

APPLYING THE TECHNOLOGY ACCEPTANCE MODEL TO GAUGE UNDERGRADUATE STUDENTS' PERCEPTIONS OF USING LEARNING MANAGEMENT SYSTEMS IN ENGLISH CLASS

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Abstract: The transmission of covid-19 has challenged English lecturers to transform offline learning into entirely online learning. In managing the classroom virtually, the lecturer utilized a learning management system. Hence, this research aimed to figure out the students' perception of using the Learning Management System during the COVID-19 Pandemic among second year students of English Language Education FKIP UIR. The Learning Management Systems used in this research are limited to using of Google Classroom and CERDAS. The indicators of students' perception to the Learning Management Systems in this research are Usefulness, Ease of Use, Ease of Learning, and Satisfaction. This research used the Quantitative method to analyze the data. To collect the data, the researchers used a questionnaire as the instrument of this research. In analyzing the data, the researchers employed the assessment scale. The results for all indicators categorized 'agree'. Consequently, the study can be implied that the learning and teaching process through LMS can be accessible and useable.

Keywords: lms, perceptions, tam

INTRODUCTION

Indonesia is one of the countries that face the Covid-19 pandemic. The majority of people realized that for the time being of the pandemic Covid-19, so many fields experience the troubles such as public health, economics, politics, and education fields. According to Daniel (2020), Covid-19 is the most significant educational challenge that lecturers and students have ever been involved. Indeed, it is so difficult to live and survive in this situation. But the educators should manage the situation and survive the education aspect to minimize the negative impact on the students or young generations.

The main aspect of the teaching-learning process is the way the lecturer or the educators can transfer the knowledge to the students well because the lecturer is the facilitator that will guide the students to achieve the knowledge efficiently. In an ordinary situation or before the Covid-19 pandemic, the teaching and learning process that taught by the lecturer is how the lecturer can transfer the material and idea directly with a clear explanation and gesture from the lecturer. But, during the Covid-19 pandemic, the teaching and learning process uses another way of educational process in the class. Lecturers and students should use technology (Etfita & Wahyuni, 2020) or



adopt other kinds of the best method in learning (Ardini & Saputri, 2022), for example, is using Learning Management systems to assist the teaching and learning process.

According to Aldiab Abdualaziz, Chowdhury Harun (2019), Learning Management System is a general online platform that can be used by the teacher, students, and educators as an educational service. Thus, we can know it is beneficial, especially in a pandemic situation such as the condition we are now experiencing. Since Learning Management Systems provide many Applications with some benefits, it is used by all people, especially educators.

According to Kraleva., et al (2019), Learning Management Systems is created as a flexible and practice e-learning environment. furthermore, Learning Management Systems are also very helpful and very simple to use. According to Ortiz Sergio (2019), the students can use Learning Management System by using their smartphone, which is the tools or application that is available to access learning even from the distance. additionally, Learning Management Systems are the systems by technology that give the freedom to the user to control and keep their own way to create and share the material(Aldahwan,2020).

Meanwhile, Tagreed Kattoua et al., (2016) state that Learning Management Systems serve many ways to share the instruction and resources to the students for learning. Using Learning Management Systems can help teaching and learning more efficient and improve the ability to use the benefit of modern technology.

There are various kinds of Learning Management Systems, such as; Moodle, Edlink, Edmodo, Google Classroom, etc. The lecturers and students can use one of the Learning Management System to support the teaching and learning during the Covid-19 pandemic. Universitas Islam Riau is one of the Institutions that used a Learning Management System in the teaching and learning process during the Covid-19 pandemic. The Learning Management Systems that are used in Universitas Islam Riau are Google Classroom and the Learning Management Systems created by Universitas Islam, named CERDAS.

According to Ketut (2019), Google Classroom is one of the Learning Management Systems that created by Google for teachers. This application is the tool of communication between the teacher and students and facilitates the learners. Additionally, Google Classroom is a free web service platform that can we use for online learning which is can be an effective tool for communication between the teacher ans students (Vasanth & Sumathi, 2020). Then, Google Classroom especially created to help the teacher to submit the assignments without using the paper, saving more time, and easy to install on the mobile phone (Setiadi, 2020).

Google Classroom can be an effective presentation and content of the material, manage, and organize the assignments and facilitate the indirect communication between the teacher and students in teaching and learning process, cited by Willy.,et al(2018).



The same way with Google Classroom, CERDAS is one of the Learning Management Systems that created by Universitas Islam Riau. Which is seems like an online platform that can be used by the lecturer and students in teaching and learning process. CERDAS can help the lecturer to share the materials and control the attendance of the students.

CERDAS or Center Of E-Learning and Education For Students is the application or the tools that support by the technology to support the teaching and learning process which can be a helpful media for lecturers and students especially during the Pandemic COVID-19 or online learning. By using CERDAS, the lecturer can share the material, live stream discussion, and monitor the students' attendance. CERDAS integrated with SIKAD or Sistem Akademik Mahasiswa, which is the students who done entry learning plan and SIKAD automatically can access the CERDAS application without putting or taking another code and can join the live streaming discussion.

Besides, there are also student perspectives on the use of Learning Management Systems as a learning medium. Their perceptions influence the significance of LMS and how they use it to obtain information. Perception is something that person thinks about after hearing and seeing something. It will appear when someone has the interaction directly after seeing and hearing something. Perception can be a negative or positive side depending on something that happened or appeared naturally. Someone's perception will be assumed that person to face and handle the emotion or handle the situation. The perception is also the one that solves the problem. Furthermore, according to Yunita Wisma (2020), perception is the people's reaction to the individual environment based on knowledge and experience.

Perception also connects to something. For example the perception of the online learning felt by the students. The online learning also supports by technology as the learning media which is include on Technology Acceptance Model (TAM). TAM was discovered by Davis in 1989. According to Davis (2013), perception include perceived usefulness and perceived ease of use which are the perceived usefulness means the system can help the user on the user's work and perceived ease of use means the system can operate easily. Then TAM also affecting the 'perceived ease of use and usefulness (Guritno and Siringoringo, 2013). In addition, Pertiwi.,et al (2020) state Perceived usefulness consider to the use of technology and can improve the performance when do the job. Then perceived ease of use is how technology can easy or effortless to use.

Furthermore, Qiong (2017) mentions three stages of the perceptions process;1)Selection, in this stage after receiving the ideas from the environment, 2) Organization, try to organize the idea and make own opinion, 3)Interpretation, select the idea and organize the idea and information then give the feedback by express what the impression about the previous idea or



information. Then, according to Samuel (2016), there are two things that can give impact the formation of perception, such as; 1) Internal Factors and 2) External Factors.

Based on the explanation above, it is realized that the use of Learning Management Systems has a possibility to influence the students learning process. Thus, this study is undertaken to investigate the students' perceptions of Google Classroom and Cerdas as their medium in learning English.

METHOD

The researchers used Quantitative method to describe the Students' Perception of using Learning Management Systems during the COVID-19 pandemic at Second Year Students of English Department FKIP UIR. Where the data was described objectively or based on the questionnaire. The population and sample of the research is all the second semester students of English Department of FKIP UIR because the total of students at second year semester is 65 students and less than 100 students.

The instrument used in this research is questionnaire. According to Muhammad & Kabir (2018), a questionnaire is an instrument that includes some questions to get the respond from the respondent in the research. In this research, the researchers adapted the questionnaire by Oktaria Annafi Annanda (2021) which consist of some indicators. The total items of the questionnaire are 16 statements using a five-Likert-scale from Pranatawijaya, Widiatry, Priskila, & Putra (2019). They are Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4) and Strongly Agree (5). Furthermore, the questionnaire used in this research is the closed questionnaire and will be given to the students by using Google form and printed.

The first indicator is about the usefulness of Google Classroom and CERDAS which are included in the questionnaire number 1-4 and the total is 4. The second indicator is about the Ease of Use of Google Classroom and CERDAS which is included in questionnaire number 5-10 and the total is 6. The third indicator is about Ease of Learning of Google Classroom and CERDAS included in questionnaire number 11 and the total is 1. The last indicator is Satisfaction of Google Classroom and CERDAS which is included in the questionnaire number 12-16 and the total is 5.

Finally, afther gathering the data from questionnaire, the researchers calculated the students' individual scores from the questionnaire use the following formula of Likert scale:

 $T \times Pn$

Description:

T: The total number of respondents who voted

Pn: Likert scale score numbers selection



Furthermore, to categorize the each items of questionnaire the researchers use formulation as follows:

Total score = the sum of the results of each TxPn

Maximum score = number of respondents x highest Likert score

Minimum score = number of respondents x lowest Likert score

Indeks (%) = (Total score / Maximum score) x 100

Furthermore, the result of the score is calculated by using the formula of the Likert scale and then categorized to the following interval rating to get the perception of each item.

Table 1. Rating Interval

Option	Percentage		
Strongly Disagree	0% - 19.99%		
Disagree	20% - 39.99%		
Neutral	40% - 59.99%		
Agree	60% - 79.99%		
Strongly Agree	80% - 100%		

FINDING AND DISCUSSION

The aim of this research is to know the students' perceptions of using learning management systems during the covid-19 pandemic among second-year students of the English Language Education FKIP UIR. Data presentation presents the data obtained from students' perceptions of using learning management systems during the covid-19 pandemic among second-year students of the English Language Education FKIP UIR which is taken through the questionnaire. The data took from second-year students of the English department FKIP UIR which is a total student is 65 students in the population and sample because the total of students is less than 100 students. After obtaining the data, the researchers indicates the data according to the response of the students' statements from the questionnaire that has been shared via Google form and printed as follows.

The questionnaire's result in this research is about the result of the four indicators in the questionnaire, which is about the Usefulness, Ease of Use, Ease of Learning, and Satisfaction. The result took from questionnaire based on the Google form and printed and count by using Likert Scale's formula as explained in the chapter three (page 25-26). The data processed and the result as explained as follows.



No	Indicators	Statement	Total	Max Score	%	Categorized
1	Usefulness	1	184	325	56.61	Neutral
		2	166	325	51.07	Neutral
		3	205	325	63.07	Agree
		4	208	325	64	Agree
		Mean	190.75	325	58.68	Neutral
2	Ease of Use	5	197	325	60.61	Agree
		6	200	325	61.53	Agree
		7	217	325	66.76	Agree
		8	175	325	53.84	Neutral
		9	179	325	55.07	Neutral
		10	209	325	64.30	Agree
		Mean	196.16	325	60.35	Agree
3	Ease of Learning	11	210	325	64.61	Agree
4	Satisfaction	12	182	325	56	Neutral
		13	209	325	64.30	Agree
		14	185	325	56.92	Neutral
		15	204	325	62.76	Agree
		16	213	325	65.53	Agree
		Mean	198.6	325	61.10	Agree

Table 2. Questionnaire Data Processed

Table 2 shows the result of the perceptions for the use of Learning Management Sytems second-year students of the English department FKIP UIR. From the 16 statements, most of the them are categorized into neutral and agree. In which, the neutral category's frequency that is chose by the students are 6 statements and agree category' are 10 statements.

Moreover. there are 6 statements that fall into neutral's categorized. First, a statement that mention "The Learning Management Systems (*Google Classroom and/or CERDAS*) help students to understand the materials". Then, second statement about "The Learning Management Systems (*Google Classroom and/or CERDAS*) help students become more productive". After that the eighth statement which tell about "Students can use the Learning Management Systems (*Google Classroom and/or CERDAS*) without written interactions". Next is the ninth statement about "The Learning Management Systems (*Google Classroom and/or CERDAS*) facilitates the students to see the scores automatically after submit the assignments". Then, the twelfth statement about "Students are satisfied to use with the Learning Management Systems (*Google Classroom and/or CERDAS*) features in learning process", and the last is the fourteenth statement which asked about" The Learning Management Systems (*Google Classroom and/or CERDAS*) features in learning Management Systems (*Google Classroom and/or CERDAS*) features in learning process", and the last is the fourteenth statement which asked about" The Learning Management Systems (*Google Classroom and/or CERDAS*) work as expected".



In addition, there are 10 statements that in agree's categorized. They are the third statement "The Learning Management Systems (Google Classroom and/or CERDAS) are useful in learning process", the fourth statement "The Learning Management Sytem (Google Classroom and/or CERDAS) makes students flexible in time and place to do the learning process", the fifth statement "The students are easy to use the Learning Management Systems (Google Classroom and/or CERDAS) to interact with lecturer and friends", the sixth statement "The Learning Management Systems (Google Classroom and/or CERDAS) are simple to utilize", the seventh statement "The students easy to understand how The Learning Management Systems (Google Classroom and/or CERDAS) works", the tenth statement "Students learn how to use Learning Management Systems (Google Classroom and/or CERDAS)", the eleventh statement "Students easily remember how to use Learning Management Systems (Google Classroom and/or CERDAS) in learning process", the thirteenth statement "The Learning Management Systems (Google Classroom and/or CERDAS) are worth to use for students in learning process", the fifteenth statement "The students have got a new experience in learning process using Learning Management Systems (Google Classroom and/or CERDAS)", then the sixteenth statement" The Learning Management Systems(Google Classroom and/or CERDAS) are recommended to students in learning process".

Of the 4 indicators included in the 16 previos statements, the usefulness indicator for item number 1-4 is categorized as neutral, the ease of use indicator for item number 5-10 is categorized as agrees, and the ease of learning indicator for item number 11 is categorized as agrees and for the item number 12-16 of satisfaction indicator is categorized as agree.

The researchers conclude that most students agree with using Learning Management Systems during the COVID-19 pandemic. This finding is appropriate to the statement by Maharani (2021). She found that the Learning Management Systems (Google classroom) can support and easy for students in the learning process. Furthermore, the Learning Management System also gives satisfaction to implementing online learning by involving synchronous learning through the technology stated by Rizal, R, Rusdian, D, Setiawan, W, Siahaan (2020).

CONCLUSION

The researchers conclude that the most students agree of the using Learning Management System during the COVID-19 Pandemic. it showed from the result of the students' responses from the questionnaire that already given by the researchers. Based on the result of students' responses on the questionnaire, the researchers conclude the average index



percentage of each indicator which the Usefulness indicator was 58.68% (Neutral), Ease of Use indicator was 60.35% (Agree), Ease of Learning Indicator was 64.61% (Agree), and Satisfaction indicator was 61.10% (Agree). It conclude that the most of students give a good perception of the using Learning Management Systems in the learning process during the Covid-19 Pandemic.

REFERENCES

- Aldahwan, N. S. (2020). Use of Artificial Intelligent in Learning Management System (LMS): A Use of Artificial Intelligent in Learning Management System (LMS): A Systematic Literature Review, (December).
- Aldiab Abdualaziz, Chowdhury Harun, D. (2019). Utilization of Learning Management Systems (LMSs) in higher education system: A case review for Saudi Arabia. *Energy Procedia*, 160(2018), 731–737. https://doi.org/10.1016/j.egypro.2019.02.186
- Ardini, S. N., & Saputri, H. T. (2022). The Implementation of Autonomous Online Learning to Enhance Academic Writing Competence during Covid-19 Pandemic. *Journal of English Educational Study (JEES)*, 5, 1–10.
- Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1), 91–96. https://doi.org/10.1007/s11125-020-09464-3
- Davis, F. D. (2013). Information Technology Introduction, 13(3), 319-340
- Etfita, F., & Wahyuni, S. (2020). Developing english learning materials for mechanical engineering students using padlet. *International Journal of Interactive Mobile Technologies*, 14(4), 166–181. https://doi.org/10.3991/IJIM.V14I04.12759
- Guritno, S., & Siringoringo, H. (2013). Perceived Usefulness, Ease of use, and Attitude Towards Online Shopping Usefulness Towards Online Airlines Ticket Purchase. *Procedia*- Social and Behavioral Sciences, 81, 212–216. https://doi.org/10.1016/j.sbspro.2013.06.415
- Kattoua, T. (2016). A Review of Literature on E-Learning Systems in Higher Education, 7(5), 754–762.
- Ketut, S. (2019). The use of Google classroom in the learning process The use of Google classroom in the learning process. *Conference Series*. https://doi.org/10.1088/1742-6596/1175/1/012165
- Maharani, N. (2021). Penggunaan Google Classroom Sebagai Pengembangan Kelas Virtual dalam Keterampilan Pemecahan Masalah Sebelum dan Saat Pandemi, 5(1), 23–29.

Muhammad, S., & Kabir, S. (2018). Preparing questionnaire, (June).

Oktaria Annafi Annanda, R. L. (2021). Students €Tm Perceptions Of Using Google ClassroomDuringTheCovid-19Pandemic,2(2),153–163.Https://Doi.Org/10.12928/Ijemi.V2i2.3439



- Ortiz Sergio, G. M. (2019). Trends And Patterns Of Mobile Learning : A Study Of Mobile Learning Management System Access Mobile Devices in Distance Learning, (January), 161–176.
- Pertiwi, D., Suprapto, W., & Pratama, E. (2020). Perceived Usage of E-Wallet among the Y Generation in Surabaya Based on Technology Acceptance Model, 22(1). https://doi.org/10.9744/jti.22.1.17-24
- Pranatawijaya, V. H., Widiatry, W., Priskila, R., & Putra, P. B. A. A. (2019). Pengembangan Aplikasi Kuesioner Survey Berbasis Web Menggunakan Skala Likert dan Guttman, 5(November), 128–137. https://doi.org/10.34128/jsi.v5i2.185
- Qiong, O. U. (2017). A Brief Introduction to Perception, 15(4), 18–28. https://doi.org/10.3968/10055
- Rizal, R, Rusdian, D, Setiawan, W, Siahaan, P. (2020). Jurnal Pendidikan IPA Indonesia Students 'Perception Of Learning Management System Supported Smartphone: Satisfaction Analysis In Online Physics Learning, 9(4), 600–610. https://doi.org/10.15294/jpii.v9i4.25363
- Setiadi, M. A. (2020). Students ' Perception On The Use Of Google Classroom In Language, (August).
- Vasanth, S., & Sumathi, C. S. (2020). Learning Management Systems through Moodle and Google Classroom for Education, 21(10), 32–37. https://doi.org/10.9734/AIR/2020/v21i1030249
- Willy, Prastiyo, Djohar As'ari, P. (2018). Development Of Youtube Integrated Google Classroom Based E-Learning Media For The Light-Weight Vehicle Engineering Vocational High School. *Jurnal Pendidikan Vokasi*, 8(1), 53–66.
- Yunita Wisma, M. I. (2020). Students 'Perception On Learning Language At The Graduate Program Of English Education Amids The Covid 19 Pandemic, 2069(6), 107–120.