The Use of Tanjungpura University’s e-Learning–Moodle LMS during Online Learning: Problems, Solutions and Continuation

Abstract: This study aims to investigate the problems, solutions, and opinions about the use of the Tanjungpura University’s e-learning-Moodle LMS as learning media during the covid-19 pandemic by students of the Elementary School Teacher Education Study Program at the Faculty of Teacher Training and Education of Tanjungpura University in Pontianak, West Kalimantan. Respondents in this study were selected based on the characteristics of gender, and semester classifications. The qualitative research approach was employed in this study, utilizing semi-structured interviews where the interview questions underwent a piloting phase. The results of the study showed that the challenges faced by the students in using Moodle LMS included network instability, application errors, application disadvantages and the level of technology literacy which were followed up by shortcut tricks and strategies the respondents came up with to overcome them. In general, respondents gave a positive response to the use of Moodle LMS which can be seen from their preference for Moodle LMS over other LMS’s, claim of its suitability for use in learning, and willingness to recommend it to other potential users. However, all respondents revealed that they prefer face-to-face learning to online learning.

Keywords: Problem, Solution, Continuation, e-Learning, LMS, Moodle

INTRODUCTION

The use of technology in the learning process has been recorded since 1995 and subsequently received approval as advanced learning in 1998 at the Department of Education (Gaspay, A., Dardan, S., & Legorreta, L., in Folden, 2011). The use certainly did not stop as it was recorded that it was widely used in the US in 2002 (Dhawan, 2020). To date, technology has progressively gained significant importance as a viable alternative for learning following the onset of the COVID-19 pandemic, which requires learning to be conducted online as implemented in Indonesia (Circular of the Ministry of Education and Culture of the Republic of Indonesia No. 15, 2020). The application is used by several high schools in Indonesia (Rahmani, 2021), including West Kalimantan.

In Indonesia, this learning web was initially introduced prior to the pandemic, and its usage significantly increased during the pandemic. As the pandemic gradually subsides, the effective utilization of LMS is persisting. The use of this web in the researched university was reported to become more intense as the digital literacy of both the students and the lecturers have drastically improved.

Education providers in West Kalimantan as reported by Suparjan & Mariyadi (2020) use several LMS platforms to support learning during the pandemic such as Google Classroom, WhatsApp, Youtube, etc. However, these platforms also come with problems encountered by both students and educators. Some of the problems encountered were related to network, supporting hardware, and the level of technology literacy that did not fully support the use of LMS (Suparjan & Mariyadi, 2021).

In Indonesia, Moodle LMS is not as widely-used in learning as it is in other platform that is easier to manage in terms of content, data, and participants. (Foreman, 2018).

The government in this case recommended several e-learning media to help educators and students in learning during the pandemic, one of which is the Moodle Learning Management System (LMS) application (Circular of the Ministry of Education and Culture of the Republic of Indonesia No. 15, 2020). The application is used by several high schools in Indonesia (Rahmani, 2021), including West Kalimantan.

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countries, especially at the university level (Gamage et al., 2022). In the researched university, the adoption of Moodle LMS was suggested for facilitating online learning that was initiated due to the circumstances of the pandemic, including for students of the Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Tanjungpura University (hereafter referred to as PGSD FKIP UNTAN). The students, in this case, made use of the Untan’s e-learning portal to log in for free to Moodle LMS.

The use of any application certainly does not always receive a good response from its users. In the use web-based applications, there are shortcomings that are often found in areas that do not yet have adequate network facilities such as in Indonesia, namely unstable signal problems, limited data quotas, and slow internet connections. (Pramana et al., 2020). Research on the shortcomings of Moodle's LMS (Usov et al., 2020) was conducted by conducting swot analysis on students with the results showing that Moodle LMS is still unable to replace some traditional learning techniques such as language learning which allows for providing skills training. Another study on the use of Moodle (Egorov et al., 2021) reported problems that include the lack of direct contact between students and the lecturer, the difficulty of learning materials without direct contact with the instructor, and the longer time taken to explain the materials.

In the use of Moodle LMS, several shortcomings were also reported such as lack of compatibility with text browsers, reproduction errors by screen readers, content reproduction errors on mobile devices (Kosova et al., 2021). The studies mentioned above, on average, used quantitative research as a research method, and therefore they provide space for quantitative research on the weaknesses of use of Moodle LMS in online learning during the Covid-19 Pandemic (Gamage et al., 2022) as in this study aims to examine using qualitative methods.

Research on the problems and solutions to using Moodle LMS needs to be carried out in order to get the responses of learning participants regarding the use of the application. Thus, this research seeks to fill the void of research on the use of the LMS at the Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Tanjungpura University. This research is expected to provide an overview for other educational institutions as potential users of Moodle LMS so that they can prepare good planning through the challenges revealed in this research.

Before writing the objective(s), the writer should depict the background and related studies adequately to record the existing solutions or methods, to show the best things that have been done by the previous researchers, the weaknesses they have, as well as the new things that have been done by the previous researchers. Avoid summarizing research results.

**METHOD**

**Participants and Characteristics of the Respondents**

Research on the problems, solutions, and continuation of the use of Moodle LMS in e-Learning during Covid-19 at the Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Tanjungpura University (PGSD FKIP UNTAN) was carried out using qualitative descriptive research procedures. The data were triangulated through the different sources of interview informants. A pilot project for validating the questions was conducted to maintain its trustworthiness.

The semi-structured interview technique was conducted involving 8 respondents who used Moodle LMS from this program. The respondents were...
randomly selected in the program and gender balance occurred unintentionally.

Table 1
Respondent Biodata

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Research Instrument
This study used question sheets during semi-structured interviews with respondents, which were divided into two parts. The first part contained questions on personal information, and the second part contained three questions about the Problems, Solutions, and Continuation of Using Moodle LMS in the Implementation of e-Learning during Covid-19 pandemic in West Kalimantan as follows:

1. What is your perception of the problems of using e-learning–Moodle LMS in facilitating teaching and learning activities during the Covid-19 pandemic, especially at the PGSD FKIP UNTAN?
2. What is your perception of the solutions to the problems of using e-learning–Moodle LMS in facilitating teaching and learning activities during the Covid-19 pandemic, especially at the PGSD FKIP UNTAN?
3. What is your perception of the continuation of using e-learning–Moodle LMS in facilitating teaching and learning activities during the Covid-19 pandemic, especially at the PGSD FKIP UNTAN?

These questions were further expanded according to the themes that emerged during the interview process. It was in line with the analysis technique used in this research, namely the thematic analysis technique.

Data Analysis Method
This research was divided into three stages, namely planning, implementation, and publication. At the planning stage, preparations were made such as collecting references, selecting respondents, formulating problems, and writing the research proposal. The implementation activities included data collection using the technique of semi-structured interviews, transcription of data, data analysis, and conclusion drawing. The third stage was the process of displaying the data in the form of a research article.

This research used the thematic data analysis technique. The use of this technique aims to find themes obtained from data collection, namely the problems and solutions in the use of e-learning–Moodle LMS during the Covid-19 pandemic and the continuation of its use after the Covid-19 pandemic (Braun & Clark in Heriyanto, 2018). The technique is suitable for accurate and in-depth exploration of the predetermined problems (Alhojailan in Purwanto et al., 2020).

RESULT AND DISCUSSION
The result and discussion section contains discussion and display of the collected field data. The discussion is presented in three sections based on the research problems, namely the problems, solutions, and continuation of the use of Moodle LMS, which is followed by the thematic sub-
The problems encountered in using e-learning–Moodle LMS in facilitating teaching and learning activities during the Covid-19 pandemic, especially at the PGSD FKIP UNTAN

**Network Problems**

Based on the results of interviews conducted with 8 (eight) respondents, almost all of the respondents reported network problems. The results of the interview are shown as follows:

*Sometimes there was a problem with the internet when logging in. So [ I ] couldn’t log in. (R1)*

*The problem was sometimes Moodle couldn’t be accessed. [ It ] required a strong signal [fast internet connection]. (R2)*

*The signal was weak. Because it required a strong signal to log in. (R4)*

*I was in the village. [With] my signal, I couldn’t log in to e-learning. Sometimes [the internet] encountered an error, sometimes it worked. So, I had difficulties in submitting assignments and accessing the materials (R8)*

The results of the interviews above show that respondents (R1), (R2), (R4), and (R8) complained about unstable network in their area which sometimes made it difficult for them to log in to Moodle LMS, unable to submit assignments, unable to access the materials, and even unable to log in to their account on Untan’s e-learning platform. This occurred because Moodle LMS requires a strong network and large internet data. However, in some places in urban areas, network problems are rarely encountered by students as it can be easily resolved in several ways, such as changing providers or being in places that provide stable wi-fi. The worst condition was reported by (R8) who was in a remote area where the network facilities were so insufficient that he could not even log in to the e-learning platform at all. Network problems also greatly affected the learning process especially when using video conferencing assistance such as Google Meet.

Network problems encountered by respondents are not permanent at every learning session. However, these obstacles certainly have a negative effect on the continuation of learning at the next meeting. Network problems encountered by LMS users both in general and with Moodle LMS in particular as reported have hindered Indonesian students in the learning process, especially in remote areas (Pramana et al., 2020). With limited network facilities, the network is unstable, making students unable to log in to Moodle LMS or the e-learning web. The effectiveness of Moodle learning will be further enhanced when students return to the normal situation of studying in their campus area, in the city. Moodle Learning will be more compatible to the current situation.

**Application Error**

Application errors are the most common responses obtained through interviews with respondents. All respondents reported that they had encountered frequent errors when trying to log in to the Untan’s e-learning Moodle LMS. The interviews generated responses citing the application errors as the problems is shown as follows:

*[The application had] frequent errors when I submitted assignments. During mid-term and final exams. I didn’t know the cause. I had to...*
refresh to log in. When [filling out] attendance, I often encountered errors. (R1)

[I encountered] errors when logging in ([the application] often couldn’t open) (R2)

[I often encountered] errors when logging in so I had to use WA [WhatsApp] (R3)

[I often encountered] errors. It was difficult because of the weak signal. If the signal is good it’s ok. (R4)

[I often encountered] errors when logging in and doing assignments (R5)

[I encountered] errors when submitting assignments. Untan’s e-learning [platform] often encountered errors. (R6)

[I encountered] login errors. Usually the error occurred at the same time as Siakad [application]. Error often occurred. So, [I had problems] submitting assignments. (R7)

[I encountered] errors when logging in, (R8)

Based on the results of the interviews above, it can be concluded that all researched students encountered several errors when using the Untan’s e-learning Moodle LMS. Respondents (R2), (R3), (R4), (R5), (R6), (R8) encountered errors several times when trying to log in to Moodle LMS causing them to miss some class sessions. It occurred because the Untan’s e-learning server encountered network disruption or had an unstable signal when students tried to log in to Moodle LMS.

The errors that occurred on Untan’s e-learning platform is also usually accompanied by an error on student attendance interface. Respondents (R1), (R5), (R6), and (R7) encountered errors when submitting or working on multiple-choice or essay assignments on Moodle LMS. As a result, some of their assignments could not be submitted prior to the deadline and some of the assignments that had been completed on the application had to be redone, making it very difficult for them.

Almost all respondents have encountered problems in the form of application errors at certain times simultaneously. The concern issue is that there are differences between students who live in the city and those in remote areas when an error occurs due to network problems.

Despite being relatively less technologically advanced compared to some other Asian countries, such as Saudi Arabia, Moodle LMS is favored and widely used in this particular nation (Alghafis et al., 2020). If Indonesia aims to achieve success in education, it is imperative for the country to enhance internet stability nationwide.

**Application Disadvantages**

Problems reported by the respondents were also related to the disadvantages of the application in which it did not support the online learning process. The responses regarding these problems are shown as follows.

Assignment notifications didn’t exist on Moodle so sometimes I forgot that I had assignments. The display on the laptop was slightly different from the display on the phone (R1)

The signal had to be strong. Sometimes the server was a little slow so it was hard to upload assignments. In addition, the assignment [files] had a certain maximum size [for upload], so it was very difficult to reduce [file size] or [I had to] upload it to the drive (R2)

No notifications. No video conferencing so I had to use google meet. The storage space
was insufficient so I had to use the google drive link. Videos and other big files had to be uploaded to Google Drive. (R3)

If I accidentally pressed "back" it would repeat itself so it was complicated. (I had to re-log in and restart the procedure). It required a strong signal to log in. (R4)

No notifications. The materials didn’t appear or weren’t responsive to changes made. Limited storage. Maximum size of 5 MB. (R5)

Assignment notifications didn’t exist so I often forgot to submit assignments (R6)

No notifications that go to [my] email like google classroom. Sometimes for sending files there is a size limit of 5 mb. (R7)

It required a stable and strong signal (R8)

Based on the findings above, it can be described that respondents (R1), (R3), (R5), (R6), (R7), and (R8) revealed that they had difficulties due to the unavailability of notifications on Moodle LMS so that they missed their assignments. This is quite different compared to other LMS’s that provide notifications on email when assignments come in. Another disadvantage of the application is that it only allows its users to save files that are limited to only 5 MB in size was reported by respondents (R2), (R3), (R5), and (R7) who had to find an alternative such as uploading on other media or reducing file size to upload on Moodle LMS. In addition, all respondents also reported that Moodle LMS does not provide a plugin that can bridge the virtual face-to-face conferencing.

Another disadvantage is that the application of this university Moodle is not responsive to updates made on Moodle LMS such as assignments, etc., causing students to have to refresh it several times as encountered by (R2) and (R5). In addition, respondent (R8) also complained when opening the Moodle LMS which requires a stable network and a large data package so he had difficulty with it. Needless to say, this problem was also encountered by several other LMS’s used in Indonesia (Pramana et al., 2020). Meanwhile, respondent (R1) reported that the display on a laptop device was different from that on a smartphone so that at the beginning of learning process it was difficult for him to understand and navigate on Moodle LMS. (Kosova et al., 2021) reported an advantage of Moodle LMS especially regarding content reproduction errors on mobile devices.

Student Technology Literacy

The next problem found in the use of Moodle LMS is the students' technology literacy. The results of interviews that show these problems are shown as follows.

There was no explanation from the campus. (R1)

In the beginning it was a bit difficult to learn. But in the second semester it was easier because I got some experience. At first, it was a bit difficult sometimes the assignment had been completed but had not been submitted because I forgot to press the 'send' button (R3)

At first, I was confused because there were a lot of menus. [I had to find out] how to submit assignments, and so on. (R4)

Only at the beginning, because of the Moodle dashboard (R6)

Several respondents, especially (R1), (R3), (R4), and (R6) reported that at the beginning of using Moodle LMS in some of the courses they took, they had difficulty in learning to use Moodle LMS because there
was no tutorial or instruction from the university on its use. Some respondents admitted that they only got a few instructional videos recommended by the lecturer. What makes the respondents difficult is the initial display of the Moodle LMS dashboard which is very different from other LMS’s as reported by (R4) and (R6). Respondent (R3) admitted that some users encountered errors in understanding the function of the assignment submission button, causing the assignments to fail to be submitted.

Solutions to the problems of using e-learning—Moodle LMS in facilitating teaching and learning activities during the Covid-19 pandemic, especially at the PGSD FKIP UNTAN

This section covers the solutions made by the respondents to the problems/obstacles they encountered the are described above. The solutions made by the respondents are described as follows.

**Solutions to Network Problem**

The solutions to the network problems were revealed by several respondents as follows.

*I have to use a provider with a good signal in my area (R2)*

*I have to find a place with a strong signal or go to [a place with] wifi (R4)*

*I submit [my assignment] in the morning or at dawn; [Then send] confirmation to [my] friends or the lecturer (R8)*

*I usually ask [my] friends for help. E-learning can be opened by others. For [my] attendance, I ask [them] to fill it out (R8)*

Based on the results of interviews above, some of the network problems encountered by the respondents were solved in several ways; the first, as reported by (R2), was to replace the network provider with a stable and strong one. The second solution (R4) came up with was to find a place with a strong network signal. Cases like these are encountered by students in areas with poor network facilities. If nothing worked, respondent (R4) went to a place with wifi to get better internet access.

Problems encountered by (R8) were overcome in various ways, first, by submitting assignments during the hours of minimal network usage, such as early in the morning. Second, by sending confirmation to his friends and the lecturers that the respondent (R8) could not submit or do the assignments due to network problems. Third, by asking his friends for help to submit or do the assignments because the account on Untan’s e-learning platform could not be accessed and ask them to send the material of that day. This also happened when the attendance was taken online, the respondent (R8) asked his friends to fill it out.

In addition to the solutions mentioned above, respondents also reported that lectures would usually be moved to other media such as WhatsApp. With this media, lecturers and students can communicate about the continuation of learning. This is in line with what (Prasetya, 2021) reported that the WhatsApp social media application was very helpful in facilitating learning processes during the pandemic in Indonesia. Solutions offered by (Prasetya, 2021) is to coordinate with local governments to complete network facilities in areas with minimal infrastructure.

**Solution to Application Error**

Several respondents reported the solutions they came up with to overcome the problems the encountered regarding application errors. The respondents’ statements are shown as follows.
The lecturer contacted us using WhatsApp. G-meet link was sent via WhatsApp. (R2)

Waiting for instructions from the lecturer to resolve the error (R3)

The lecturer gave assignments via WhatsApp. (R4)

The solution was to use other media such as WhatsApp. [The apps] had to be refreshed when any material comes in. An error [occurred] when logging in. If there was an error, the lecturer chatted the class leader. (R5)

Sometimes it didn’t take long. So, there was no solution. The next day I could still access it. Except for attendance. (R6)

Based on the data collected, the steps that had been taken by the respondents when there were several application error problems, namely first, the lecturer contacted the class leader using WhatsApp to continue the lecture by sending assignments on the WhatsApp application as reported by (R2), (R4), and (R5). From WhatsApp, the lecturer also usually moved the class to video conferencing applications such as Google Meet. In addition, some respondents admitted that they only waited for a solution from the lecturer or waited until Moodle LMS could run properly as reported by (R3) and (R6).

Moving classes to WhatsApp social media as reported by (Prasetya, 2021) was very common as WhatsApp itself was the most widely-used media during the Covid-19 Pandemic. This method, of course, gave a solution for students and lecturers to continue learning, which could be conducted through assignments or using other applications such as Google Meet. It shows the combination of several applications in the learning process.

Solution to Application Disadvantage

The solutions to problems regarding application disadvantages were reported by several respondents. The respondents’ statements are shown as follows.

I had to keep opening Moodle. Setting an alarm. Asking [my] friend to remind me (R1)

The files had to be converted so that they can appear [on the apps]. But rarely [did I receive] large files (R2)

Using Google Meet. I had to check into [my] Moodle account frequently. [Files] had to be uploaded to Google Drive (R3)

I frequently had to check on [my] Moodle account. [It] had to be refreshed when any material came in. (R5)

Using Google Meet. [Files] had to be compressed first (R7)

Based on the data collected from the interviews, there were several ways the respondents dealt with the problems of application disadvantages, where each will be discussed. Regarding the problem of the non-existence of assignment notifications, some respondents overcame it by recurrently opening the Moodle application so as not to miss assignments or setting a reminder for assignments in the alarm, and asking classmates to remind each other as reported by (R1), (R3) , and (R5).

Regarding the problem of the non-existence of video conferences, some respondents reported that lecturers and respondents resolve it by using the Google Meet as reported by (R3) and (R7). It would be difficult for students to understand learning materials as there was no direct explanation from the lecturer which is not found on Moodle LMS. With regard to the problem of limited storage for assignments.
on Moodle LMS, students dealt with this problem by reducing the file size using an online application or uploading them to Google Drive and then sending the link on Moodle LMS. Some problems also concern the lack of responsiveness of the Moodle LMS account as reported by (R5).

**Solution to Student Technology Literacy**
The solutions to the problems faced by students concerning technology literacy were reported by several respondents. The respondents’ statements are shown as follows.

- **Learning by myself on other applications (R4)**
- **Asking [my] friends [questions] (R3)**
- **Reading instructions from the lecturer (R2)**

Based on the data above, several respondents revealed that there were several solutions to the students’ inability to understand the use of Moodle LMS. However, this problem did not last long because several respondents reported that they could overcome it in several ways, such as studying tutorials on how to use Moodle LMS as reported by (R4). In addition, there are also other ways as reported by (R3) and (R2) who actively asked for explanation from their friends and read some of the instructions given by the lecturer.

**Continuation of the use of e-learning Moodle LMS in facilitating teaching and learning activities after the Covid-19 pandemic, especially in the PGSD FKIP UNTAN**

In the section on the continuation of the use of Untan’s e-learning Moodle LMS, there are several themes that emerged to reveal indicators of the continuation of the use of the LMS. The indicators include: preferring Moodle LMS to other applications, acknowledging the suitability of Moodle LMS for education, choosing to recommend Moodle LMS to friends, and interest in using it in the future. The interview results are shown as follows.

**Preferring Moodle LMS to Other Applications**
Almost all respondents gave a positive response to using Moodle during the pandemic. This shows that all respondents are interested in Moodle LMS. The results of the interviews are shown as follows.

- **Moodle is more interesting than others (R1)**
- **I chose Moodle (R2)**
- **Yes, I prefer Moodle (R3)**
- **I prefer models. (R4)**
- **I like using Moodle (R5)**
- **I prefer Moodle when learning online (R6)**
- **Yes, because it is more fun and not monotonous. (R7)**
- **I prefer Moodle. Except for the network in the village (R8)**

Based on the findings above, it can be concluded that all respondents agree that Moodle LMS is very good for supporting learning activities even though there are several problems. The problems, however, did not have a significant effect on the respondents’ desire to choose Moodle LMS. The reason for choosing Moodle LMS is based on several advantages of the LMS as e-learning media during the Covid-19 Pandemic that can be used for free (Rice, 2015), built with an educational philosophy.
that fits learning needs (Jason Cole and Helen Foster, 2007), and has a plugin that gives administrators the flexibility to manage online learning properly (Henrick & Holland, 2015).

Suitability of the use of Moodle LMS

Several respondents gave their responses to the suitability of the Untan’s e-learning Moodle LMS for use in learning. The results of the interviews are shown as follows.

If it works in high schools, then it’s suitable for college students. (R1)

Moodle class is suitable for education classes (R3)

Not suitable because there is no video feature. We have to use Zoom [or] G-meet. (R5)

But for elementary school students, it's a bit difficult. (R6)

The results of the interviews above show that several respondents revealed that Moodle LMS is suitable for supporting learning activities (Foreman, 2018). In general, Moodle LMS can provide general needs during learning such as providing materials, assignments, and several other learning needs (Jason Cole and Helen Foster, 2007). However, Moodle LMS does not provide skill training features (Egorov et al., 2021).

Some respondents contended that the Moodle LMS is not suitable for low levels of education. Several respondents recommended the use of Moodle LMS at high school levels, namely at high school and college levels as reported by (R1), (R3), and (R6). A different response was expressed by (R5) which stated that Moodle LMS is not suitable for learning because of the disadvantages such as the non-existence of a video conferencing feature.

Recommending Moodle LMS

Several respondents gave their responses to the suitability of Moodle LMS for use in learning. The results of the interviews are shown as follows.

Yes, if there is an opportunity, it will recommend it (R1)

I will recommend Moodle for use (R2)

Yes, I will do it if I have the opportunity (R3)

I recommend using Moodle (R4)

I will recommend using Moodle (R5)

I recommend it. But for elementary school students, it's a bit difficult. (R6)

Yes, I will recommend it (R7)

I recommend using Moodle. (R8)

Based on interviews held with the respondents, all of them have an interest in recommending LMS Moodle to other teaching staff at the higher education level. With the desire to recommend it, it can be seen that respondents are very impressed with the use of Moodle LMS during the Covid-19 Pandemic. Several problems encountered during its use did not have a bad effect on the tendency of respondents to recommend Moodle LMS to other teachers for use after the covid-19 pandemic.

CONCLUSION

Through this research, several conclusions can be drawn regarding the challenges/problems of using Untan’s e-learning--Moodle LMS based on several
themes. First, the problem of unstable and less supportive network in remote areas. Second, some students encountered errors when logging in to the application, when working on and submitting assignments, when receiving materials, and when navigating the application. The error did not frequently occur so the application was quite convenient to use. Third, the disadvantages of the application are, among others: it does not have assignment notifications and video conferencing, it is less responsive, it has limited storage capacity, and the display is different on the cellphone and on the computer. Fourth, the problem of low technology literacy when using Moodle LMS for the first time. This problem only occurred to first time users.

The solutions that the respondents came up with were adjusted to the challenges they encountered. First, the solutions to network problems include: changing the network provider, going to a spot that has a strong network, visiting a place that provides Wifi, uploading assignments at the beginning of the day, such as at dawn or early in the morning. Second, the application error problems were overcome by communicating with the lecturer to use another method or waiting for the lecturer to find a solution. Third, regarding the application’s disadvantages: the non-existence of notifications was overcome by frequently opening the application, asking classmates to remind each other, and setting up reminders on an alarm. In the problem of the non-existence of the video conference was resolved with the use of Google Meet. The problem of the limited storage on Moodle LMS was overcome by reducing the file size using an online application or uploading files to the Google Drive. The problem of the lack of responsiveness of the Moodle LMS account was overcome by recurrently refreshing on the application. Fourth, the problem of low technological literacy among students was overcome by actively viewing tutorials on how to use the application, asking friends for information, and following the instructions of the lecturer.

The results of research on the continuation of the use found several indicators. First, all respondents prefer Moodle LMS to other LMS’s. Second, the respondents reported that Moodle LMS is suitable for higher education. Third, all respondents stated their willingness to recommend Moodle LMS to other potential users.

**Recommendation**

Further research on the challenges, solutions, and continuation of the use of Moodle LMS should be carried out with quantitative methods with larger respondents at the Tanjungpura University or other universities in West Kalimantan in order to obtain more comprehensive results of research on the problems examined in this study.

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