

Students' Perception of Using Moodle as a Learning Management System in Tertiary Education

Muhammad Arifin¹, Imas Eryani², Ghina Farahtika³

¹ Universitas Muhammadiyah Sumatera Utara, Indonesia; muhammadarifin@umsu.ac.id

² Universitas Muhammadiyah Sumatera Utara, Indonesia; imas.eryani@gmail.com

³ Universitas Muhammadiyah Sumatera Utara, Indonesia; gfarahatika@gmail.com

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ABSTRACT

The objective of the study was to determine students' perspectives of utilising Moodle as a learning management system throughout the Ninth Semester. The researcher employed the descriptive qualitative research method due to its suitability for gathering data on students' perceptions. The researcher conducted interviews to collect the data. The data was acquired from the ninth semester, which was studied using Moodle. The sample consisted of 10 students, selected based on specific criteria. The research findings revealed that the students' interviews demonstrated a predominantly favourable assessment of Moodle as a learning management system, with a heightened inclination towards active participation in the learning process. Some students claimed that Moodle is hindered by network issues and server errors, which prevent them from using it. Furthermore, it was discovered that Moodle offered benefits such as effortless access to learning materials and the ability for students to manage their time effectively. Drawbacks include insufficient explanation and poor interaction.

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Corresponding Author:

Muhammad Arifin

Universitas Muhammadiyah Sumatera Utara, Indonesia; muhammadarifin@umsu.ac.id

1. INTRODUCTION

In this time, online learning has become a form of education at all levels of education during Covid-19. As we know, due to government regulations restricting school or university activities to stop the spread of the Covid-19 pandemic, teachers and students are required to stay at home. This arrangement should bring school or campus activities home (<https://setkab.go.id>). This means that traditional or face-to-face learning methods are being replaced with fully online learning activities (Azzahra, 2021). That's why online learning is inescapable in this time (Martha, Junus, Santoso, & Suhertanto, 2021). Online learning is an internet-based learning environment that can connect students from different backgrounds who boast different perspectives. The way teaching and learning are done today is changing and incorporating technology. The traditional classroom style is now integrated with the e-learning (Chukwuemeka, Edori, & Bakare, 2015). Online learning refers to the acquisition of knowledge in settings where learning activities take place either synchronously or asynchronously,

utilizing various devices such as mobile phones and laptops, all connected to the internet. Within these settings, students have the flexibility to be in any location independently while engaging in learning and communication with teacher and students (Singh & Thurman, 2019).

The progression of technology has prompted universities and other institutions of higher education to incorporate Learning Management Systems (LMS) in facilitating student learning. (Mpungose & Khoza, 2020, p. 1). Learning Management System is the most popular software to support online learning; it is a software that can help us create, manage, organize, and deliver online learning materials for students. For example, Moodle, an acronym for Modular Object-Oriented Dynamic Learning Environment, serves as an open-source course management system initially established by Martin Dougiamas. This platform empowers educators to create online courses, providing students with 24/7 access akin to a virtual classroom. It has the advantage of teaching method and practice that emphasizes interactivity in the knowledge (Kotzer & Elran, 2012) It holds the position as the foremost learning management system globally that used by hundreds of millions of learners across the world . Moodle is a free learning management system (Girik Allo, 2020) that enables you to create powerful, flexible, and engaging online learning experiences (Rice, 2003).

Online learning activities on Learning Management System (LMS) bring different experiences and perceptions to students and teachers. However, there was a flip side to distance education that could marginalize students through the use of this LMS. (Girik Allo, 2020). The lack of equity for unhindered internet access is proving to be a nuisance for many students. (Muthuprasad et al, 2021). Besides that, changing the system of education can make them little opportunity to discuss and communicate in class (Xie Ling & L. Gao, 2020). Meanwhile, other issues in the understanding of online learning media use and negative relationships have been overlooked. These problems make students less interested and motivated to learn.

The University of Muhammadiyah Sumatera Utara was one of the universities that implemented Moodle as a Learning Management System. All of the activities of the learning process by using Moodle LMS, both in the form of uploading documents (RPS, Lecture Material) task collection, and others. And the sounds of LMS negativity above were reasonable since the utilization of this platform is quite new, especially at UMSU. Therefore, the writer was interested to research entitled students' perception of using Moodle as a Learning Management System: A Case Study of Universitas Muhammadiyah Sumatera Utara. The researcher chose UMSU as the source of this research and the purpose of this study is to know about the perception of students about Moodle as a learning management system in UMSU, and after getting the result, I conclude that Moodle has a good or bad response as a learning management system in this university.

Perception refers to an individual's understanding or thoughts about something, encompassing their beliefs and impressions of its nature. For instance, one identifies their favorite food through its aroma and appearance, recognizes an orange through its circular form, citrus taste, and color, and distinguishes a song by listening to its melody and the singer's voice. Our interaction with and interpretation of the world around us is shaped through these sensory encounters. The recognition and interpretation of sensory information, including sound and smell, are integral components of cognition.

Cognition refers to our ability to recognize and interpret sensory information, involving the process of transforming sensory input into meaningful understanding. This cognitive function enables us to make sense of the sensory stimuli we encounter. Cognition is a way of understanding natural signals or, better, transforming natural signals into intentional signals (Millikan, 2004). Cognition is the series of steps through which an individual attributes significance to their experiences; once specific stimuli are received in sensory memory, this processing progresses into perception. The significance of cognition lies in its impact on the information stored in memory. Additionally, prior knowledge, represented by schemas, plays a crucial role in shaping subsequent cognition and learning. (Adediwura & Tayo, 2007).

A learning management system (LMS) is a software application or online technology utilized for designing, executing, and evaluating a particular learning procedure. Generally, an LMS empowers instructors to generate and deliver content, track student engagement, and evaluate student achievements through online platforms. Additionally, the LMS might offer students interactive features like threaded discussions, video conferencing, and discussion forums. (Alias & Zainuddin, 2005). Learning management that uses technology as a supporting tool is referred to as a Learning Management System (Watson & Watson, 2007). The primary goals of an LMS are twofold: firstly, to enhance independent learning, and secondly, to enable LMS users to register, store, manage, publish, and print learning materials accessible through the web. In essence, an LMS offers flexibility, allowing users to create and manage learning in alignment with their specific intentions and established learning objectives (Hunt, 2010). Bailey (1993, cited in Watson, 2007) gives some of the general characteristics of LMS in education. There are Objectives embedded learning in students' individual lessons, Supporters of divided learning into several categories according to level or lesson, Management system collecting student performance, Integration into human resources systems, Provide access to content and learning environments (classroom, online), Create teaching materials and their storage, Integrate learning materials with third-party software to enrich learning and Provide an assessment of the learning outcomes that have been carried out. Those are the ninth of LMS characteristics that we can use during the learning and studying process.

Moodle, short for Modular Object-Oriented Dynamic Learning Environment, is an e-learning software created by Martin Dougiamas in 2004, and it is freely available as an open-source platform. Moodle stands out as one of the most frequently employed learning management systems. Its design is rooted in social constructivism principles, emphasizing the significance of interactive dialogues and the active involvement of learners in the process of acquiring a second language. Theoretically aligned with the social constructivist perspective, Moodle provides an array of multimedia tools (audio, video, images, documents) tailored for diverse educational needs. These tools facilitate tasks ranging from sharing lesson-related materials and assigning/evaluating homework to reviewing in-class lessons and engaging in idea discussions through forums (Truong, 2021). E-learning platform provides users with a series of communication facilities, such as a forum, chat, message system, wiki space, and so on (www.docs.moodle.org). That, Forums allow asynchronous communication, enabling students to interact with peers or professors anytime, as long as there is an internet connection. Forum discussions can cover general interest topics or focus on specific subjects, initiated by any user. In contrast, the Chat system facilitates real-time, synchronized communication among users on the course platform. The messaging system supports private communication between users. Moodle's wiki serves as a collaborative space for students to engage in group activities, making it suitable for seminars or project work.

2. METHODS

This research was used a descriptive qualitative approach, focusing on students from Universitas Muhammadiyah Sumatera Utara who were utilizing the Moodle Learning Management System (LMS). The researcher identified and selected 10 students who met specific criteria, emphasizing active and consistent involvement in the online learning process through Moodle. These criteria were established to ensure participants' familiarity with Moodle and were recommended by computer science lecturers. During the recruitment process, the researcher deliberately selected individuals who aligned with the study's objectives, and interview schedules were arranged. The interview sessions, spanning about a week at Universitas Muhammadiyah Sumatera Utara, were conducted by the researcher using interview guides as instruments. These guides, following the standard three-phase structure of interview preparation, process, and evaluation, facilitated the collection of data pertaining to issues commonly encountered in research utilizing interviews. The study participants provided information during the interviews, and their statements were considered

essential factors for the subsequent analysis, resulting in cumulative findings. To ensure data accuracy, the researcher utilized an audio recorder during the interview sessions.

After collecting the data, the researcher made an analysis from the data that has been gotten by using the theory of (Miles, Huberman, & Saldana, 2013), stating that the activity in data analysis consists of three stages, there were:

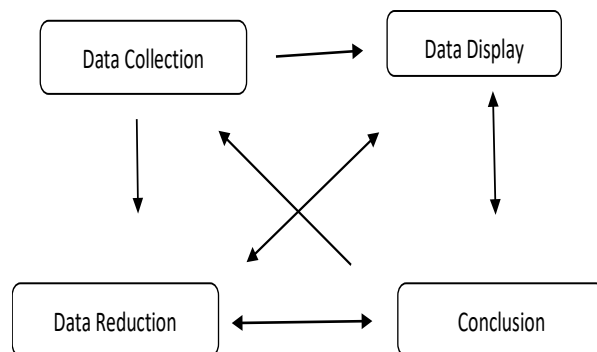


Figure 1. Data Analysis of the Research

3. FINDINGS AND DISCUSSION

This learning management system has been applied in many universities, including Universitas Muhammadiyah Sumatera Utara, by using Moodle as a learning management system. Moodle, being an open-source platform, requires students to be well-acquainted with its use by instructors in the teaching and learning processes. To assess students' cognition, various indicators, such as recognition, stimulation, experience, knowledge, motivation, social interaction, understanding, acceptance, response, and future solutions related to Moodle as a learning management system, were identified. These indicators were established based on expert definitions of cognition and were further explored through interviews conducted by the researcher with 10 students across eight semesters in various faculties at UMSU who engaged in learning through Moodle.

3.1 Student's Perception of the Understanding of Moodle

Understanding someone's perception of Moodle requires the respondent to answer the researcher's questions and be familiar with what Moodle is. If the respondent lacks this understanding, they won't be able to effectively respond to the researcher's inquiries. In the context of this research, students are capable of supplying answers to the questions posed by the researcher. While the students' responses exhibit diversity, they share the same underlying intention as Moodle itself. The various responses from students are documented in the table below.

Table 1. Students' Perception of the Understanding of Moodle

Students Initial	Students Perception (Understanding)
JKPS	<i>Hmm, I think Moodle is like a website that can help us do the learning process, which can help us as students in doing and collecting tasks. Moreover, we are now facing Covid-19, where a learning management system like this is needed. And as I know before covid19 is come UMSU has been applied Moodle, using it for students to take an attendance list and share the material so they can download it directly.</i>
DO	<i>Hmm, Moodle is the software of e-learning sist</i>
ZT	<i>Hmm, as I know Moodle is a learning system that we are using now. Where Moodle is e-learning software that can develop the appearance of online learning media to be more interesting and also there are features that is really to use.</i>
SM	<i>Hmm, Moodle ya sis. I think UMSU students all understand what Moodle is and its uses, especially since this system has been used with UMSU lately. So, in my</i>

Students Initial	Students Perception (Understanding)
	<i>opinion, yes, it can be said to be one of the learning systems that really helps, sis. Equipped with various features, so we just need to match what we want to use.</i>
WAP	<i>Oh yes, sis, Moodle is one of the learning systems that is currently widely used in various universities, including UMSU as well. I think this Moodle itself is very influential in online learning today. Why do I say that, because with this it can make it easier for us students to access the material as well as lecturers, making it easier for them to provide material and the existing interaction is also quite good, we can see that there are forum and chat features, well where this feature we can use to exchange opinions and even if it is something that we don't understand.</i>
BS	<i>Yes, as we know Moodle it is a learning system that we currently use. Become one of the open sources websites where we are free to use it. With the features that are already available, lecturers make it easier to learn, and we, as students, get material easily. In addition, this Moodle also includes LMS that are widely used, right, brother, because it is easy to use and very helpful for learning at this time</i>

From the results of the interview, it can be concluded that Moodle is a software e-learning that can be used for the teaching and learning process, designed to provide educators, students, and administrators with one secure, integrated system.

3.2 Recognize

The "Message Participants" feature allows users to send private messages to friends, and the "Course Competencies" feature enables users to access the lesson plan and monitor the status of each competency course, among various other Moodle features. Through the utilization of these features, students have become acquainted with their functionality and advantages. As part of this indicator, the researcher inquires whether students are well-versed in the use of Moodle and its available features as a learning system.

Table 2. Students' Perception in Recognizing the Function of Moodle

Students' Initial	Student' Perception (Recognition)
JKPS	<i>As far as I using Moodle I know how to use it well because it is easy to understand. The features also have a name that relates to the function of them.</i>
ZT	<i>Of course I know it sist, I know it from the escort and also my friends that help me if I miss how to apply it.</i>
BS	<i>Hmm, first time I do not understand using it but because there are the directives from lecturer about how to use it and also because it has been the activity so for now I understand it well.</i>
DO	<i>Hmm, of course I know it hehe. Because if I did not known it means that I do not join the learning process. But yaa, for the first time I am still confused but because there is the escort and sometimes if I am in difficult asking my friend's help, yaa as time goes by everyone knows how to use it well.</i>
RA	<i>Of course I know it, because we have been given the instruction, besides that in UMSU we used it as a learning system. Especially, the features are easy to use. But there is also the minus. For example, if all the students access it in the same time makes Moodle error, block us to login.</i>

3.3 The conclusion of the interview results is the features in Moodle have different use and benefits for lectures and students

In the teaching and learning process, educators should use techniques or media on it, because it is one of the ways that can stimulate students' interest in participating in the learning process. In this indicator, the researcher gives questions to students about how they stimulate to be more interested in learning with the system.

Table 3. Students' Perception of Stimulation in Using Moodle

Students Initial	Students' Perception (Stimulation)
JKPS	<i>Actually, without making stimulate we as a student should know that it is important to do, because this is also one of the ways that can know the function of technology now. Besides that, by using this system I myself feel more interested because it helped me in doing activities in the same time.</i>
ZT	<i>Using Moodle as a learning management system motivates me in joining the learning process because I can manage the time, between my work and studying means that I can do it at the same time, do not waste my time. Besides that, students can download the material and discuss it with lecturers and others in the forum available in the website</i>
SM	<i>My way to stimulate myself is, there is a motivation to learn. Especially, using Moodle seems like we do self-study though it is already the explanation from the lecturer. This makes me more interested in learning because it can push us to do critical thinking.</i>
AIN	<i>Actually, I do not have a special way to stimulate myself. But we have known that our obligation as a student is studying. Eventually, Moodle makes the learning system goes easy to use, where ever we want to use it after that collecting the task is easy to do, do not spend money for printing, and getting the material is easy too, therefore Moodle makes me feel interested in the learning process</i>
BS	<i>(I really interested, because it has been my duty to joining the learning process. So yaa, if we really want to study sure we can feel interesting without choose the learning system.)</i>
DO	<i>Yes, I am the type of person who is comfortable with this online learning system, brother, like using Moodle. So, I can learn as well as work with others too, that's what makes me more interested and motivated. This will teach us how to manage our time.</i>
WAP	<i>Hmm, I personally, sis, I'm motivated because of the ease, sis</i>

In the ninth semester at UMSU, students have reported that the implementation of Moodle as an LMS has the potential to inspire and generate interest in their active participation in the learning process. However, it is noteworthy that certain students provided feedback expressing a reduced level of interest in utilizing Moodle. Nevertheless, a significant majority of students affirm that this system effectively stimulates their enthusiasm for engaging in the learning process. The outcomes of the researcher's interviews lead to the conclusion that the use of Moodle as a learning management system successfully sparks students' interest, fostering enthusiasm by ensuring a non-monotonous learning experience.

3.4 Knowledge

Based on the students' responses to the researcher's question on Moodle, it is clear that they are familiar with the platform and understand how to use it effectively. With this metric, the researcher probes participants' subjective experiences with the ease and rationale of content comprehension. Students consistently show a strong desire to be an active participant in their own education. On the other hand, pupils face the following challenges:

Table 4. Students' Perception in Understanding the Material by Using Moodle

Students Initial	Students' Perception (Knowledge)
JKPS	<i>Actually, it depends on the lecturers, because by downloading the material does not mean we can understand the material directly. So, need more explanation to make us understand well.</i>
BS	<i>In my opinion, understanding the material by using Moodle is easy because it is more efficient. Whereas, I feel difficult sometimes but I can handle it. Depends on us. Whatever we are using if we want to study of course we can understand it</i>
ZT	<i>Hmm, depends on us. For example, the material being given contain some difficult words and it sometimes makes me do not understand. But I feel using this Moodle is more efficient, eventually, the learning system needs technology to support the learning process.</i>
SM	<i>Hmm, understanding the material depends on us. If you ask about me, I feel difficult to understand it, because we are given the material and also questions, for example, the content of material we do not understand well but the question has been given automatically makes us feel difficult to answer them. That is one of the lacks of using Moodle, for the explanation that is given is less, especially for me, I am the type of student that must be explained directly so I can understand it faster.</i>
WAP	<i>Understanding the material depends on the material too. Because when the lecturer gave it without more explanation sometimes it can make me not understand the material well. Besides that, the server problem is a serious problem because if student access Moodle at the same time the server will be an error even if we can't download and fill attendance. But accepting material is very easy, depending on our network. If we had a bad connection means that we download the material slowly.</i>

Based on the feedback received, it can be deduced that the utilization of Moodle brings about both positive and negative consequences for students. Within the Moodle system, students faced challenges related to server issues, the clarity of lecture explanations, and network limitations. So when the server or network is not good the students cannot access the Moodle and cannot download the material. Not only that, fewer explanations from lecturers can cause students to not understand the material well.

3.5 Motivation

In this indicator, the researcher asks the following question "Does using the Moodle learning system motivate you to be more interested in participating in the teaching and learning process? Why?". From the result of several student interviews, they responded that Moodle as a learning management system is a new one that can make most students feel helped because they do not waste their time doing their activity. While a small number of students may offer differing responses, the collective feedback implies that, on the whole, students express a heightened interest in participating in the learning process through Moodle .

Table 5. Students' Perception of Motivation in Using Moodle

Students Initial	Students' Perception (Motivation)
JKPS	<i>Hmm, actually regarding my interest maybe needs time, because we do not know what is next. But, at this time I feel like I am interested in this system because like I said before it can help us in doing something in the same time.</i>
BS	<i>Of course sis, like I said before, I will be more motivated because I can keep working and study in the same time.</i>
SM	<i>Like I said before sist, using this system makes me more interested and motivated to study. Because it is very efficient and easy to use. Although, the bad network can affect us in accessing Moodle sometimes.</i>
AIN	<i>Hmm, of course, motivated because it is our responsibility in joining the learning. Using this helps us in doing others easily, managing time and money for the pay-to-campus, and task printing.</i>
DO	<i>With an adequate Moodle display can motivate me more also in learning sis</i>

3.6 Social Interaction

The use of Moodle as an LMS weaves together the interactions between students, professors, and other students. Hence, it is safe to say that Moodle is still a great tool for encouraging student-to-student and student-to-lecturer communication. When students engage with the lecturer by paying attention and asking questions, especially when they meet parts of the material that are new or unclear to them, these exchanges take place. The forum that is accessible in all materials allows for the inclusion of responses or inquiries. Specifically, the researcher is interested in knowing whether or not Moodle facilitates communication and collaboration between instructors and their students.

Table 6. Students' Perception of the Interaction in Using Moodle

Students Initial	Students Perception (Interaction)
JKPS	<i>I think the interaction will go well depending on us. Because you know that, in Moodle, there is a chat feature and a forum that can we use to communicate with other friends, and in the forum we can communicate with the lecturers. So, the interaction will go well depend on ourselves. We can ask whatever about the material and also give our opinion there.</i>
SM	<i>Hmm, interaction happened depends on our responding, means that how the students respond their friends each other. And the interaction between students and lecturers started from how students respond their lecturer explanation when she/he deliver the materials. So means like it is not enough because the communication indirectly.</i>
RA	<i>In my opinion, the interaction still goes well. Because if we want to ask we just type whatever we want to asked, the good interaction not must be happened in face to face, by using Moodle we can do it, interact with our friends is by doing opinion changes, sharing whatever we have not understood, especially in group task is very helped to increase our interaction I think.</i>
DO	<i>The interaction went well, the lecturer responded to questions from students actively in the forum. So it is just like learning directly.</i>
WAP	<i>In my opinion, it's quite good, sis, because by using this we can immediately get feedback from lecturers and other friends even though sometimes it is constrained by the same network as well</i>
AIN	<i>Yes, that's it, sis, the interaction using Moodle I think is lacking also because of the large number of students who ask so the question is that sometimes there are answered, some are drowned, and also in the forums that have been provided are less effective too sometimes sis, because of the negligence of students not using the forum properly</i>

Interaction can be developed depending on how is their responsibility in the surroundings. Because interaction can be established when they can pay close attention to each other.

3.7 Acceptance

In this indicator, the researcher asks the question about the exception of material that uses model.

Table 7. Students' Perception of the Acceptance of Material by Using Moodle

Students Initial	Students' Perception (Acceptance)
AIN	<i>(If you receive the material, it will be easy, brother, but if you understand it takes time, brother, it depends on the explanation of the lecturer as well)</i>
BS	<i>Now here's the main problem from Moodle, if our network is bad then we can't access and download existing material</i>
SM	<i>Receiving material is definitely much easier, sis, because we can download it directly. If to understand a material, yes, surely each of us needs time for a deep understanding.</i>
ZT	<i>Well, here it is sis, the lack of this Moodle is right sis if for example like at my home the network is again ugly it affects me sis to access this Moodle, you have to be fast also with others to access it if you don't error the server sis. So, if you understand the material that has been given, it is difficult and easy, brother, it depends on our focus. Receiving material is definitely much easier, brother, depending on the network.</i>
WAP	<i>Yes, it is very easy to accept the material because we can access it directly by downloading the material that is available in Moodle features.</i>
DO	<i>Getting the material is easy by using this system, because we just download the material that is shared by lecturer, although the network problem.</i>
RA	<i>In my opinion, accepting the material depends on the network because sometimes the server will down so we must wait for it. And for the materials that are given it is okay, the problem is on the new vocabulary for me, but I can handle it by asking the lecturers or searching in Google.</i>

From the student responses, most of the students said that the main problem in accepting the material is the network. Especially, the students that live in the village, sometimes the network there cannot access the internet. Then the researcher found that some students choose face-to-face learning then this system. It is caused by the obstacles experienced by students. . From the interview findings, it can be inferred that students encounter challenges in comprehending material through Moodle when they experience poor network connectivity.

3.8 Experiences

Using Moodle as a learning management system is a new one for students. In this indicator, the researcher asks the following question: how about the experience during learning all of the material with Moodle. Based on the above question conducted by the researcher on students the ninth semester at UMSU who have used Moodle as a learning management system, responds as follows:

Table 8. Students' Perception of the Experience of Using Moodle

Students Initial	Students' Perception (Experience)
AIN	<i>Based on my experience, everything is okay, brother, because this system is also very helpful for online learning and managing our time to still be able to do other activities by studying simultaneously.</i>
BS	<i>Yes, as far as I use it is okay. Finally, we can use the technology well in supporting education though Moodle is complete enough, and the features on it can make us easy to apply it.</i>

JKPS	<i>In my opinion, since Moodle was used I feel helped. As I said before I am a worker and student too. Using this system helped me keep doing both of them at the same time, collecting the task and just uploading it, so it can be done in my workplace too.</i>
ZT	<i>Based on my experience as far I use it overall is okay, yaa the problem is we need a best network to access it, more over we need to be patient because when the students try to access it the same time it can makes the server down, so I think like that hehe.</i>

3.9 Response

The research question on this indicator is about the students' responses when learning was determined to use Moodle as a learning management system. In this question above generate responses from students themselves, including the following:

Table 9. Students' Perception of the Response to Using Moodle

Students Initial	Students' Perception (Response)
DO	<i>Hmm, I think it is okay if the system will do for next. But the notes are we use it just for giving and collecting the task and material. For the explanation, it will be good directly so the students have a good understanding.</i>
RA	<i>I personally agree with this, because it is more efficient and can balance my activity too.</i>
ZT	<i>I agree with that because it can make students easy to access the material directly, collecting the task and lecturer they can share their material in the website.</i>
SM	<i>Hmm, I think if this system is used next there will pros and cons, why I said that, is because by using Moodle the explanation is still not enough, but accessing the material and filling the attendance is very helped., besides we can economize times, money and also doing others activity.</i>
WAP	<i>In my opinion, it's also good for sis if for example this is continued because it makes it easier for lecturers to provide material and also makes it easier for students to collect assignments. No more hassle gatherings here and there. But I think face to face learning is more effective, sis, not always we can expect this system to support learning. I mean, yes, there must be more considerations if you want to continue or establish it as a learning later.</i>

It can be concluded from some students' responses regarding Moodle as a learning management system is good to apply because some features can be useful in collecting the task easily.

3.10 Solutions for Moodle as a learning management system going forward

Moodle is an e-learning software that can be used for the teaching and learning process. It is designed to provide educators, students, and administrators with one secure, integrated system. In applying this research in the ninth semester at UMSU, some features of Moodle were used. The research question is about students' solutions for Moodle. Based on the results of interviews conducted by the researcher, all students provide suggestions regarding Moodle going forward, including the following:

Table 10. Students' Perception about the Solution for Moodle

Students Initial	Students' Perception (Solution)
SM	<i>Improving the Moodle server will also help users be more excited in using it</i>
JKPS	<i>Improving the server, the quality of the web so that it is more enjoyable in following the learning</i>
BS	<i>Nah, the solution for this system is increasing the server. Sometimes if we access it in the same time, it will be down. I am fed up with that, there we struggle to get the material wkwk, I think that's all sist.</i>

RA	<i>Yeah, I hope the system was increased. Of course, time by time everything needs improvement so it is not boring to use, increasing the available features or adding the feature that needed for the improvement.</i>
WAP	<i>The solution is increasing the server more, and if it can the appearance made more interested to prevent ennui.</i>

From the interview results the researcher, produced some responses which can be concluded that Moodle as a learning management system can make us manage time easily, especially for students who have a job they can balance their studies and theirs' job in the same time. The solution regarding Moodle as a learning management system from student responses hopefully can be used in forward by upgrading the server and adding more features that can support the learning process more efficiently to do.

Discussion

The main research objective of this study was to students' perception of using Moodle as a learning management system during the ninth semester at Universitas of Muhammadiyah Sumatera Utara. Perception is the process by which people sense, select, organize, and interpret information, to form a subjectively meaningful picture of the world so as to identify, retrieve, and respond to the information (Broadbent & Poon, 2015). By knowing the students' perception of using Moodle, this research can get the result by doing interviews. In finding students' perceptions, there were some indicators that determine perceptions, including Understanding, Recognize, Make Stimuli, Knowledge, Motivation, Social Interaction, Acceptance, Experience, Response, and Solutions in using Moodle go forward. From all the indicators that researcher used in an interview get the results, some students agree that moodle can be an effective learning management system, increasing their motivation by using it because they can manage their time and save their money in printing fees. Getting the material was easy but sometimes depends on the network.

Moodle can stimulate them to joining the learning process. Whereas, the connection can effect the learning process and the interaction between each other, the server also down if the students tried to access it in the same time. But overall, they think moodle can be one of the best learning management system in the future because of the useful features on it and can make us easy in the learning process. This supports the findings of Chania et al. (2022), which explain the effect of using Moodle application e-learning on the learning outcomes of class X students of SMAN 1 Batang Kapas. According to Chania, the results of the research and data analysis indicate that there is a difference in the learning outcomes between the experimental class (using the Moodle application) and the control class (without using the Moodle application). The learning outcomes of students in the experimental class (using the Moodle application) are higher than the learning outcomes of the control class (students not using the Moodle application). The learning outcomes percentage using the Moodle application for the experimental class is 97%, while in the other hand, it is 71%. Similarly, the research findings of Fadillah, it was stated that "the use of Moodle e-learning media has been proven to result in better student learning outcomes compared to the use of worksheets (A. I. Fadillah et al., 2020).

The results of this study are comparable to those of earlier studies, according to the debate. The results of this study demonstrated that moodle is a well-received LMS. The perspective of students in an online English learning environment during the COVID-19 epidemic was determined in a study by Azzahra (2021). This indicates that the overall learning process was affected by the LMS use, including aspects such as system quality, features and display, perceived utility, English competency, and satisfaction. According to the results, students had a positive impression of the LMS and found it enjoyable to use. In this study, students also reported that the material was engaging as they learned it. Nonetheless, the focus of (horvat, dobrot, krsmanovic, & cudanov, 2013) was on the significance and satisfaction of moodle as a learning management system, as demonstrated by both male and female students. Both this study and its predecessors have shown that the majority of students think that

Moodle is a great tool for managing their coursework. To make moodle more effective in the future, you need to develop the features and the server.

4. CONCLUSION

Students' perception of using Moodle as a learning management system in the ninth semester in Universitas Muhammadiyah Sumatera Utara have a perception that Moodle can be said as an effective learning resource when supported by adequate infrastructure such as a good network and increasing server. Then Moodle can motivate students to join the learning process because Moodle and its features is easy to use and also make them can manage their time in the same time. The advantages of using Moodle as a learning management system based on students' perception are: When using this LMS students felt easy to get the material because they log in and access it, By using it, students more interested in joining the learning process, Moodle is one of the best learning management systems because that features on it has the function in helping the learning process, Besides that, it can help them in managing time and do not need to spend their money in printing fee, The disadvantages of using Moodle as a learning management system based on students are The Moodle depends on the connection that we have, if it in trouble we cannot access and get the material from Moodle, The explanation by using Moodle is not good enough, because the lecturers just share the papers, The interaction of each other does not goes well, that the learning process was done by using the website. The relationship of this research takes a very limited subject regarding the use of Moodle using qualitative methods, so the researcher suggests that other researchers carry out further research with different methods and different samples to draw conclusions and generalizations.

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