



APPLICATION OF ONLINE-BASED LEARNING MODELS IN THE PANDEMIC Period (COVID-19) IN DEVELOPING LEARNING INDEPENDENCE FOR STUDENTS AT UNIVERSITY LEVELS

Case study: Faculty of Economics and Business

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ABSTRACT

This study analyzed the application of online-based learning models during the pandemic (Covid-19) in helping develop independent learning for university level students. This research uses descriptive qualitative research methods. The population in this study were students of FEB UPI YPTK Padang and for the number of samples calculated using the Slovin formula, 350 samples were obtained. The sampling technique was purposive random sampling. Retrieval of data in this study is by distributing questionnaires to students using google forms. The effectiveness of online learning ((X1) is .298 or 29.8%. While the calculation for the Respondents' Achievement Rate (TCR), it is found that 50% more give an assessment indicating that they strongly approve of online learning or distance learning (PJJ) during the pandemic period. for the variable online learning constraint ((X2) is .488 or 48.8%. While the calculation for Respondent Access Level (TCR) is obtained that 45% more give a higher assessment of the constraints they face from online learning or distance learning (PJJ) this. For the independent learning variable (Y) the results of the F test processing obtained F count of 122,832 with a significance value of 0,000. Meanwhile, the results of the Respondents' Achievement Level (TCR) showed that there was a significant increase in fostering learning independence for students, it was seen that 65% of students stated that they were more active in completing class assignments and looking for recovery materials.

Keywords: Online Based Learning Model, Independent Learning, University levels

INTRODUCTION

Currently Indonesia and the world have been hit by concerns in the face of the Covid-19 virus attack. This virus can be life threatening to humans due to the easy spread of the virus and is deadly. This makes the world restless and busy looking for a treatment for the Covid-19 virus. The very fast spread of the virus and the difficulty of finding a vaccine for this epidemic made the government take a firm policy to stop all activities related to crowds or gather large numbers of people in every activity. This

action is an effort so that the spread of Covid-19 is not high so that the number of deaths from this virus can also be reduced. With the covid-19 virus, it has made major changes in all aspects of human life, especially in the world of education such as school activities, lecture activities that no longer exist carrying out normal face-to-face activities as usual. This change has been transferred to using online-based digital media.

Changes in the education system during the Covid-19 pandemic certainly felt heavy by some students, especially since these changes were made suddenly and



without any prior preparation. During the Covid-19 pandemic, face-to-face learning systems were transferred to using online or online-based digital media in the learning process. This raises several obstacles and problems during the implementation of learning activities. One of the reasons is due to the lack of mental readiness for some students in facing online-based learning systems. The habit that is often accepted by students in general is that the presence of lecturers in class greatly determines the course of the lecture process, because they will fully accept the lecture material from what was conveyed by the lecturer, while in the pandemic era, of course the existence of teachers / lecturers as guides and facilitators in the learning process does not have a direct role anymore in assisting and guiding students in carrying out lecture activities. The use of digital media during a pandemic is one of the ways that lecturers and students use to carry out the lecture process remotely. This of course feels difficult if it only uses digital media which is limited by the space and time between students and teachers / lecturers. And plus limitations such as internet networks, internet quotas, ownership of laptops and smart phones, online learning systems during the Covid-19 pandemic are still not maximal.

According to Milman (2015) the use of digital technology allows students and lecturers to be in different places during the learning process. From the results of previous observations (2020) where there are several things that become problems in the online learning system, namely:

1. An internet network whose condition is always unpredictable, sometimes stable and sometimes unstable.

2. The habit of learning systems in the classroom or conventional, making it difficult to interact even though the technology and information available is currently sophisticated.
3. Assessment of knowledge and skills to students / students is limited and cannot be carried out directly.
4. Intensity in interaction can only be done through internet media.

According to (Gikas & Grant, 2013) online learning in its implementation requires the support of mobile devices such as smartphones, tablets and laptops that can be used to access information anywhere and anytime but there are several problems above that are faced by educators and educators. In following the online-based learning system during the Covid - 19 pandemic. In terms of education, of course the pandemic that we are facing today is not an excuse to obstruct the goals of education, where the habit is generally carried out in the classroom with teachers / lecturers as guides and guides in learning. However, this can no longer be done now because the virus that has hit makes all aspects unable to run normally.

The use of internet media is one of the methods chosen by the government so that the learning and lecturing system continues and is not disturbed by the current pandemic. The most important thing about the impact of the Covid-19 pandemic that is being felt at this time is the need to develop independent learning for students, especially students so that they can carry out aspects of life, as well as in the educational aspect. The use of internet media in an online-based learning system so that it can run well, it is necessary to develop independent learning in students. Usually, learning is done together and in groups but now it is replaced independently. Students must need to build a spirit of independence in implementing learning with the current online system, such as doing assignments independently, studying and reading lecture materials independently, as well



as forming a character of independence from a mental and psychological perspective in the face of this outbreak.

Online-based learning system is a learning system that must be faced and implemented given the increasingly sophisticated technological advances and the need for speed in receiving information at this time. This type of learning has been done by applying E-Learning learning with the Blended learning model. According to Romisatriawahono (2008) the components that make up e-learning are e-learning infrastructure, e-learning systems and applications and e-learning content. E-Learning learning that is full system is not new because almost part of universities have implemented a distance learning system such as in Open Universities.

Based on the explanation above, it is hoped that online learning used during the Covid-19 pandemic, related to the effectiveness of online learning and the obstacles faced during online learning, will be able to foster the character of learning independence in students to acquire knowledge.

METHOD

Population and Sample

The population in this study were students of Putra Indonesia University YPTK Padang at the Faculty of Economics and Business (FEB). To facilitate the determination of the sample, criteria were determined so that a representative sample of the population in this study was obtained. The criteria set are:

1. Has an active status as a student of FEB UPI YPTK Padang.
2. Feel the impact of online learning during the Covid-19 pandemic.
3. Students who use online-based digital media in lectures during the Covid-19 pandemic

So to determine the number of samples in this study, it was calculated using the Slovin formula where the number of samples was 320 with an error margin of 5%. The sampling technique was purposive random sampling and the number of samples for each group could change according to research needs only.

Data Collection Techniques

In collecting this data, several supporting methods were used, including:

- a. This study collected data using google form, the link of which was distributed through the WhatsApp application. From the amount of data distribution that has been done, it was obtained that 320 students participated in filling out the google form
- b. Literature study, namely data collection and information search by reading and studying related and supporting books and research journals, both in analyzing data and information and solving problems as a whole.

Types and Sources of Data

Primary data is data taken directly from the object under study by conducting direct research on the object of research so that conclusions can be drawn and in this study the primary data source is obtained from the distribution of google forms which can be filled in by students. Secondary data is data that is not directly obtained from the first source and has been arranged in the form of written documents, books and journals that are related to research.

Method of Analysis

This research uses descriptive qualitative research methods. According to Sugiyono, the qualitative research method is a research method used to examine the condition of a natural object, (as opposed to an experiment) where the researcher is the key instrument, the data collection technique is carried out by triangulation (combined), inductive data



analysis, and more qualitative research results. emphasizes meaning rather than generalizations. Retrieval of data in this study is by distributing questionnaires to students using Google Forms, so that information is obtained directly.

The sampling technique used in this study was purposive sampling technique, namely sampling with the basis of the efforts to achieve the research objectives. The selected informants are considered to have in-depth knowledge of the information and problems and can be trusted to become a solid source of data.

Aspects of this research are:

1. Student responses regarding the effectiveness of online learning that can foster learning independence for students.
2. Constraints experienced by students while participating in online learning that can foster independent learning for students.
3. The application of online learning in fostering learning independence

The conceptual framework of this study is as follows:

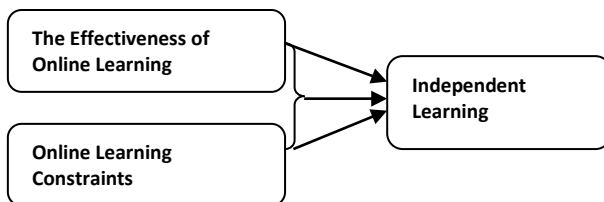


Figure 1. Conceptual Framework

Data analysis technique

Descriptive Analysis

This analysis intends to describe the characteristics of each research variable. The results of data processing in descriptive analysis are then described with the aim of using the proportion of respondents' answers to the research variables.

Prerequisite Analysis

- a) Normality Test

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b) Heteroscedatitas Test

c) Hypothesis Testing

Data Validity Testing

Validity test

The validity test in this study is a degree of accuracy of research measuring instruments regarding the actual content being measured, the validity test can be seen in the Corrected item total correlation. To test the validity of the instrument, the correlation method was used.

Reliability Test

Reliability test shows the extent to which a measurement result is relatively consistent if the measurement is against the same aspect on the same measuring instrument.

Multiple Regression Analysis

To see the effect of the independent variable (X) on the dependent variable (Y) in this study, it can be done using multiple linear regression analysis. In its use, multiple linear regression analysis can be formulated as follows:

$$\hat{Y} = a + b_1.X_1 + b_2.X_2 + e$$

Information:

a = Constant

\hat{Y} = Independent Learning

X_1 = Online Learning Effectiveness

X_2 = Online Learning Constraints

$b_1.b_2$ = Regression Coefficient

e = Bully error

Hypothesis test

1. t-test

Individual testing, namely seeing the effect of variable X individually on variable Y. Processing data for the -t test using the SPSS version 16.0 program. The provisions used are if t count \geq t Table then the hypothesis is accepted and if t count < from t Table then the hypothesis is rejected. The confidence level (α) of this hypothesis is 95% or (α) = 0, 05.

2. F-test

This test is carried out to see the joint effect between variable X on variable Y. Data



processing for the F-test uses the SPSS version 16.0 program

RESULTS AND DISCUSSION

Based on the results of data processing, the following results were obtained:

Tabel 1. Uji t
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	13.550	1.832			7.396	.000
The Effectiveness of Online Learning	.298	.051	.272		5.855	.000
Online Learning Constraints	.488	.045	.499		10.738	.000

a. Dependent Variable: Independent Learning

Source: the results of data processing with the SPSS Version 16 program

1. The first hypothesis

The first hypothesis in this study is that there is a significant influence between the effectiveness of online learning on learning independence for students with a sig value of 0.00.

2. The second hypothesis

The second hypothesis in this study is that there is a significant influence between the constraints of online learning on learning independence for students with a sig value of 0.00.

3. The third hypothesis

The third hypothesis in this study is that there is a relationship between the effectiveness of online learning and the constraints of online learning on learning independence for students.

To make a hypothesis on the research, first the dependent variable is tested simultaneously. It can be seen in the output of SPSS 16 in the ANOVA table below:

Tabel 2. Uji F
ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	5413.097	2	2706.548	122.832	.000 ^a
Residual	6984.950	317	22.035		
Total	12398.047	319			

a. Predictors: (Constant), Online Learning Constraints, Online Learning Effectiveness

b. Dependent Variable: Kemandirian Belajar

Source: the results of data processing with the SPSS Version 16 program

1. Student responses regarding the effectiveness of online learning

The online learning system carried out during the Covid 19 pandemic is an action that is very appropriate to take so that the learning process continues even though faced with a contagious virus outbreak.

The learning process that takes place using online media is a form of commitment from educators along with parents and students so that learning during the pandemic will not stop. Many things can be done so that learning can continue even at home. The development of technology that is increasingly developing makes the learning process at home no longer an



obstacle for educators to provide their knowledge. Putra Indonesia University YPTK Padang is one of the campuses that implemented an online learning system during the Covid-19 pandemic, almost all campus activities were transferred using the online system and one of them was lecturing activities.

Based on the results of tests that have been carried out using the SPSS program, the magnitude of the influence for the online learning effectiveness variable ((X1) is .298 or 29.8%. While the calculation for the Respondent Achievement Level (TCR) has been processed from the questionnaire results that have been distributed to students via google form, it was found that 50% more gave an assessment indicating that they strongly approved online learning or distance learning (PJJ) during this pandemic.

The results of the processed data show that there is a significant effect on the effectiveness of online learning for students, this is indicated by the great enthusiasm of students in taking online lectures during the Covid-19 pandemic.

The results of calculations processed using SPSS obtained a t test value with a significance level of $0.00 < 0.05$. This means that the hypothesis H_0 is rejected and H_a is accepted. Thus the effectiveness of online learning during this pandemic has an influence on students in developing independent learning.

Based on the results of tests that have been carried out using the SPSS program, the amount of influence for the effectiveness of online learning is 0.298 or 29.8%. this means that the effectiveness of student learning during this pandemic is 29.8%. Thus there are other factors that have an influence on students related to developing an independent learning attitude during the Covid-19 pandemic.

2. Constraints experienced by students while participating in online learning

There are many obstacles and what happens when taking online lectures or distance LLDIKTI Wilayah X

learning (PJJ) both in terms of signals, packages that run out quickly, and costs incurred in buying internet packages or pulses This is a common occurrence that is often experienced not only for students but also for lecturers who carry out these online lecture activities. One of the constraining factors that hindered the lecture process was the location or coverage of the internet that was outside the network area or it could be said that students living in villages who had limited access to telecommunications networks. this makes online learning unable to run optimally.

Based on the results of the test that has been done using the SPSS program, the magnitude of the effect for the online learning constraint variable ((X2) is .488 or 48.8%.) distributed to students through google form obtained that 45% more give a high assessment of the constraints they face from online learning or distance learning (PJJ). The result of the constraints they experience is that students have difficulty receiving information on their education and often this makes them miss assignments and lecture materials.

Through the results of calculations processed using SPSS, it was found that 48.8% of students experienced problems in online learning during the Covid-19 pandemic and this also affected their learning independence. So the obstacles experienced in online learning can be seen how long and how often the number of accesses made by students to carry out online learning smoothly and without obstacles during work hours or rush hours. Therefore, it is not uncommon for many students to feel that online lectures are still not optimal during the Covid-19 pandemic.

3. The application of online learning in fostering learning independence

The online learning system carried out during this pandemic not only had a negative impact on both students and lecturers. It cannot be denied that this system also has a positive impact in fostering independent learning for



students. The lecture process carried out in the classroom makes students less active in seeking recovery information both from books and other learning sources. They are more inclined to receive this information only from lecturers who teach the courses. So this makes them passive in class and there is a lack of communication interaction between lecturers and students in terms of sharing learning information.

The Covid-19 pandemic has changed the paradigm of students and their attitudes in learning activities, namely students are required to find and provide information to lecturers who teach so that it creates the growth of independent learning from students.

From the results of data processing that has been done where the results of the F test processing obtained F count of 122,832 with a significance value of 0,000. Whereas from the results of the Respondent Achievement Level (TCR), the study showed that there was a significant increase in fostering learning independence for students, it was seen that 65% of students stated that they were more active in completing lecture assignments and looking for recovery materials through learning media both print and media.

The existence of lecturers as media facilitators during the Covid-19 pandemic was not fully fulfilled, this was due to space and time limitations which made students have the obligation to hone their learning skills in an independent way in learning.

CONCLUSION

Based on the results of the analysis and discussion above, it can be concluded as follows:

1. Learning with online systems or distance learning (PJJ) has a significant impact on learning independence, this is due to the influence of current circumstances and situations so face-to-face recovery cannot take place.
2. Online learning also does not run smoothly for all students. Constraints

and obstacles during online recovery make learning activities disrupted and hindered and have a significant effect on student learning independence.

3. Fostering independent learning among students can be realized during this pandemic. It can be seen that there is an influence on the effectiveness of online learning and the obstacles experienced by students during online learning on student learning independence. Students can dig up a lot of recovery information from learning sources because of the minimal and limited intensity of the lecturers' role in delivering recovery materials

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