THE EFFECTIVENESS OF USING LMS SIPDA COMPARED WITH THE GOOGLE CLASSROOM LMS IN THE DEPARTMENT OF COMMUNITY EDUCATION UNIVERSITY OF THE STATE OF MEDAN

Frisk Indria Nora Harahap [1*], Jubaidah Hasibuan [2], Mahfuzi Irwan [3], Aisyah Anggreni [4], Jihan Sunita [5]

[1,2,3,4,5] Community Education, Medan State University, South Sumatera, Indonesia

[1] friskaharahap@unimed.ac.id*, [2] jubaidahhasibuan02@gmail.com, [3] mahfuziirwan@gmail.com, [4] aisyahanggreni346@gmail.com, [5] sunitajihan5@gmail.com

Abstract

In online learning that uses e-learning, whether it is effective or not is largely determined by the effectiveness of the LMS model used. This study aims to describe the effectiveness of using LMS SIPDA compared to LMS Google Classroom at the Department of Public Education, State University of Medan. The assessment indicators used in this study include indicators of teaching quality, level of teaching, intensity, and time. The research method used is quantitative research with a descriptive approach. The research instrument used in this study was a questionnaire distributed via Google Form. The data analysis technique of this research used descriptive quantitative analysis in the form of percentages. The results obtained an average of 77.66% with the category agreeing that the level of effectiveness of using SIPDA LMS is higher than Google Classroom. So it can be concluded that users feel more effective in using SIPDA LMS than Google Classroom, with a negative value on internet connection (WiFi or Internet Quota) in accessing SIPDA LMS which is much stronger and more stable than accessing Google Classroom.

Keywords: Effectiveness, LMS SIPDA, Google Classroom

Abstrak

Dalam pembelajaran daring yang menggunakan e-learning, efektif atau tidaknya sangat ditentukan oleh keefektifan model LMS yang digunakan. Penelitian ini bertujuan untuk mendeskripsikan efektivitas penggunaan LMS SIPDA dibanding dengan LMS Google Classroom pada Jurusan Pendidikan Masyarakat Universitas Negeri Medan. Indikator penilaian yang digunakan dalam penelitian ini meliputi indikator mutu pengajaran, tingkat pengajaran, intensif, dan waktu. Metode penelitian yang digunakan yaitu penelitian kuantitatif dengan pendekatan deskriptif. Instrumen penelitian yang digunakan dalam penelitian ini adalah angket yang disebar melalui Google Form. Teknik analisis data penelitian ini menggunakan analisis kuantitatif deskriptif dalam bentuk persentase. Hasil penelitian memperoleh rata-rata 77,66% dengan kategori setuju bahwa tingkat efektivitas penggunaan pada LMS SIPDA lebih tinggi dibanding Google Classroom. Sehingga dapat disimpulkan bahwa pengguna lebih merasa efektif pengunaan pada LMS SIPDA dibanding Google Classroom, dengan nilai negatif pada koneksi internet (WiFi atau Kuota Internet) dalam mengakses LMS SIPDA jauh lebih kuat dan stabil dibanding mengakses Google Classroom.

Kata kunci: Efektivitas, LMS SIPDA, Google Classroom

INTRODUCTION

The 21st century marked with development technology very fast information as well as development automation where many nature of work profession routine and repetitive start replaced by a machine, fine machine production nor computer (Wijaya, et. al., 2016: 263). All form activity now help with technology even could said Public moment this dependency will technology . Progress technology information and communication has change style life human, good in work, socialize, play nor study. Enter century 21st technology has enter to in various joints life, no except in field education. Progress technology is something not can avoided in life this, because progress technology will walk in accordance with progress knowledge knowledge. Global demands demand the world of education for always always adapt development technology to effort in enhancement quality education , especially adjustment use technology information and communication for the world of education especially in the learning process (Salsabila and Agustian, 2021: 123).

According to Megahantara (2017) development technology in the world of education has many produce innovations new To use support the learning process. Every innovation created for give benefit positive for life human. Technology also provides many convenience, as well as as method new in To do activity human. Humans have too enjoy many benefits brought by innovations technology that has been generated in decade final this. One of them is the more a lot variety of learning media blessing development increasingly technology fast. in line with opinion Tondelur et al (in Mulyani and Haliza, 2011) who stated that digital technology now already start used in the field education as means for support learning, good as tool information (means access information) or as means learning (support activity study and assignments).

Application technology education in the learning process meant to learn more effective, efficient, meaningful for life of learning people (Suryatni , 2021: 32). In decade final Today, the entry of the Corona Virus Disease (Covid-19) in Indonesia brings impact big to life community, start from health, economic, social, religious, as well as in the world of education. A number of method has conducted for prevent the spread of the virus, such as social distancing, self- quarantine, even lock down . Indonesia has also take policy Restrictions Social Scale Large (PSBB). Consequence from the PSBB policy, the order life society changed. Society must stay at home for cut off chain the spread of Covid-19 (Gunawan and Amaludin , 2021: 134).

With condition that, everything form activity nor activity conducted with tool help technology, electronics, and later apps. Thing the Becomes solution in effort support needs human. in every side life moment this really depend on technology, moreover with enforcement social distancing, work from home, at home just change everything to digital direction. Moment this all form activity supported full of technology like case from side education, activity study dismissed teaching for while later replaced with online system (in network) with utilise internet access, software (applications), web and also gadgets/ laptops (Danurahman and Kusdarini, 2021: 152).

Not except for education height , shape education that can made solution during the covid-19 pandemic is online learning . Online learning is able learning bring together students and lecturers for doing interaction learning with internet assistance (Kuntarto, E., 2017). Through the Ministry of Education and Culture Government has forbid college tall for doing study stare advance (conventional) and ordered for organize study or learning online (Circular Ministry of Education and Culture Dikti No. 1 year 2020). College tall led for could organize learning online or online (Word & Rahayu, 2020).

Not little university with fast respond instructions government, no with the exception of Medan State University (UNIMED) with Secrete letter instructions about prevention the spread of the corona virus diesease (Covid-19) in the Medan State University. Implementation online lectures in progress since March 2020, and continues until end 2020 is appropriate by Circular Rector Number 000809/ UN33/ SE/ 2020. However, in 2022 Circular Rector Number 000119/ UN33/ KP/ 2022 circulated with statement that learning at the Medan State University in the even semester of 2021/ 2022 is carried out by mixture that is stare face and inside network (hybrid learning). It means use of LMS in learning will permanent Becomes complement and add-on for support implementation of the learning process. Even semester learning of TA2021 /2022 based on hybrid learning reminds with blended learning used by the State University of Medan before The COVID-19 pandemic strikes. Draft between blended learning and hybrid learning together is fusion Among online learning with stare face (face to face). Same thing conducted by Medan State University in deal with learning online. Remember that learning online has becomes demands of the world of education since a number of year last (He, Xu, & Kruck , 2014). Online learning needed in learning in the revolutionary era Industry 4.0 (Pangondian, et. al., 2019). Use mobile technology has donation big in institution education, including is achievement destination learning distance away (Korucu & Alkan , 2011). One utilization technology information and communication in learning is with take advantage of e-learning. Medan State University (Unimed) as one of the college supportive height development revolution industry 4.0 designing a Learning Management System (LMS). Learning Management System (LMS) is device software used for make Theory web based online lectures and manage activity learning as well as the results . Medan State University launched an LMS that meets e-learning standards and criteria called with Unimed Online Learning System (System Online Learning abbreviated Sipda).

However, no only with using LMS SIPDA, Medan State University also uses other LMS like Google Classroom. SIPDA and Google Classroom are two NGOs whose nature Fulfill e-learning standards and criteria. Clark and Mayer (2016:8) say, "e-learning as instruction delivered on a digital device (such as a desktop computer, laptop computer, tablet, or smart phone) that is intended to support learning". So can our mean that e-learning is one of the the form of a facilitated and supported learning model utilization technology information and communication. Then Clark and Mayer 2 (2016:30) said that e-learning should take advantage of powerful, cutting-edge technologies such as mobile computing, video, games, and social media available on the web. In taking a technology-centered approach, she is basing her decisions about how to design e-learning on the capabilities afforded by new technologies. The characteristics of e-learning according to Clark & Mayer (2016:8) are "may be instructor-led (synchronous e-learning) or designed for self- paced individual study (asynchronous e-learning). Allows learning direct teacher - centred (synchronous e-learning) or designed for learning independent (asynchronous e-learning)".

In online learning that uses e-learning is largely determined by the LMS model developed and its use optimally, effectively and efficiently. In Thing this is necessary emphasized is learning that uses e-learning is largely determined by the effectiveness of the LMS model used . Based on background behind problem that, then writer feel interested for researching, "Effectiveness SIPDA LMS Usage Compared with the LMS Google Classroom (GCR) at the Department of Public Education, State University of Medan".

METHODS

Method research on research this is study quantitative with approach descriptive that uses method survey. Study quantitative is research based on philosophy positivism, focusing on facts objectives that have been investigated with method quantitative (Sukmadinata in Nafsi and Trisnawati, 2022). What does it mean next? with approach descriptive is purposeful research make a systematic, factual and accurate picture about the phenomenon under investigation. Design on research this is numbers and calculations statistics. Research data analysis techniques this use analysis quantitative descriptive in form percentage. Chosen method quantitative research this because study this measure level effectiveness the use of LMS SIPDA compared to Google Classroom (GCR) in the Department of Public Education, State University of Medan with scoring formula following this :

$$\text{Percentage Rating (\%)} = \frac{\sum s \quad o}{\sum hi \, he \quad s} \times 100\%$$

Application formula scoring on score choice answer distributed questionnaire _ for see effectiveness the use of the LMS by direct nor deployment through online using Google Forms. Type the questionnaire used is questionnaire closed use scale Likert measurement with 5 options answer strongly agree, agree, less agree, no agree and strongly disagree. Determination Likert Scale score for question trending positive get score 5 with criteria Answer Strongly Agree (SS), score 4 with criteria answer Agree (S), score 3 with criteria Disagree answer (KS), score 2 with criteria answer Disagree (KS), and score 1 with criteria Very No answer Agree (STS). Score on answers questionnaire used for count indicator effectiveness. See reject measuring effectiveness teaching in theory Slavin there is four necessary indicators noticed namely : (a) Quality teaching , (b) Level of teaching (c) Intensive and (d) Time.

Lecturers and Students study program education Public Class of 2021, 2020 and 2019 Faculty Medan State University Education Science is population in research this . Questionnaire shared to lecturer student active study program education Public batch of 2021, 2020 and 2019. Taking technique sample used in study this use technique purposive sampling . Method data collection on research this obtained through distributed questionnaire to Community Education lecturers and students for see effectiveness use of LMS SIPDA compared to Google Classroom done by direct nor deployment through online media using Google Forms .

As for the stages method analysis on research this There are 3 (Three) stages namely : (1) Data processing , in Thing this all data that has been obtained researched return completeness. (2) Organizing data, with step beginning input and enter data that has been checked on table frequency , then conducted calculation to every question by way sum up score , next researcher make interval class later add score from every answer respondents . (3) Discovery result , in get results conducted calculation all score every later indicator displayed in next percentage results percentage grouped in accordance with class the interval. Numbers the next described in form sentence for more easy understood (Nafsi & Trisnawati , 2022).

After the data is analyzed by quantitative , data on average and so on will grouped in accordance criteria evaluation scale likert following :

Table 1 . Table Criteria Effectiveness Score Interpretation The use of LMS SIPDA compared to *Google Classroom*

Evaluation	Criteria Satisfaction
0% - 20%	Very No Agree
21% - 40%	Not Agree
41% - 60%	Disagree _
61% - 80%	Agree
81% - 100%	Strongly Agree

RESULTS AND DISCUSSION

Results

The results of data analysis after researcher spread questionnaire using Google Forms via WhatsApp, which then responded by respondents a total of 109 consisting of from lecturers and students Faculty of Public Education study program Active Educational Sciences , Medan State University in study that is batch of 2021, 2020 and 2019 and using LMS SIPDA and LMS Google Classroom. Based on of the 4 (four) indicators used as reject measuring evaluation show results percentage of 77.66% with category agree prove that user feel level more effectiveness on SIPDA LMS tall compared to with LMS Google Classroom views from indicator quality teaching , level teaching , intensive and time . By whole results effectiveness use of LMS SIPDA compared to with the Google Classroom LMS you can seen in the table following :

Table 2. Distribution Effectiveness Use of LMS SIPDA Compared to with Google Classroom LMS

Indicator	Question	Percentage	Results
Quality Teaching	Do you agree that LMS SIPDA is far more easy accessed compared to Google Classroom?	76.51%	Agree
	Do you agree that the material contained in the LMS SIPDA is richer and appropriate with Theory study ?	79.44%	Agree
	Do you agree that in Thing submit and review return task , do you agree that LMS SIPDA is more easier for you than Google Classroom?	71.38%	Agree
	Do you agree that In Thing facilitate and provide opportunity for ask and discuss ,	76.70%	Agree

Indicator	Question	Percentage	Results
	is LMS SIPDA more ? effective compared to Google Classroom?		
	Do you agree that Lecturer more give response to question students at LMS SIPDA rather than Google Classroom?	78.34%	Agree
	Do you agree that Lecturer more together in LMS SIPDA compared to Google Classroom when learning in progress until finished ?	78.71%	Agree
	Do you agree that Lecturer more explain direction and purpose learning moment using LMS SIPDA instead of Google Classroom?	80.91%	Strongly Agree
	Do you agree that you can follow activity learning far more good when using LMS SIPDA instead of Google Classroom?	74.68%	Agree
	Do you agree that you are more qualified in Thing knowledge and skills after you see , observe and understand material on LMS SIPDA rather than Google Classroom?	78.71%	Agree
Teaching Level	Do you agree that speak question means support learning such as HP, Laptop or Computer, and Tablet, do you agree that LMS SIPDA is	76.14%	Agree

Indicator	Question	Percentage	Results
	more easy accessed through what just use all four compared to Google Classroom?		
	Do you agree that for accessing LMS SIPDA must have internet connection (Wifi or Internet quota) more strong and stable compared to access Google Classroom?	81.28%	Strongly Agree
	Do you agree that you are more ready good by physical and mental when using LMS SIPDA instead of Google Classroom?	74.31%	Agree
Intensive	is you agree that more SIPDA LMS view interesting compared to Google Classroom so that make student happy with existing features ? _	78.16%	Agree
	Do you agree that the tasks that are collected in the LMS SIPDA must be rated compared with those collected on Google Classroom?	76.51%	Agree
	is you agree that Lecturer more active respond discussions made on the LMS SIPDA compared with Google Classroom?	79%	Agree
	is you agree that The use of SIPDA LMS makes evaluation more transparent compared with Google Classroom?	79.26%	Agree
Time	Do you agree that	77.61%	Agree

Indicator	Question	Percentage	Results
	with using LMS SIPDA, Lecturer more appropriate time for start and end learning in accordance with schedule that has been determined ?		
	Do you agree that Using LMS SIPDA is very easy I get Theory learning compared with Google Classroom?	78.34%	Agree
	Do you agree that The use of LMS SIPDA and Google Classroom makes I more appropriate time in collection task ?	78.90%	Agree
	Are you agree that more use of LMS SIPDA flexible compared with Google Classroom because can repeat return material that has been available ?	78.34%	Agree

Source : Processed by researchers (2022)

Discussion

Table 3. Interpretation Criteria Effectiveness Use of LMS SIPDA compared to Google Classroom

No	Indicator	Percentage	Category
1	Quality Teaching	77.26%	Agree
2	Teaching Level	77.24%	Agree
3	Intensive	78.23%	Agree
4	Time	78.30%	Agree
	Average	77.75%	Agree

Source : Processed by researchers (2022)

On indicator quality teaching There are 9 question items with percentage 77.26% with results agree . In indicator quality teaching load questions that are approved by lecturers and students as user from both LMS , both SIPDA and Google Classroom, start in Thing access that the

LMS SIPDA is approved far more easy accessed because web -based so that only Requires a browser such as Google Chrome, Mozilla, Opera, Safari and others without need download application more first. The material contained in the SIPDA LMS is richer and appropriate with Theory study it means students and lecturers of Community Education make LMS SIPDA a rich media Theory learning. In Thing submit and review return SIPDA LMS task stated more facilitated by lecturers and students of Community Education. Further also related LMS SIPDA declared more effective in Thing facilitate and provide opportunity for ask and discuss with completeness more features complete compared to Google Classroom.

In Thing give response to question students, at LMS SIPDA lecturers and students Becomes productive because the system that can by direct give answer on the question given with feature "*reply*", with that far more give *feedback* at LMS SIPDA. This thing in tune with question that lecturers and students agree lecturer more together when learning using LMS SIPDA. Where with LMS SIPDA is felt lecturer more explain direction and purpose learning at the moment using LMS SIPDA instead of Google Classroom. So from that, lecturers and students also agree that follow activity learning far more good when using LMS SIPDA than Google Classroom. So, question final from indicator quality teaching related after see, observe and understand the material at LMS SIPDA is felt more qualified in Thing knowledge and skills approved by lecturers and students because with LMS SIPDA is very helpful and adds to the knowledge and skills and understand Theory learning .

On indicator level teaching There are 3 question items with percentage 77.24% with results agree. Same thing with question first on indicator quality teaching about convenience more SIPDA LMS access easy accessed with use means support learning what just good such as HP, Laptop or Computer, and Tablets with all four or with others LMS SIPDA can accessed with easy and thing the approved by lecturers and students of Community Education. However, something else must be noticed that for accessing the LMS SIPDA must have internet connection (WiFi) or Internet quota which is far more strong and stable compared to access Google Classroom. Question last on indicator level teaching about readiness by physique as well as mentally stated more good when using LMS SIPDA instead of Google Classroom remember that from side completeness More SIPDA LMS features complete so that could facilitate with perfect which has an impact on readiness user's physical and mental.

On indicator intensive There are 4 question items with percentage 78.23% with results agree . Lecturers and students agree with question that more SIPDA LMS view interesting compared to Google Classroom with all completeness features . Lecturers and students agree that the tasks collected in the LMS SIPDA are more could confirmed assessed by lecturer compared with those collected in Google Classroom. Question next on indicator intensive which also has similarity with one _ question from indicator quality teaching that lecturer more active respond discussions made on the LMS SIPDA compared with Google Classroom. In Thing assessment, lecturers and students of Community Education agree that the use of SIPDA LMS makes evaluation more transparent .

On indicator intensive There are 4 question items with percentage 78.30% with results agree . In Thing start and end learning in accordance with schedule that has been determined , the lecturers and students of Community Education agree that Thing that could occur when using LMS SIPDA. The LMS SIPDA is believed to be very easy in get Theory learning because the LMS SIPDA can what format to load just such as learning videos, recordings voice learning, and more . With completeness more features structured on the LMS SIPDA makes collection Duty far more appropriate time because no could hijacked by students and can given limitation

which time student no could To do uploader - an same very when already too late. Question last on indicator time agreed by lecturers and students that more use of LMS SIPDA flexible compared with Google Classroom views from corner look could repeat return material that has been available.

CONCLUSION

Based on discussion and findings research , view from variable effectiveness with indicator quality teaching , level teaching , intensive and time , lecturers and students of Community Education as user both LMS , both SIPDA and Google Classroom agree with percentage of 77.66% with category agree prove that user feel level more effectiveness on SIPDA LMS tall compared to with the Google Classroom LMS.

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