



THE EFFECT OF ONLINE LEARNING ON STUDENT LEARNING OUTCOMES AT UPBJJ UT MEDAN

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Abstract

The Covid 19 pandemic that has hit parts of the world, has affected and entered the State of Indonesia and changed the social fabric in our country. Education, which initially went well through face-to-face, now has to be done online. This situation requires educators including lecturers to be more responsive to the existing conditions. Students and lecturers who were initially less familiar with the online learning model, Kina had to be "forced" to respond to very sophisticated technology. This study aims to see to what extent the effect of online learning on student learning outcomes at UPBJJ UT Medan. This type of research is a quasi experiment (quasi-experimental). Based on the results of data analysis obtained; (1) The results of student learning in online learning obtained an average value of 79.13, (2) The results of learning conducted online obtained an average value of 72.41, (3) Therea significant effect of the use of online learning on student learning outcomes.

Keywords: *Student Learning Outcomes, Online Learning*

A. Introduction

Corona virus or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a virus that attacks the respiratory system. This disease due to viral infection is called COVID-19. The Corona virus can cause minor disorders of the respiratory system, severe lung infections, and death. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), better known as the Corona virus, is a new type of coronavirus that is transmitted to humans. This virus can attack anyone, such as elderly people (elderly group), adults, children, and baby, including pregnant women and breastfeeding. This makes several countries implement policies to enforce It lockdown in order to prevent the spread of the Corona virus. In Indonesia itself, a Large-Scale Social Restriction (PSBB) policy was implemented to reduce the spread of this virus. In various regions, especially activities that have a profound impact on educational life are the dismissal of all school students in Indonesia. This aims to break the chain of spreading the Corona virus. As a result of the Covid-19 pandemic, the government issued a new policy to stop the spread of Covid-19, namely implementing community calls to carry out Physical Distancing or keeping a distance from other people as far as one meter and avoiding crowds and various meeting events that led to associations (Covid-19, 2020). Other than that, Another policy implemented by the government is to advise that work can be done from home only (work from home). (Kemendikbud, 2020) issued a Circular on Online Learning and Working from Home in the Context of Preventing the Spread of Covid-19. One of the contents of this letter is to cancel teaching and learning activities and replace it with network-based learning (online) via e-learning which can be used by various educational institutions. Like wise with students at the UPBJJ UT Medan Open University. Online learning

conducted by tutors using online media in the form of Microsoft Teams and Whatshap is also one of the learning alternatives carried out by UPBJJ UT Medan. Lectures that are usually conducted face-to-face, which is conducted eight times a semester, is now switched to online but without reducing the number of face-to-face meetings as usual when offline. Online learning has a positive impact, namely experience and the use of technology in a positive way as well as realizing the challenges of teachers in the 21st century (Sudarsiman, 2015). Although in fact learning at the Open University is no stranger to online learning because in the learning system at the Open University there are also those that use online tutorials for their students.

The educational situation during the Covid-19 pandemic, which is ongoing online learning since March 17, 2020, issued through a circular from the Ministry of Education and Culture, until now as of February 5, has its own obstacles and challenges, both from the lecturers and students side. From the student side, the greatest possibility that is felt is the absence of an unstable internet network in their respective regions, given that most of the Open University students live outside the city. Other obstacles also felt by lecturers were sometimes having to accept students' excuses not to enter online classes, because of the absence of quotas and bad signals in their places of residence. Seeing the phenomena that the researchers have presented above.

B. Research Method

This type of research is a quasi-experimental research (quasi-experimental), which is research that aims to determine whether there is an effect or result of something caused to the subject. Imas Kurniasih (2017: 62)

C. Results and Discussion

Description of Research Data

Description of the data in the results of this study, namely the influence of online learning on student learning outcomes at UPBJJ UT Medan.

Data Frequency Distribution of UPBJJ UT Student Post Test Results

The distribution of student learning outcomes in class A class A which is taught using audio-visual media is shown in the following table:

Table 1. Post Test Frequency Distribution Table

No.	Score	f_i	x_i	x_i^2	$f_i x_i$	$f_i x_i^2$
1	50.91 - 58.90	2	54,905	3014.559025	109,810	6029.118050
2	58.91 - 66.90	5	62,905	3957.039025	314,525	19785,195125
3	66.91 - 74.90	5	70,905	5027,519025	354,525	25137,595125
4	74.91 - 82.90	9	78,905	6225.999025	710,145	56033.991225
5	82.91 - 90.90	8	86,905	7552,479025	695,240	60419,832200
6	90.91 - 98.90	7	94,905	9006.959025	664,335	63048,713175
Σ		36	-	-	2849	230454.444490

$$\bar{X} = \frac{\sum f_i x_i}{\sum f_i}$$

$$\bar{X} = \frac{2849}{36}$$

$$\bar{X} = 79,13$$

Based on the results of the calculation, the average value of learning outcomes in the class taught by Online learning is 79.13. Class learning outcomes data taught using online learning are made in the form of a histogram as follows:

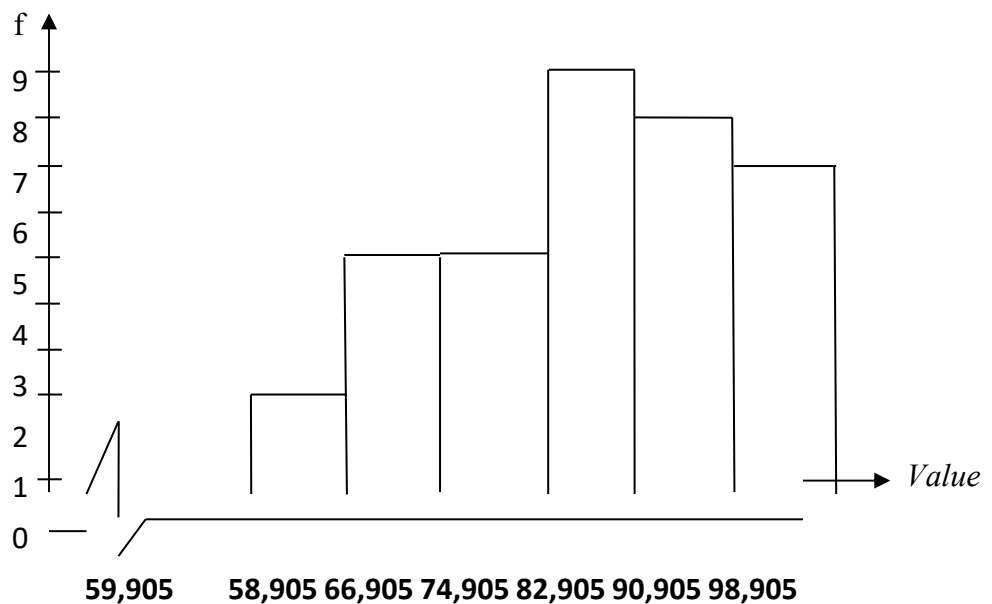


Figure 1 Post Test Value Histogram

Test Data Analysis Requirements

Before testing the hypothesis, we first look for the data analysis requirements test, namely the normality test and the variance homogeneity test.

Data Normality Test of Post Test Results

The data normality test aims to determine whether the learning outcome data is normally distributed. The data normality test for the post test scores is as follows:

Table 2. Post Test Data Normality Test Results

Media	χ^2	$\chi^2_{(1-\alpha)(k-3)}$
Online (Microsof Teams, WA)	3.58	7.81

Normality test in the Classroom Field A obtained $3.58 < 7.81$ for $\alpha = 5\%$ and $dk = 6-3$. Because $\chi^2 < \chi^2_{(1-\alpha)(k-3)}$, then H_0 accepted, so the post test data in class VA is normally distributed.

After testing the normality of the data and data *post test* normally distributed, then the requirements test is followed by the homogeneity test of variance.

Post Test Homogeneity

After the normality test and the data were normally distributed, then the homogeneity test was carried out to test the similarity of population variances. To test the variance homogeneity of the two data groups used the F test. The results of the homogeneity test are presented in the following table:

Table 3. Results of Data Homogeneity of Post Test Results

Class	n	df	S^2	F_{hitung}	$F_{tabel (0.05)(35, 34)}$
Class A field of study	36	35	144,4804	1.55	1.77

Homogeneity test of learning outcomes data in classes taught by Online media (Microsoft Teams and WA) are in the table so they are interpolated and obtained $F_{(0.05)(35,34)} = 1.77$. Based on the hypothesis testing criteria $F < F_{(0.05)(35,34)}$, then H_0 accepted, meaning that the data is categorized as homogeneous.

Hypothesis Test

After doing the normality test and the homogeneity test of the variance and the data obtained were normally distributed and the variance was homogeneous. Then the hypothesis is tested with an independent test between the two factors. The results of independent testing between the two factors are listed in the following table:

Table 4 Independent Results Between Two Factors

Class	B	K	χ^2_{hitung}	χ^2_{tabel}
Class A Field of Science (Microsoft Teams, WA)	2	3	11.14	5.99

From an independent test between two factors is obtained $\chi^2_{hitung} = 11.14 > \chi^2_{tabel} = 5.99$, it can be concluded that H_0 rejected and H_1 received. So it can be stated that there is a significant effect of the use of online media on the learning outcomes of UPBJJ UT Medan students.

Degree of Relationship between Online Media Usage and Student Learning Outcomes of UPBJJ UT Medan.

After getting the hypothesis results, the researcher then tested the degree of the relationship using online learning. From the degree test the relationship between the use of online learning and student learning outcomes obtained $C = 0.37$ and $C_{maks} = 0,71$. From the results of these data, it is stated that the closer the price of C to C_{maks} hence the use of online media during a pandemic has a great degree of association with student learning outcomes.

E. Conclusion

Based on the results of research and data analysis carried out on students in the field of science UPBJJ UT Medan, the following conclusions were obtained:

1. Student learning outcomes taught using online learning (Microsoft Teams and WA) obtained an average post test result of 79.13.
2. There is a significant effect of online learning on student learning outcomes at UPBJJ UT Medan.

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