Available online at: https://journal.stp-bandung.ac.id/index.php/jk
Jurnal Kepariwisataan: Destinasi, Hospitalitas dan Perjalanan
Volume 7 Nomor 1, 2023:10-22
DOI: 10.34013/jk.v7i1.657

The Tourism School Students' Learning Engagement during COVID-19 Pandemic

Sutanto Leo*[1]
Poltekpar NHI Bandung[1]
Email: sutanto.leo26@gmail.com

Abstract

This study aims to investigate students' learning engagement during the pandemic. A mixed method design was used by combining a questionnaire and in-depth interviews. The quantitative data analysis used descriptive statistics and the Likert scale. The qualitative data analysis used thematic analysis technique. The findings indicate that most aspects of learning engagement are reasonably feasible, but there is a need to reduce the learning workload. The in-depth interviews of the online technology utility are effective to some degree. Internet network should be improved, the workload and the duration on the phone screens should be reduced to make students less exhausted.

Keywords: Learning engagement; COVID-19 pandemic; Online technology; Utility of information technology; Tourism students.

A. INTRODUCTION

Since March 2020, education all over the world has changed its system due to the spread of COVID-19. This sudden change to a different educational paradigm can leave some students at institution disoriented and afloat. This disorder has many negative effects on students, such as impaired learning, resulting in a lack of growth and development opportunities for students and young people (UNESCO, 2020). There is a possibility that some will move away and will not return (Latino, 2020).

The presence of this coronavirus hinders a direct meeting between teachers and students. Teaching and learning tasks are carried out remotely through the use of information technology. Internet learning is now a matter of urgency to enable the information technologies available to meet the needs of learning activities. Online learning systems can tackle this issue of COVID 19 with quick access to these systems and convenient internet connections.

The most immediate impact for students was of course, that the temporary cessation of face-to-face teaching at higher education institutions left them, especially undergraduates and those who are about to finish high school and want to enter higher education (IESALC, 2019). This occurs in a radically new situation, without a clear understanding of how long it will last, with immediate impacts on daily life, costs and financial pressures.

According to UNESCO (2020), the closing of universities and schools during this pandemic has demonstrated that information technology plays a crucial role. Online learning tools can assist learning providers in organizing, planning, implementing and monitoring the learning and instruction process. They can help teachers, colleges, and universities promote student learning during offline meetings are prohibited. However, the students' learning engagement using virtual meeting becomes the main challenge for teachers during COVID-19 pandemic.

The online learning system is an important source of information due to its availability anywhere and at any time, low cost, ease of use and interactive character. Online learning has a range of benefits, such as

* Sutanto Leo
Received: March 11, 2022; Revised: October 12, 2022; Accepted: October 24, 2022

enhancing the efficiency and effectiveness of learning facilities by improving teacher accessibility and improving access to learning materials (Huang, 2010; Idris and Osman, 2015; Almaiah et al., 2020). The effectiveness of the e-learning system relies on the ability and approval of learners and teachers to use this system (IESALC, 2019; Haghshenas, 2019; UNESCO, 2020) and lack of use of the online learning method hampers the realization of benefits (Almaiah & Almulhem, 2018; Almaiah et al. 2020).

There have been a number of online learning research studies in line with e-learning where student participation is not the main concern of the report. Liguori & Winkler (2020) researched online learning: obstacles and opportunities for entrepreneurship education after the COVID-19 pandemic. Almaiah et al. (2020) examined the crucial problems and factors impacting the use of the e-learning system during the COVID-19 pandemic. Martin (2020) looked at how to optimize online learning in the age of coronavirus (COVID-19). Haghshenas (2019) examined a model for utilizing social Softwares in learning management system of e-learning. Salloum et al. (2019) investigated factors affecting the e-learning acceptance: a case study from UAE, and Al-Araibi et al. (2019) investigated technological aspect factors of e-learning readiness in higher education institutions.

This research is to investigate the students' learning engagement during COVID-19 in respect of the following two research questions: a) How is the students' learning engagement using online system provided by the institutions? b) How is the utilisation of information technology for learning provided by the institutions? The rest of the paper is presented as follows: the first section addresses related research on online learning engagement and the use of information technology. The next section is to discuss research methodology, data collection techniques and data analysis method, findings and analysis and finally conclusion

B. LITERATURE REVIEW

Learning Engagement

Learning is a mutual cooperation that involves students, teachers, learning materials, environment and media they use. Learning engagement follows scientific, effective and humanity principles (Di, 2005; Huang, 2010; Leo, 2013; Latino, 2020). Scientific principles include the analysis of applying multiple teaching techniques, maximizing the purpose of study and improving the value of teaching, not only in order to educate students about the content of literary works. Effective principle is the utility of many kinds of media to transmit teaching information and to participate in learning. Humanity principle is to create a calm, productive study environment for students, enabling them to concentrate on learning.

Learning engagement involves active cognitive processes and students that are inherently inspired to learn because of the substantive value of the learning environment and activities suggest learning participation (Shneiderman, 1998; Kearsley & Shneiderman, 1999; Cocea, 2014). Engagement is also about learning tasks and the manner in which they are carried out. Motivation would be a result from the point of view of this theory, the emphasis being on the design of activities in order to improve motivation.

Interaction of students with their classmates, teachers, course contents and environment virtually is different form face to face interaction. In online classes, those who excel in a physical classroom, surrounded by other students, can become disinterested. The online learning program has been stated by students to be much more stressful than traditional classrooms. Some of the common problems for online learning: "Normal classes may have been difficult, but having friends makes it so much more manageable and less stressful" (Angdhiri, 2020) and students may be feeling deeply isolated during this time (Latino 2020).

Further problems were found that course content has less quality in terms of interactivity (Almaiah & Almulhem, 2018; Almaiah & Alyoussef, 2019; Almaiah et al., 2020). There was lack of adaptability of course content according to students requirements (Voogt et al., 2013; Mtebe & Raisamo, 2014; Ozudogru & Hismanoglu, 2016; Almaiah & Almulhem, 2018; & Almaiah & Alyoussef , 2019). There was also lack of relevance, mistake freedom of course content and mismatch of course content with the need for learners are present (Mtebe & Raisamo, 2014; Ozudogru & Hismanoglu, 2016; Almaiah & Almulhem, 2018, & Almaiah & Alyoussef, 2019). In addition Adelayanti (2020) mentioned some issues of motivation, time management, lacking technical skills, confidence, loneliness in online learning and many students participating in the online learning programs say that the workload of online classes is larger than that of regular classes (Angdhiri, 2020).

The problems of learning online become more complexed. For this reason, lecturers, students and the institutions should be aware of this condition during COVID 19. Lecturers should be able to apply multiple teaching techniques, maximizing the objectives of study and improving the value of teaching, motivating and educating students about the course content (Di, 2005; Leo, 2008; Huang, 2010; Leo 2013; Adelayanti, 2020; Latino, 2020). On the other hand, students should have adequate devices for virtual learning and motivation to learn using online system. The institutions consequently should utilise sufficient information technology to ensure that the learning process runs well.

Utility of Information Technology

Other information technology concerns include the location of students living with problems with electricity and internet connectivity, the shortage of well-funded equipment such as computers, cell phones, internet subscription and quota limits. Some students can be disoriented and unmodernized from the institution by the abrupt change from physical contact to online learning and others may lose sight of what, in the first place, they did (Latino, 2020). In order to obtain resources and advantages to socialize with peers, online classes prevent students from being trapped alone for conversation and assignments.

Other information technology concerns include the location of students living with problems with electricity and internet connectivity, the shortage of well-funded equipment such as computers, cell phones, internet subscription and quota limits. The other problems include: students faced technological difficulty in using online learning system (Mtebe & Raisamo, 2014; Al-Araibi et al. 2019; Almaiah et al, 2020), students have lack support of facilities to perform various activities and slow speed of internet and high internet traffic during online learning experience (Esterhuyse & Scholtz, 2015; Eltahir, 2019; Almaiah et al, 2020), students have lack awareness of internet skills and reluctance of students in taking responsibility for their own e-learning (Kisanga & Ireson, 2015, Ali Al-Araibi et al, 2019; Almaiah et al, 2020) and students have also problems of technological infrastructure such as the hardware, software, facilities, and network capabilities within the university (Almaiah et al, 2020; Almaiah & Alyoussef, 2019); Almaiah & Almulhem; 2018; Mtebe & Raisamo, 2014). Similarly, Bodla (2020) mentioned problems related to electricity, connectivity, availability of resources such as handphone, laptop, or computer.

To keep student's level of engagement and acting accordingly is one of teacher's tasks. In online learning systems, the engagement problem is handled in a different way through engagement theory. In context of online learning, the term engagement is associated with the theory of engagement that focuses on how to create activities in order to engage learners. Huang (2010) suggests to apply "many teaching tactics, optimizing the goal of study and improving teaching benefit, not only in order to tell students the content of the literary works". Fung et al. (2020) suggest to maintain engaging online learning amid the COVID-19 pandemic is by strengthening student-teacher interaction, planning regular checkpoints with live student responses, and utilising student interaction.

C. RESEARCH METHOD

The study was conducted in six tourism schools of higher education, i.e.: in Bandung, Medan, Palembang, Bali, Lombok and Makassar. Indonesia during COVID 19 pandemic. A mixed method design was used, combining a questionnaire involving 638 respondents and in-depth interviews with 18 participants of semester 1 until semester 8 students staying away from their campuses. The questionnaire and interview guidelines focussed on two main variables: students' learning engagement and the utility of information technology.

Data collection

The quantitative data were collected through online questionnaire. The link of the questionnaire was sent to the Student Affair Sections of the six institutions, then they distributed to the questionnaire to the whole semester students of their institutions within three to four days of each institution. The online questionnaire was closed after the submissions of 100 respondents from each institution but altogether they reached until 638 respondents. The quantitative data was to explore the respondents' opinions, attitudes and behaviours, as it regards facts as objective, and as an objective reality related to differences in each respondent (Creswell, 2014).

The qualitative data were gathered by in-depth interviews to 18 students, three students from each institution. The sample size of qualitative research is in a range of 1 to 20 participants selected based on appropriateness of participants and adequacy of data collected (Gay et al, 2009). These participants were able to give and adequate and rich description of the phenomenon. The interview with 18 participants in this study, therefore, can be said that the sample size is adequate to satisfy the suggested requirements (Quick & Hall, 2015). The interview was audio recorded using a recorder application on Mi Xiaomi 4a by the permission from the participants and their institutions. After completing the interviews, debriefing through zoom meetings was performed in order to give opportunity to the interviewees to ask questions, make comments or add any information that was not discussed during the interview session.

Data analysis

The analysis of the quantitative data used descriptive statistics to describe the basic features of the data in this study that provide simple summaries about the sample and the measures. The next analysis used a Likert scale which assumes that the strength/intensity of an attitude is linear on a continuum from very good/very satisfying to very bad/very unsatisfying, and makes the assumption that attitudes can be measured. The range of score is as follows:

Very Good/Very Satisfying : 85% - 100%;
Good/Satisfying : 69% - 84%;
Fair/average : 53% - 68%;
Bad/Unsatisfying : 37% - 52%; and
Very Bad/Very unsatisfying : 20% - 36%.

The qualitative data of the interviews was analysed using the thematic analysis technique. The five steps were defined for conducting the thematic analysis process for this research, namely: familiarizing with data, creating initial codes, looking for themes, defining and naming themes, and producing the final report (Braun & Clarke, 2006). The data collected from the interviewees was grouped into two elements in the thematic analysis process: student learning participation, and the usefulness of information technology. The descriptive codes used words, phrases, and sentences from the data transcript labelled using specific words related to student learning engagement and information technology utility (Watts, 2008).

D. RESULTS AND DISCUSSIONS

Findings and discussions are described in the order of study questions: a) How do students participate in learning using the online system? b) How is the use of information technology provided by the institutions for learning? The results are shown separately from the discussions, and the discussions take place immediately after the presentation of the data.

Students' Learning Engagement

Findings of the respondents' basic features

The number of respondents from the six institutions was 638 students: Institution 1: 103 students, Institution 2: 107 students, Institution 3: 106 students, Institution 4: 109 students, Institution 5: 107 students, Institution 6: 106 students. The gender consisted of 50,9% female students, 48.6% male students, and 0.5%. transgender students. Their age groups showed that 33.4% students were <18 years, 58.9% students were 19 to 21 years, 6,4 students were 22 to 24 years, and 1,3% students were students >25 years of age. The respondents were 52.8% of semesters 1 and 2 students, 12.5% of semesters 3 and 4 students, 31.8%, of semesters 5 and 6 students, and 2,8% of semesters 7 and 8 students. The devices used were 82,45% handphones, 13,17% laptops, 0,03% personal computers, and 0,01% tablets.

Discussions of the respondents' basic features

The number of 638 respondents is sufficient to represent the population from the six institutions. The comparison between female and male respondents is almost balanced, female 50,9% and male 48.6% and representative, It was surprising that 0,5% respondents were transgenders and transgender is debatable in Indonesia. The age groups between 18 to 25 years indicated that they were mature enough to study in tertiary education and to give objective information. Their semesters might indicate that new students of semesters 1 and 2 were more enthusiastic and faster in responding the questionnaire. The devices used were 82,45% handphones, 13,17% laptops, and the rest used personal computers, and tablets. Handphones become the most common devices for the students. This basic features of the respondents are relevant to the kind of students mentioned by IESALC (2020) and UNESCO (2020) are considered to be important for this study, and the devices they used are in line with Almaiah et al (2020) and Almaiah and Alyoussef (2019).

Findings of students' responses on the questionnaire

Table 1 shows the responses of respondents on the online learning engagement from 638 respondents. Their responses were indicated by five potions: very bad or very unsatisfying, bad or unsatisfying, fair or average, good or satisfying, and very good or very satisfying. There are eight aspects or indicators to be assessed by the respondents. The eight aspects include: content of lesson quality, learning process quality, interaction between students to the learning materials, interaction between lecturers and students, interaction between students and students, learning workload, loneliness, and learning motivation.

Discussions of students' responses on the questionnaire

In general, the respondents' comments on learning engagement are satisfying with the mean of 69,29% according to Likert Scale. The degree of satisfaction, however is in the position at the lowest satisfaction or slightly above the level of average or fair. This condition can be seen from the whole aspects of learning engagement which are more or less between 68 % to 72 %. This condition

is in line with the statements of Huang (2010), Cocea (2014), and Latino (2020) that learning engagement is influenced by the teaching techniques, cognitive processes, value of learning environment, utility of many kinds of media to transmit teaching information and to participate in learning.

Table 1
The Responses of Respondents on the Online Learning Engagement
n = 638 respondents

No	Aspects of learning engagement	Very bad	Bad	Fair	Good	Very good	Mean
1	Content of lesson quality	23	59	229	229	98	70,03%
2	Learning process quality	20	83	239	213	83	68,03%
3	Interaction between students to the learning materials	25	77	228	222	86	68,37%
4	Interaction between lecturers and students	21	75	218	238	86	69,18%
5	Interaction between students and students	18	79	183	216	142	72,07%
6.	Learning workload	39	78	246	210	65	65,77%
7	Loneliness	29	73	214	220	102	69,18%
8	Learning motivation	27	67	183	229	132	71,66%
	Average						69,29%

Source: author elaboration

The content quality of the lesson in the online learning engagement is satisfying at the bottom of satisfaction level, 70.03%. This means that the whole content of the lesson presented during COVID 18 is not able to satisfy the expectation of students. It happens because there was lack of adaptability of course content according to students' requirements and also lack of relevance, mistake freedom of course content and mismatch of course content with the need for learners according to Voogt et al. (2013), Ozudogru and Hismanoglu (2016), Mtebe and Raisamo (2014), and Almaiah and Alyoussef (2019). This problem can be minimized when the lecturers are creative and adaptable with the teaching techniques during online learning.

The learning process quality during COVID-19 is just average, 68,03%. This condition is supported by Adelayanti (2020), Huang (2010), Di (2005), Latino (2020) and Leo, (2013), that the lecturers should be able to apply multiple teaching techniques, maximizing the objectives of study and improving the value of teaching. It can be understood as online learning process is quite different from offline learning.

Interactions between students to the learning materials, lecturers and students, and students and students are in the level of 68,37%, 69,18%, and 72,07%. The interaction between students to the learning materials is juts fair, while the interactions between lecturers and students, and students and students are at the bottom level of satisfying. In line with the ideas from Di (2005), Leo, (2008 & 2013), Almaiah et al (2020) andLatino (2020) that interactions are influenced by less quality of course content, creativity and teaching techniques.

Learning workload of the students during COVID-19 belongs to the worse level satisfaction that reaches to 65,77%. Loneliness and learning motivation are in the level of 69,18% and 71,66% that belong to lowest satisfaction. Learning workload, loneliness and motivation in the online learning may happen due to the number of assignments, under pressure condition, facing handphone or laptop screens all the time, etc. Adelayanti (2020) and Angdhiri (2020) suggest some

issues of motivation, lacking technical skills, confidence, loneliness in online learning and the workload of online classes that is larger than that of regular classes.

In summary, the online learning engagement during COVID-19 pandemic is not maximum. The level of satisfaction of students does not reach their expectation. The learning workload is felt to be the most significant problem. This problem is closely related to the other online learning engagement aspects. The degree of students' satisfaction depends on how learning engagement principles are applied. The engagement principles include scientific, effective and humanity principles (Di, 2005; Huang, 2010; Leo, 2013; Latino, 2020). These principles very important to be considered and applied by the lecturers in order to improve the satisfaction of students' online learning engagement.

Findings of in-depth interviews on learning engagement

First is the content of the lesson, very few participants found that the content was very good and well conveyed. More than half of participants stated that the content was good enough in line with the semester lesson plan. A few others said that some lecturers could not explain clearly. Secons, the process of learning, some participants stated that the process was going well but sometimes the connectivity was down, the lesson was not well conveyed. Some other participants stated that the process was not quite effective, more exhausting, confusing, nauseous because of bad connections. Third is interactions, some participants stated that the interactions between students and lecturers and students and students were effective, but some interactions were very limited, screen-to-screen only, and boring, because of the bad connectivity.

Fourth is creativity, some students informed that some lessons were well prepared but some others were unready, the lecturers were not creative and not able to deliver the lessons effectively and made the lessons tiring and boring. Few students stated that it was awesome when the lecturers did not allow students to turn off their camera. It made our devices overheated. They added that lecturers should be more creative and use other tools to make learning more interesting. Learning motivation, some students stated that that their motivation is not bad but sometimes their motivation got worse when the connectivity was bad. Very few students said that the lessons were monotonous and boring and they had no learning motivation. Learning workload, some participants stated that the workload was quite heavy, stressful and massive and quite a burden for us without sufficient break. A few students said that the lecturers thought that they just stayed at home doing nothing and gave more assignments. They seemed that they did not care with the workload of assignment from the other lecturers. We really felt exhausted, stressful and fatigued.

Discussions of in-depth interviews on learning engagement

The response of students on the content of the lesson is that more than half of participants stated that the content was good enough in line with the semester lesson plan. This finding is against the ideas of Ozudogru and Hismanoglu (2016), Almaiah and Almulhem (2018), and Almaiah and Alyoussef (2019) that there was lack of adaptability of course content, lack of relevance, mistake freedom of course content and mismatch of course content with the need for learners are present. However, a few students said that some lecturers could not explain clearly so that the contents could not be understood fully.

In terms of learning process, some participants stated that the process was going well but sometimes the connectivity was down, the lesson was not well conveyed. Some other participants stated that the process was not quite effective because of bad connections. This condition is also less relevant with the statement form Huang (2010), Leo, (2013), Adelayanti (2020), and Latino

(2020) that the lecturers lack of technical skills or teaching techniques to maximize the objectives of study. Nevertheless, some other participants stated that the process was not quite effective, because of bad connections. This important for the lecturers to improve their technical teaching skills.

In line with interactions and creativity, some participants stated that the interactions were effective, but some were not effective. They said the interactions were very limited and boring because of the bad connectivity. Some lecturers were not creative and not able to deliver the lessons effectively and made the lessons tiring and boring. This condition partly is supported partly because of lack technical skills and creativity of the lectures in the process of learning and lack support of technology facilities including students' devices according to Adelayanti (2020) and Eltahir (2019). Improving interactions are mainly the jobs of lecturers that need creativity, skills, adequate facilities both from the institutions and students to motivate students.

The last aspect in learning engagement is learning workload. The workload was quite heavy, stressful and massive and quite a burden for us without sufficient break according to some students. The workload was influenced by other aspects such as the number of assignments, the learning process, creativity, facilities and staying too long in front of screens. This condition is true to some degree mentioned by Adelayanti (2020) and Angdhiri (2020) in line with some issues of motivation, time management, lacking technical skills, confidence, loneliness and the workload is heavier. This is the duty of lecturers to reconsider the workload of students.

In summary, the online learning engagement based on questionnaire and in-depth interviews to some degree runs well and is effective. However, most of the learning engagement aspects such as the process, creativity, interaction, and student's motivation need improvement and students' learning workload need reduction.

Utility of Online System Technology

The findings and analysis of online system technology utility are presented based on the questionnaire and in-depth interviews.

Findings of online system technology questionnaire

Table 2 shows the responses of respondents on the online system technology from 638 respondents. Their responses were indicated by 5 potions: very bad or very unsatisfying, bad or unsatisfying, fair or average, good or satisfying, and very good or very satisfying. There are 9 aspects or indicators to be assessed by the respondents. The 9 aspects include: online system provided by the institution, device used (handphone, tablet, or laptop), internet accessibility, internet connection, internet speed, quality of the video, quality of the audio, availability of quota, and familiarity with technology.

Discussions of students' responses on the questionnaire

In general, the responses of respondents on the online system technology goes to 67,11%. This score indicates that the level of students' satisfaction is just average. This condition is in line with the ideas of Mtebe and Raisamo (2014), Almaiah and Almulhem (2018), Almaiah and Alyoussef (2019), and Almaiah et al (2020) that students have problems of technological infrastructure such as the hardware, software, facilities, and network capabilities within the university. Technological infrastructure plays the most crucial roles in the online learning system. For this reason, it is important that the institutions need to anticipate this problem by checking regularly and giving actions adequately to ensure that technological infrastructure is adequate to facilitate the learning process.

Table 2
The responses of respondents on the utility of online system technology
n = 638 respondents

No	Aspects of online system technology	Very bad	Bad	Fair	Good	Very good	Mean
1	Online system provided by the institution	25	61	214	254	84	69,75%
2	Device (handphone/laptop)	27	70	217	219	105	69,56%
3	Internet accessibility	24	94	227	205	88	67,49%
4	Internet connection	31	119	237	183	68	64,33%
5	Internet speed	65	140	211	148	74	60,82%
6.	Quality of the video	18	70	272	210	68	67,52%
7	Quality of the audio	21	57	236	240	84	69,69%
8	Availability of quota	79	136	202	145	76	60,09%
9	Familiarity with technology	19	28	197	253	141	74,70%
	Average						67,11%

Source: author elaboration

The devices that students used were handphones, laptops, personal computers, and tablets. Their devices they used comes to 69,56% or average level of satisfaction. This problem may happen because of the condition of their devices such as slow response, bad battery life, overheating, full storage space, application crashes / freezes, applications not downloading, etc. Bodla (2020) mentioned that there are problems related to the availability of resources such as handphone, laptop, or computer. This may become common problems of students or their parents who are not able to provide better devices for learning.

Internet accessibility, internet connection, and internet speed show 67,49%, 64,33%, and 60,82% average of satisfaction, internet speed is the lowest. These three aspects of online technology are interrelated and students have lack support of facilities to perform various activities and slow speed of internet and high internet traffic during online learning experience (Eltahir, 2019; & Almaiah et al., 2020). To improve these aspects, students need extra money to subscribe better internet network provider services.

In line with the quality of the video and audio, the scores reach up to 67,52% and 69,69% of satisfaction level. They are just fair enough according to Likert scale, meaning that the video and audio quality is not as good as their expectation. This technological problems happens as students have lack support of facilities to perform various activities according to Esterhuyse & Scholtz (2015), Eltahir (2019), and Almaiah et al (2020). Video and audio quality depend on the devices used, the better devices produce better video and audio quality.

The availability of quota gains 60,09%, the lowest score of average satisfaction. This quota limitation happens especially for the students who are not well-funded for subscribing internet. It belongs to one of technological difficulties in using online learning system according to Al-Araibi et al (2019) and Almaiah et al (2020) It should become the attention of the institutions or government to subsidise internet quota for students.

The last aspect in the online technology is the familiarity of students with the technology. This aspect goes up to 74,70%, the highest score in the variable of online system technology. It means that students are familiar and have no problem in using technology. This condition is against the

statement that students have lack awareness of internet skills as mention by Al-Araibi et al (2019) and Almaiah et al (2020). This happens because students are used to operating gadgets.

Briefly in terms of the online system technology, students' level of satisfaction is just average. It is indicated by almost all aspects of online system technology that include the system provided by the institution, students' devices, internet accessibility, internet connection. internet speed, quality of the video, quality of the audio, and availability of quota. However, the aspect of familiarity with the technology is satisfying.

Findings of in-depth interviews on utility of online technology

The findings of interviews consist of five dimensions: electronic device, internet connectivity, the online system, quality of audio and video, and internet familiarity. First is electronic device, most participants stated that they used their handphones because they did not have laptops. They were really inconvenient because they could not stay on camera continuously as they had to check some documents and materials sent by the lecturers. A few students used laptops, PCs and tablets and said they could not handle multitasking applications. Second is internet connectivity, few students stated that the internet connection and accessibility in their areas were quiet well, but sometimes they got the bad signal. Few others said that the internet connection was both awful, on and off and it took time for us to re-join the meeting. Third is online system, more than half of students said that the zoom for conferences were working well. Learning materials and assignments were able to be submitted. A few stated that the online system was not working well, it was too slow and heavy on our devices and sometimes made the class delayed. Fourth is quality of audio & video, a few students stated that sometimes the quality of audio and video was good and sometimes we had problems with the microphones and cameras. A few other students said sometimes the quality of video and audio was down and we didn't even hear or see anything on the zoom. Fifth is internet familiarity, almost all students stated that for they are familiar with the online technology. They are used to operating their gadgets. Very few said that there was problem with the handphones that are not able to perform sufficiently.

Discussions of in-depth interviews on utility of online technology

Based on the in-depth interviews on utility of online technology. most participants stated that they used their handphones and were really inconvenient to stay on camera continuously and to check some documents and materials sent by the lecturers. The availability of devices such as handphones, laptops, or PCs become a problem according to Almaiah and Alyoussef (2019) and Bodla (2020), this is important for the management and lecturers to consider the length of online meeting time.

In connection with internet connectivity, few students stated that the internet connection and accessibility in their areas were quiet well, but sometimes the internet connection was both awful, on and off and it took time for them to re-join the meeting. The problem about connectivity has been mentioned by Al-Araibi et al (2019) and Bodla (2020), this condition happens due to the less quality of internet network services and the devices used. In line with the online system provided by the institutions, more than half of students said that the zoom for conferences were working well. Learning materials and assignments were able to be submitted. A few stated that the online system was not working well, it was too slow and sometimes made the class delayed. This information indicates that there is no serious problem with the online learning system but a little problem according to Al-Araibi et al (2019) and Almaiah et al (2020). However, the institutions need to ensure that there is problem at all with the online system.

Regarding the quality of audio & video, a few students stated that sometimes the quality of audio and video was good and sometimes the quality was down and we didn't even hear or see anything on the zoom. This condition happens due to the lack support of facilities or technological infrastructure such as the devices, and network capabilities within the university in line with the ideas of Almaiah and Alyoussef (2019), Eltahir (2019) and Almaiah et al (2020), improvement of audio & video quality is needed to be considered by the institutions.

Concerning the internet familiarity, almost all students stated that for they are familiar with the online technology as they are used to operating their gadgets. Although Mtebe and Raisamo (2014), Al-Araibi et al (2019) and Almaiah et al (2020) mentioned technological difficulty in using online learning system this difficulty, this information shows that students have no problem.

In summary, the electronic devices, online system, quality of audio and video, and internet familiarity of online system technology are manageable. This is supported by the finding and analysis of the questionnaire that the online technology reveals average satisfaction. However, internet connectivity including internet speed needs to be improved and the length of staying on the handphone screens need more serious attention to make the students convenient.

E. CONCLUSION

Based on the findings and analysis of the students' learning engagement and the utility of online technology, it can be concluded that students have average satisfaction to some degree based on their questionnaire responses. It is supported by their responses from the in-depth interviews that students' learning engagement and online system technologies are acceptable.

Most of the learning engagement aspects such as the learning process, creativity, interaction is relatively feasible, but the motivation of students needs to be strengthened and the workload of learning needs to be reduced. The utility of online system technology is simply adequate. The findings and analysis of the questionnaire reveals that students have average satisfaction on the electronic devices, online system, quality of audio and video, and internet familiarity. The in-depth interviews suggest that the aspects of online system technology to some extent effective. However, internet connectivity, including internet speed, needs to be increased, the workload and the length of staying on the phone screens need to be reduced to allow students enjoy learning.

F. LIMITATION AND FURTHER STUDY

Students' learning motivation decreased during COVID 19 pandemic. Therefore, it is recommended to conduct further investigation on students' learning motivation during COVID 19 pandemic.

REFERENCES

Adelayanti, Natasa (2020) Revealing the Challenges of Online Learning During Covid-19 Pandemic, Universitas Gajah Mada, retrieved from: https://www.ugm.ac.id/en/news/19554-revealing-the-challenges-of-online-learning-during-covid-19-pandemic

Al-Araibi, A.A.M., Naz'ri Bin Mahrin, M., Yusoff, R.C.M. (2019) Technological aspect factors of E-learning readiness in higher education institutions: Delphi technique. *Education and Information Technologies, 24*(1), 567–590.

Almaiah, M. A., & Almulhem, A. (2018). A conceptual framework for determining the success factors of e-learning system implementation using Delphi technique. Journal of Theoretical and Applied Information Technology, 96(17), 5962-5976.

Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and information technologies, 25,* 5261-5280.

Almaiah, M. A., & Alyoussef, I. Y. (2019). Analysis of the effect of course design, course content support, course assessment and instructor characteristics on the actual use of E-learning system. *IEEE Access, 7*, 171907-171922.

Angdhiri, Rarkryan P. (2020) Challenges of home learning during a pandemic through the eyes of a student from. *The Jakarta Post*, July 21, 2020. Retrieved from: https://www.thejakartapost.com/life/2020/04/11/challenges-of-home-learning- during-a-pandemic-through-the-eyes-of-a-student.html

Bodla, Amita (2020) E-Learning Experience of Students in Higher Education Institutions During the Covid 19 Pandemic: A Primary Survey, in *Covid-19 Pandemic: A Global Challenge* (Pp.115-131). New Delhi: Aryan Publication.

Braun, V. & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Cocea, Mihaela (2014) Learning Engagement: What Actions of Learners Could Best Predict It? National College of Ireland, School of Informatics, Dublin, Ireland.

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE Publications.

Di, Sun (2005). On the enlightenment of engaged learning theory to construct virtual learning community, *Distance Education Journal 6*, 21-25.

Eltahir, M.E. (2019) E-learning in developing countries: Is it a panacea? A case study of Sudan. *IEEE Access. 7,* 97784–97792.

Esterhuyse, M. and Scholtz, B. (2015). Barriers to e-learning in a developing country: An explorative study. In *Proceedings of the 9th IDIA conference*.

Fung, F. M., Magdeline, N. T. T., Kamei, R. K. (2020) How to create engaging online learning amid COVID-19 pandemic: lessons from Singapore, from National University of Singapore, Retrieved from: https://theconversation.com/how-to-create-engaging-online-learning-amid-covid-19-pandemic-lessons-from-singapore-138979

Gay. L.R., Mills, G.E., & Airasian, P. (2009). *Educational Research: Competencies for analysis and applications.* Pearson Education. Upper Saddle River: NJ.

Haghshenas M. A. (2019). Model for utilizing social Softwares in learning management system of E-learning. *Quarterly Journal of Iranian Distance Education, 1*(4), 25–38.

Huang, C. (2010). Application of engagement theory in the literary education*. Journal of Language Teaching and Research, 1*(4), 460-463.

Idris, F. A. A. and Osman, Y. B. (2015, October). Challanges facing the implementation of e-learning at University of Gezira According to view of staff members. In *2015 Fifth International Conference on e-Learning (econf)* (pp. 336-348). IEEE.

IESALC and UNESCO. (2020). COVID-19 and higher education: Today and tomorrow. Impact analysis, policy responses and recommendations. UNESCO Institute for Higher Education in Latin America and the Caribbean. Retrieved from https://www. iesalc. unesco. org/en/wp-content/uploads/2020/04/COVID-19-EN-090420-2. pdf.

IESALC (2019). Mobility in higher education in Latin America and the Caribbean: challenges and opportunities of a renewed Agreement for the recognition of studies, titles and diplomas (Vol. 1). Caracas: I UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC).

Kearsley, G. & Shneiderman, B. (1999). Engagement Theory: A framework for technology-based teaching and learning. Retrieved from http://home.sprynet.com/~gkearsley/engage.html

Kisanga, D. and Ireson, G. (2015). Barriers and strategies on adoption of e-learning in Tanzanian higher learning institutions: Lessons for adopters. *International Journal of Education and Development using ICT, 11*(2), Open Campus, The University of the West Indies, West Indies. Retrieved from https://www.learntechlib.org/p/151845/.

Latino, Jennifer (2020). Student engagement: Strategies to help institutions retain students during the COVID-19 pandemic. Ellucian Company L.P. and its affiliates. Retrieved from: https://www.ellucian.com/emea-ap/insights/student-engagement-strategies-help-institutions-retain-students-during-covid-19-pandemic

Leo, S. (2008) *Kiat Sukses Mengelola dan Mengajar Sekolah Minggu,* Yogya: Andi.

Leo, S. (2013) *A Challenging Book to Practice Teaching in English*. Yogya: Andi Offset.

Liguori, E. W., Winkler, C. (2020). From offline to online: Challenges and opportunities for entrepreneurship education following the COVID-19 pandemic. *Entrepreneurship Education and Pedagogy.* https://doi.org/10.1177/2515127420916738

Martin, A. (2020). How to optimize online learning in the age of coronavirus (COVID-19): A 5-point guide for educators. UNSW Newsroom. Retreved from: https://newsroom.unsw.edu.au/news/social-affairs/how-optimise-online-learning-age-coronavirus

Mtebe, J.S. & Raisamo, R. (2014) Investigating perceived barriers to the use of open educational resources in higher education in Tanzania. *The International Review of Research in Open and Distance Learning, 15*(2), 43–66.

Ozudogru, F., & Hismanoglu, M. (2016). Views of freshmen students on foreign language courses delivered via e-learning. *Turkish Online Journal of Distance Education, 17*(1), 31-47.

Quick, J. & Hall, S. (2015) Part two: Qualitative research. *Journal of Perioperative Practice, 25*(7–8), 129–133. https://doi.org/10.1177/1750458915025007-803

Salloum SA, Al-Emran M, Shaalan K, Tarhini A. Factors affecting the E-learning acceptance: A case study from UAE. *Education and Information Technologies, 24*(1), 509–530.

Shneiderman, B.: Relate-Create-Donate: A teaching/learning philosophy for the cyber-generation, *Computers & Education 31*(1), 25-39.

UNESCO (2020). Crisis-sensitive educational planning. Paris: UNESCO.

Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. *Journal of computer assisted learning, 29*(5), 403-413.

Watts, Jacqueline H. (2008). Integrity in qualitative research. In: Given, Lisa M. ed. *The Sage Encyclopedia of Qualitative Research Methods,* Volume 1. Thousand Oaks, California: Sage Publications, pp. 440–441.