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PROBLEM OF ONLINE LEARNING AMONG STUDENTS UUM: TECHNOLOGY ACCESS, ASSESSMENT, AND SELF-EFFICACY

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Abstract:

Using online learning is getting relevant in education perspective. In order embrace online learning effectiveness, university should provide proper suitable tools towards more efficient for online learning implementation. This aims for this paper is to understand students' problems during using online learning that provided by the university. The paper used a qualitative approach through unstructured interviews from the student's perspective. Ten students from different routes of inasis were interviewed. Three themes of online learning problem were selected: technology access, assessment, and self-efficacy by using thematic analysis. Based on the analysis, most of the respondents admitted they are having problem with wi-fi networks and coverage, and it makes uncomfortable to study through online. This study also highlighted, the managements should provide strategy how to minimize fraudulent issue during completing task and online examinations. An in-depth understanding from the voices of students was essential for further action and improvement in fostering the online learning effectiveness in higher educations. Thus, study is offering valuable insight for understanding the real experiences from students' perspective for online learning in higher education.

Keywords:

Online Learning, Technology Access, Assessment, Self-Efficacy

Introduction

Online learning refers to the use of internet-based technology features, which are highly dependent on the availability of information technology.

Previous studies reported, many students have a problem of the connection internet at home (Li, 2022). Students cannot accept study materials and assignments delivered by teachers

through the internet network if they experience connection problems. Arumugam (2020) highlighted that lack of internet access with sufficient bandwidth and stability could pose a problem. For some students, preparing to online learning in terms of internet access are burdening. This is especially prevalent in rural and remote areas in Sabah and Sarawak (Iskandar, Ganesan, & Maulana, 2021).

Assessments are also a very important part of online learning. There are many problems related to finding effective techniques in the online environment (Tartavulea, Albu, Albu, Dieaconescu, & Petre, 2020). Dendir, and Maxwell (2020) argued that even the measures that are used to gauge learning in online courses, such as scores on assessments with do quiz or exam, do not truly. For example, exam score distributions turn out to be comparable in an online course and its F2F counterpart, it does not mean that comparable learning takes place in the two modes simply because the online scores are likely inflated by cheating. Such arguments are predicated on the assumption that academic dishonesty is more prevalent in online courses than F2F approach.

In an online learning setting, self-efficacy students are recognized by their overall expectations and beliefs during the learning process. According to past studies, self-efficacy in online learning is not only a good predictor of student academic accomplishment, but efficient students also endure, adjust, and adapt well even when they have no priority experience (Taipjutorus, Hansen, and Brown, 2012). Low self-efficacy can be an obstacle in the teaching process (Rosidah et al., 2018; Sagala & Andriani, 2019). Unfortunately, for some student with lack of self-efficacy in an online learning environment may having difficulty for effectiveness in online learning (Du, Fan, Xu, Wang, Sun, & Liu, 2019).

As UUM also is applying online learning mainly through Webex application, thus there is need to identify the student's difficulty during using online learning in UUM. This study explored students' problems during online learning specifically at student inasis for each route: A, B, C, Maybank, and Bukit Kachi.

Literature Review

Lack of Connection
The main disadvantage of online learning is that the effectiveness of teaching delivery depends heavily on the quality of the technology access (Devarajoo, 2020). A bad connection may result in disruptions during live sessions, and this affects the quality of course delivery. The high bandwidth or strong internet connection needed by online courses are not given to many students and thus fail to catch up with their virtual classes (Saminathan, 2021). Although Malaysia was the third best across Southeast Asia in Internet penetration (Jalli, 2020). The access to the Internet in different states in Malaysia is not the same. Some remote areas do not have adequate Internet access (Ating, 2020). Even though the statistics show increased penetration every year (Jalli, 2020). The infrastructural gap such as the discrepancy of Internet speeds in different regions will affect students' access to e-learning (Jalli, 2020). This is supported by Chong (2020) stating that location and Internet budget have different coverage and speed of the internet. Some students from rural areas may not enjoy Internet access or sufficiently good Internet access compared to their peers in urban areas.

Assessment During Online Learning

Quiz, Tests and Examination

Online formative assessment usage grew dramatically during online learning, as anticipated (Tartavulea et al., 2020). Online tests and quizzes will be used to evaluate the performance of the students. However, unauthorized usage of textbooks or online resources when completing online quizzes and examinations is one opportunity for academic dishonesty (Casey, Casey, & Griffin, 2019). This problem arises from the fact that in a traditional course, students often have access to significantly fewer textbooks and internet resources during quizzes and exams. Alawamleh, Al-Twait, & Al-Saht (2020) claimed, some students make just a little effort to study and frequently cheat on tests and quizzes. Another study also found the quizzes and exam process has additionally faced the cheating menace by student during online learning (Balderas, & Caballero-Hernández, 2020). Thus, the steps used to measure learning in online courses, such as quizzes or exams may be contaminated by fraud that occurs during this assessment (Arnold, 2016).

Self-Efficiency During Online Learning

Self-efficacy refers to a person's belief that he or she can complete tasks effectively required by his or her scholastic standards (Pantu, 2021). People with high self-efficacy have higher academic achievement. Furthermore, those with high levels of self-efficacy may change lectures (Qusay, 2020). According to (Diola and Mudjiran, 2019; Mesurado, Richaud, and Mateo, 2016), students' self-efficacy is associated with academic progress. Whilts, Dayne, Harabayashi, Seli, & Reidobolt (2016) believed face-to-face learning approach is more suitable in explainiang how self-efficacy could promote academic performance. Based on the previous literatures, this study aims to explore how academic self-efficacy influences academic flow in online learning. Meanwhile, the importance of this study is that it will broaden educators 'understanding of academic streams in online learning, enabling them to select the most effective techniques for conducting online learning.

Methodology

This study used qualitative method which is an unstructured interview method to achieve the objectives of the study. Unstructured interviews are an approach to obtaining research participants' experiences, beliefs and opinions. Interviews were conducted through through Webex Meeting to make it easier to interview students for each track at the institute at UUM. Before the interview is conducted, the researcher prepared an interview protocol as a guide to facilitate the researcher and the respondent during the interview session. The selection of respondents for this study consisted of students from different Inasis routes consisting of routes A, B, C, Maybank and Bukit Kachi. The selection of students for each different routes is to identify student's experience related to the problems encountered during online learning. Each respondent was interviewed personally to avoid bias during data collection. Personal interviews offer the benefit of involving personal and direct interaction between interviewer and respondent and eliminating non-response rates. The demographic of respondents is shown as below:

Table 1: Table for Interviewees

Road Inasis At Uum	Number
A	2
B	2
C	2
Maybank	2
Bukit Kachi	2

The thematic analysis had used to analyze the data and it had been defined as a method for identifying, analyzing, and reporting themes within the qualitative data. It is a suitable method to organize the data by grouping the data based on themes. The data was categorized based on themes and supported by the evidence in the interpretations.

Finding and Discussion

Based on the interviews, there are several problems faced by students at UUM during online learning. Their problems are from the experiences they face. The main themes of the problem of online learning among students at UUM are technology access, assessment, and self-efficacy.

Technology Access

The first theme that emerged from personal interview was the knowledge of participants about online learning and the role of online learning in physical education. This theme consisted of two sub-themes: (1) lack of personal internet; and (2) lack of UUM WIFI. Table 2 shows the subthemes of technology access:

Table 2: The Subthemes of Technology Access

Sub-themes	Context	Example
	Low coverage in rural areas	*Yes, I have a problem when I want to access this online learning because I think ....the use of the internet near a place not everyone has it…………upgrading the internet is not the same. So I sat near the deepening area. The use of the internet is very limited. Sometimes it's okay, sometimes it's not okay.*
Lack of personal internet	Low personal internet	*As for me, I did not attend any of the Google Meeting discussions because my personal internet was very slow.*
	Disturbance of the internet caused by rain	*There are times when you ask questions. Internet....I couldn't get internet at that time, it was rainy season, so when it rains, the internet is very slow when I ask intermittent questions, that's what I have, I can't catch what I'm asking. That's his only problem.*

Lack of WIFI UUM	Low internet of UUM WIFI	*Yes, there is a problem. When at UUM, WIFI is really slow. We are provided WIFI when at UUM. When too many people use WIFI, the internet becomes slow and slow when you want to access it, so it's a problem for events near UUM.*
	Limited time to access	*It is also near UUM although it has WIFI but not all places can get the UUM WIFI. So, for example if we are near another place outside of the institute or outside of where we have a college....WIFI we can't access so it's like if we are near outside of the institute or college and time we have a class or presentation. So, it is quite difficult for students to access and quite difficult for me to access online learning.*
	More student access	*Like I said earlier, there are many students in UUM. All of them need a line to access this online class. Due to the internet connection at UUM, it is slow when there are many students, especially during weekends. Many students at UUM use UUM Wifi as their connection*

Lack Of Personal Internet

Most interviewees mentioned a lack of personal internet. The lack of personal internet will affect online learning. The influence of lack of internet is influenced by low coverage, low personal internet, and disturbance of the internet caused by the rain. 4 of the 10 interviewees have low coverage in rural areas. The student cannot attend online learning causes of the problems. One interviewee stated:

IV7: *Okay basically based on my experience, I started online learning during the 2nd semester and there was a problem during online learning where my friends from my house were always few so it was quite difficult to access telecom. All the telcos are not helping. Had to go out of town for online learning.*

However, 10 of 10 interviews have low personal internet. If the interviewees have problem internet mostly the interviewees cannot attend to their class. One interviewee stated:

IV5: *There's a reason I use it, I don't have WIFI at home so I'll buy internet to use my mobile phone's internet which means open a hotspot so internet usage is very limited and easy.*

Besides that, 2 of 2 interviewees have a problem during online learning such as a disturbance of the internet caused by the rain. The weather cannot be expected interviewees so is hard to students have problems with the weather.

IV10: *Based on my experience, when I study online at home it takes slow time to log in due to internet interruption. When it rains, there is internet disruption at home, I am quite disturbed. So, I find it very difficult to get into online learning classes.*

These testimonials have shown that online learning problems need more connections to recognize and respond to themes. Lack of technology, such as the internet, causes students to experience problems. Table 3 shows some statements stating that internet disruption is a problem faced by students:

Table 3: The Previous Study Lack of Connection Internet

Sources of Adapted and Modified Items	Lack of Internet Connection
(Okyere et al., 2022)	*"It's like a first class learning and although I feel for the students who cannot afford data and sometimes too the internet is not good, so it goes on and off during online classes. . . When the internet becomes slow, you cannot even download articles and books to read".*
(Curelaru et al., 2022)	*One of the most stressful experiences (…) was an exam during which I lost my internet connection and (…) it took quite a while to get back online and be able to send my exam answers. It feels that academics are not very empathetic with these kinds of situations, particularly when we can't do anything about it. (…). It seems unfair to be penalised for circumstances that do not reflect our knowledge but rather the technological equipment that we possess. At the same time, I also try to understand my professors' position who can't confirm whether we have or not the necessary equipment (…). I suppose it is difficult to manage these kinds of situations and make sure everyone is happy"*
(Devarajoo, 2020).	*"the slow internet connection"* *"Sometimes I have difficulty with my internet connection…"*

Lack of UUM WIFI

The interviewees mentioned the lack of UUM WIFI. Most of the interviewees highlighted the problem online is the low internet of UUM WIFI. 4 of 10 interviewees stated the low internet at UUM is the problem during online learning. One interviewee stated:

IV6: *When at UUM there is a little problem because sometimes this UUM WIFI is okay sometimes it is not okay. It's like at night he has a very slow line, if it's during the day or during the day, UUM WIFI is very good, can be accessed smoothly, no interruptions.*

2 of 10 interview also mention that when at UUM the WIFI UUM is very limited to access. One interview stated that:

IV2: *For me, I cannot access online learning near UUM. Because like I said the internet here is very slow and then many students use it which limits me to use the internet here.*

In addition, the problem of lack of WIFI is also due to too many students using WIFI. Several interviewees have pointed out that WIFI will be slow if there are many students using WIFI. One interview provided an example by stating:

IV3: *Like I said earlier, there are many students in UUM. All of them need a line to access this online class. Due to the internet connection at UUM, it is slow when there are many students, especially during weekends. Many students at UUM use UUM Wifi as their connection.*

This online learning problem is matched by the lack of WIFI at UUM. UUM's WIFI problem has affected students' process of online learning. Therefore, the lack of UUM WIFI points on the theme of technology access has been detected.

Self-Efficiency

The second themes section will focus on the self-efficiency among students at UUM. This will focus on the problems faced by students while online in terms of the student's own behavior. This theme consisted of two sub-themes: (1) answer quizzes, exams, and assignments and (2) give up attending. Table 4 shows the subthemes of self-efficiency:

Table 4: The Subthemes of Self-Efficiency

Sub-themes	Context	Example
Answer quizzes, exams, and assignment	Imitate	*I don't think he's suitable, when it's online learning I think sometimes I'm not being honest with myself. I imitate time quiz, test. How to sleep honestly with yourself.*
	Discuss with friends	*I feel that it is inappropriate because students can discuss with their friends, making students dishonest.*
	Use Google to search for the answer	*Even students think they only need to google to get answers.*
Give Up Attend	Disturbance of electricity at home	*Yes, I had a bad experience when I was learning online, so it was my 2nd semester of 2020. In December, my house was being renovated, so we had a plug game near the house. So, play the plug, there is WIFI, there is a plug nearby. So, the contractor has days when he will pull out the plugs near the main plug because he wants to plug in. He has plugs for his tools and his electrical items.*

Answer Quiz, Exam, and Assignment

Most interviews mention that, based on experience, the student has problems during online learning that will affect their behavior student. Most students like to use google search to answer the assignment, like discussing with a friend, and eliminate it during quizzes or exams. 10 out of 10 interviewees imitate interviews during quizzes, exams, and assessments. Most students do it during online learning. For example, the interview stated that:

IV1: When online learning students are not honest including myself, I think this online learning is not suitable. I think it's better to do it physically because when online learning is all at the fingertips, so everyone will copy.

Besides that, 2 of 10 interviewees mentioned that during answering the quiz, exams and assignments mostly like to google answers. It is problem that online learning causes students' low self-efficiency to answer the like quiz or exams. One interview provided an example by stating:

IV4: I think it is not appropriate because when we do this online learning, sometimes the student's imitation rate can be high. The reason is online learning no one sees so they can contact their friends or they can search the internet or look at google to answer the quiz. So it's not suitable for me

4 of the 10 interviewees also mentioned students will discuss with their friends during online learning. If the lecturer does an online quiz or exam, students will discuss it with their friends. For example, the interview stated that:

IV8: Share my experience, for the two years that I have taken online exam online quizzes. From experience, it is easy for students because we can discuss everything. There is an open book exam open book quiz. So, it is easy for students to discuss with other friends. Maybe through WhatsApp to anything. Any application. But for me, if you do everything online, it's not good. The reason is that if everything is online, the student doesn't have quality because he's a student because everything has to be discussed. That is my experience.

During online learning, most of the students have low self-efficiency. Mostly also mentioned that during online learning the problem the to answer the quizzes, tests, and examinations. If the student has a high self-efficiency maybe it will focus during online learning. Based on the previous that mentioned,

''I perceive it (Blackboard) as a good way or platform for online participation; it provides a good option for participation in our online learning process. Everyone can easily participate in an online class. Everyone can easily talk and give arguments and explain what he/she wants to explain. We can share documents, files, folders, or any type of audio or video content on this platform''(Naji, Du, Tarlochan, Ebead, Hasan, & Al-Ali, 2020).

Give Up Attend
The problem faced by students during online learning is that they feel disconnected from attending. Some interviewees also mentioned that attending online learning is also one of the problems they face. The problem of low self-efficacy has affected students during online learning. One interview provided an example by stating:

IV7: Yes, it's true that sometimes I go in and it's okay, but if it's delayed, he will exit Webex on his own. Like most lectures using Webex, he usually goes out so if he wants to go back in then it's time. So sometimes I give up and don't go in straight away. That's my main problem because if I go online I go to town and don't stay at home. So many other factors make me want to return home and return quickly.

Next, students will give up on attending class because they experience interruptions if the electricity supply is at home. In the event of a power outage, this will make it more problematic to participate in online learning. For example, the interview stated that:

IV8: *Yes, I had a bad experience when I was learning online, so it was my 2nd semester of 2020. In December, my house was being renovated, so we had a plug game near the house. So, play the plug, there is WIFI, there is a plug nearby. So, the contractor has days when he will pull out the plugs near the main plug because he wants to plug in. He has plugs for his tools and his electrical items.*

Hence, the theme of self-efficacy has problems with online learning in the answer quizzes, exams, and assignments and give up attending.

Assessment

The third themes section will focus on the assessment. This will focus on the problems faced by students when online in terms of student assessment during online learning. This theme consisted of two sub-themes: (1) low interaction; and (2) quiz, exam, and assignment. Table 5 shows the subthemes of assessment:

Table 5: The Subthemes of Assessment

Sub-themes	Context	Example
Low Interaction	Low interaction with the lecture	*I think there is. Due to internet interruption sometimes there is sometimes not so I have an interruption in the interaction between me and the lecture. When he asks me a question, I can't answer it, so that's one of the problems I face during online learning.*
	Low interaction with student	*There is a reason when we do this online learning, we interact less with people.*
	Shy to answer question from the lecture	*As we know during online learning interaction mark is important. But it gives me problems because I rarely answer the questions asked by the lecturer. This is because I feel embarrassed to answer questions from the lecturer because I am a shy person.*
	Late submit quizzes, tests, and assignments	*Internet problems have caused me to send my quiz late and I have to inform the lecture every time. Makes some lectures like they don't want to accept my quiz and some are like for me to give reasons.*

| **Quiz, Exam and Assignment** | Hard to submit quizzes, tests, and assignments | *I think it's hard because... I think it's hard to answer the quib or to answer the exam because we're first. We want to study even if the internet is limited so when we want to answer a quiz or an exam it becomes difficult for us. Even if we want to study, the internet is limited, what else do we want to answer exams or quizzes.* |

Low Interaction

During online learning, 10 of the 10 interviewees mentioned that the interaction mark with the lecture is low. It is because most interviewees cannot answer the question during online learning. It will affect the interaction mark with a lecture. For example, the interview stated that:

IV2: *The problem of internet interference caused me to not be able to interact with the lecturer properly. Sometimes the lecturer asks questions two or three times I say listen to him so it's kind of slow. So, it will be slow when I want to answer the question and it won't be fun. When we are excited, he is not happy.*

Besides that, the problem of learning not only affect interaction with lectures but with other students. 3 of the 10 interviewees highlighted, have low interaction with the student. One interview provided an example by stating:

IV4: *I think when we do this online learning, we interact less with other people like in this virtual world only*

Then, being shy to answer questions from the lecture also is a problem during online learning. When the student shy to answer the interaction will affect the student. 1 of the 10 interviewees has a problem too shy to answer questions from lectures. For example, the interview stated that:

IV3: *As we know during online learning interaction mark is important. But it gives me problems because I rarely answer the questions asked by the lecturer. This is because I feel embarrassed to answer questions from the lecturer because I am a shy person.*

During online learning, interaction is very important for the lecturer and student. Most interviewees have low interaction during online learning. Then, interviewees also mentioned that shy want to answer questions when the lecturer asks. The problem stated by interviewees is related to the themes assessment.

Quiz, Exam, and Assignment
Most interviewees have mentioned that they have problems with assessments during online learning, such as quizzes, exams, and assignments. 3 of the 10 interviewees have highlighted, that late submission of the quizzes, exams, and assignments, will affect the assessment. One interview provided an example by stating:

IV2: *Internet problems have caused me to send my quiz late and I have to inform the lecturer every time. Makes some lectures like they don't want to accept my quiz and some like for me to give reasons. That's my problem.*

Then, 3 of the 10 interviewees have problems hard to attend the quizzes, tests, and examiner. It will affect the assessment of the student if the student hard to attend. One interview provided an example by stating:

IV3: *For me it is very difficult because the time allocated to answer is short. I couldn't finish the questions my lecturer gave me. For example, if I want to find related information, it takes a long time to find an answer.*

Hence, interviewees also mentioned that have late hard to submit the quizzes, tests, and assignments. The sub-themes are quizzes, exams, and assignments related to the theme which is assessment. The themes overview of online learning problem in UUM was summarized Table 6.

Table 6: Summary of Thematic Analysis

Thematic Analyse												
Themes	Sub-themes	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10
Technology Access	**Lack Of Personal Internet**										
	Low coverage in rural areas				1		1	1		1	
	Low personal internet	1	1	1	1	1	1	1	1	1	1
	Disturbance of the internet caused by rain					1					1
	Lack of WIFI (UUM)										
	Low internet of UUM WIFI	1	1				1	1			
	Limited time to access		1				1				
	More student access			1	1	1	1			1	1
Self-efficiency	**Answer Quizzes, Exams, And Assignment**	1		1	1	1			1	1	
	Imitate				1				1	1	1
	Discuss with friends			1							1
	Use Google to search for the answer										
	Give Up Attend										
	Disturbance of electricity at home								1		
Assessment	**Low Interaction**										
	Low interaction with the lecture	1	1		1	1	1		1		
	Low interaction with the students				1	1				1	
	Shy to answer a question from the lecture			1							
	Quiz, Exam and Assignment										
	Late submit quizzes, tests, and assignment		1				1	1			
	Hard to submit quizzes, tests, and assignment	1		1			1				

Conclusion

Online learning problems among students have disrupted the learning process. Therefore, identifying the issues faced will increase the efficiency of online learning in the future. Based

on the interviews, the interviewees described problems during online education, including technology access, self-efficacy, and assessment. Based on the interviews, the interviewees identified problems from their own experiences. The interviewees stated that the lack of internet was why they experienced internet interruption problems. If they fail to have the internet, it can cause many factors that affect their online learning. Based on the study, the main weakness of deep understanding is that the effectiveness of online teaching delivery depends a lot on the quality of the internet connection (Devarajoo, 2020). A poor connection can cause disruptions during live sessions and affect the quality of course delivery.

The problem in terms of evaluation during online learning is a problem faced by students. Based on the interviews, most interviewees have assessment problems as a result of them needing to be on time and sending assignments, quizzes, and tests. They deliver on time as a result of internet outages they face. Some lecturers understand the student's situation, but there is the opposite.

From the point of view of self-efficacy, this research strengthens the research findings by identifying some problems that the interviewees have in terms of self-efficacy. In an online learning environment, students' self-efficacy is recognized by their overall expectations and beliefs during the learning process. According to Taipjutorus, Hansen, and Brown (2012), self-efficacy in online learning is not only a good predictor of students' academic achievement, but efficient students also persevere, adapt and adjust well even if they do not have priority experience. Based on the interview, there are interviewees who feel like giving up attending online learning. The problem of lack of efficiency itself has caused problems for students. They also feel that online learning is not suitable because it requires a high degree of independence. In fact, some interviewees stated that they imitate during exams or quizzes. Based on previous studies, the quiz and exam process has also faced the threat of cheating by students during online learning (Balderas, & Caballero-Hernández, 2020).

In summary, the study shared the important knowledge towards online learning experience in UUM and potentially contribute for services improvement by university management. The management team can develop more strategy to increase the Wi-Fi performance and assessment security for examination test. The findings of this study have important implications for both researchers and organizations, suggesting for enabling of good services improvement to students as a university's stakeholders.

Acknowledgement

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