We are facing the difficulties during online learning, they were not only related to the uncertain time, but

it is also difficult to understand the explanations about material presented due to shortage of facilities and connection” (P 98).

The results of this study contradict those of a previous study on emergency remote teaching, in which students claimed that problems with course scheduling, dropping out of the class, network instability, unilateral interactions, and reduced concentration were among the reasons for their complaints (Shim & Lee, 2020; Sintema, 2020). It has been stated that instructors do not use technology to promote student learning since it takes time to explore, assess, and utilize technology's tools and resources (Francom, 2020).

The finding of current study demonstrated that students showed positive response of having a feeling satisfied to integration of technology onto education during emergency remote teaching. Students' satisfaction during emergency remote teaching can also be traced in the interview.

Meaningful learning experiences and interesting discussions are very influential for us. We are using online learning applications and having discussions with colleagues which make us familiar with the applications. Interactions and communications are also important. I always communicate with my colleagues immediately to ask about something which I do not understand. My colleagues also contact me to ask something which they do not know. So, we communicate and share knowledge with each other (P 37).

A high degree of online learning engagement is associated with positive responses and feelings of satisfaction with online activities, tasks, and conversations, as well as a heightened ability to participate, perform or express emotions online. As stated by Baloran, Hernan, and Taoy (2021) that student satisfaction in online courses is a crucial element in student engagement in online learning, meaningful development of technology-based knowledge is critical for all learners in order to optimize their learning potential (Ahmadi, 2018).

The rapid change of teaching system onto online learning can be potential to stimulate students and teacher development particularly in technology. Nonetheless, technological competence and effective technology integration in education takes times and do not happen in one day and one night. They come with barriers, such as time, training and technical support, access, teacher belief/motivation, and other factors (Francom, 2020).

Students' engagement in online learning through technology integration requires teachers to always improve their competence both in the form of joint and personal training. However, this must also be supported by adequate facilities and infrastructure.

## 5. Conclusion

As integration of technology increase in education, new conditions for engagement emerge. Thus, we identified that the EFL students in four universities in Aceh, Indonesia was relatively engaged in all the criteria of engagement (*behaviour*,

*emotional, and cognitive engagement*) in online learning during emergency remote teaching. It indicates that they face no difficulties of technology integration into education. EFL competence and abilities are adequate and sufficient for online learning during emergency remote teaching. Event, the EFL students showed their satisfaction when it comes to integrating technology to the course.

This latest research had limitation with relation to several aspects. The small numbers of participants may increase the limited information. Therefore, the greater scale of participants needs to take place to look at a wider view, particularly concerning to the integration of technology into education, and EFL engagement in online learning and its effects. Multiple instruments were highly recommended to obtain the deeper understanding on the issue, such as interview and observation when teachers and students are on the sessions.

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