

# The Improvement of The Role Of Lecturer In The Learning Process Through E-Learning Models In Associate Degree of Midwifery, Megarezky University, Makassar

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## **ABSTRACT**

*This study aimed to find out the increase of lecturers' role in the learning process through the e-learning model in Associate Degree of Midwifery at Megarezky University, Makassar by looking at lecturer evaluations before and after using the Indonesia Kuliah Online application. The research method was a quasi-experimental with time-series design by measuring before and after treatment (pre-test and post-test). Specifically, it compared lecturers' role in the learning process between before and after e-learning with the Indonesia Kuliah Online application. The research was conducted from November to December 2020 involving seven lecturers and each lecturer given a questionnaire containing statements about e-learning to assess the perception against the learning method. The results showed a significant effect of learning through e-learning models on the improvement role of lecturers. It was evidenced by the analysis results with the Paired Samples T-Test, which showed the significance value obtained of 0.000, and the value of  $t_{count} > t_{table}$  was  $10.321 > 2.365$ . This study revealed that e-learning applied by Associate Degree of Midwifery lecturers at the Megarezky University available in the <https://indonesiakuliahonline.com> site. There were differences in lecturer evaluations before and after using Indonesia Kuliah Online application as an alternative in the study*

*through e-model. The use of the Indonesia Kuliah Online application could increase lecturers' role in the learning process through the e-learning model.*

**Keywords:** *E-learning, IndonesiaKuliahOnline application, Lecturer role*

## 1. INTRODUCTION

The development of information and communication technology (ICT) in the Industrial 4.0 era greatly influenced the teaching and learning process, particularly during the Covid-19 pandemic. The Covid-19 pandemic requires all educational institutions to undertake online learning. It is not new, but the pandemic revives online teaching and learning opportunities (Almaiah et al., 2020). The concept and teaching and learning mechanism needed nowadays is internet technology to support the learning process. One of the learning concepts carried out by utilising internet technology is known as e-learning. The use of e-learning transforms the conventional education process into a digital form both in terms of content and systems (Maudiarti, 2018).

Today, e-learning is widely used by people. It is proven by the zoom application that has been implemented in educational institutions (schools, training, and universities) as a media for meetings and a medium for distributing learning materials to students. E-learning has a significant role. It can manage, convey, track learning and carry out the teaching process (UNISCO, 2020). E-learning is the best alternative solution to most of the learning process problems in the world of education and as a substitute for learning activities in the classroom that have been used so far (Nisaul Choirah, 2020).

Higher education is an educational institution that aims to produce quality graduates under the science they are engaged. In realising these goals, it is the role of lecturers that are needed. A lecturer is a person who works as an educator who has particular expertise with the main task of educating, disseminating knowledge and carrying out tasks based on the *tri dharma* of higher education. (Nim, 2016).

In e-learning, educators or lecturers act as facilitators, namely guides in teaching and learning activities. Lecturers can provide learning materials, assignments, and discussions and monitor and establish communication with students via the web so that learning activities can be carried out anytime and anywhere. The ease in teaching and learning poses should not reduce the lecturers' effectiveness, but rather increase the lecturers' role as professional educators (Maudiarti, 2018).

Study of (Maryeni, 2013) entitled "E-Learning Application as a Learning Model Based on Information Technology in the Department of Health". It found the ease of use of e-learning from the lecturers. About 75% of respondents agreed, and 25% strongly agreed that the e-learning menu was easy to understand and smoothed the task teaching. Besides, it was found to increase the effectiveness of completing work and make it easier for lecturers and students to obtain information and minimise information loss in assigning coursework to students.

Based on the information obtained from Associate Degree of Midwifery lecturers at Megarezky University, Makassar, during the Covid-19 pandemic, all lecturers were encouraged to take advantage of e-learning as an alternative in the study. During this process, the role of lecturers in learning has not been useful. The lack of mastery of e-learning media, especially in using the zoom meeting application and learning provided only face-to-face, can

be seen. So, other forms of learning may not be achieved, especially in improving student skills. This study aimed to measure the improvement level of lecturers' role in the learning process through the e-learning model in Associate Degree of Midwifery, Megarezky University, Makassar.

## **2. METHODS**

### ***Research Design***

This research used experimental methods. The type of experimental method used was quasi-experimental with a time-series design. This design used only one group, and the measurements were taken before and after treatment (pre-test and post-test). Thus, this method had higher validity. External factors can be reduced since the measurement was carried out more than once, and there was no control group (Hidayat A. Aziz Alimul, 2014).

### ***Location and Time***

This research was conducted at Associate Degree of Midwifery, Megarezky University, Makassar on November 5 to December 5, 2020.

### ***Population and Sample***

This study's population were all lecturers taught in the Associate Degree of Midwifery study program, Megarezky University, Makassar. This study involved seven samples, Associate Degree of Midwifery study program, Megarezky University, and Makassar. The purposive sampling technique used to determine the sample based on inclusion and exclusion criteria.

### ***Data Collection***

Data collection was carried out by distributing a questionnaire containing a series of questions or statements to collect data or information. The respondents had to answer freely according to their opinion. (Arifin Z, 2012).

In filling out the questionnaire, the object of research conveyed the attitude with a written statement. Thus, this instrument used an attitude scale or Likert. The Likert scale was a statement in the form of a scale of approval or rejection of questions and statements. Acceptance or rejection was expressed in the agreement starting from strongly agree, agree, doubt, disagree, and strongly disagree (Sukmadinata N, 2016).

### ***Data Analysis***

The data collected from the pre-test and post-test were processed with the Statistical Package for Social Science (SPSS) program for Windows version 22, with a 95% confidence level using the Paired Samples T-Test. After, the processed data was then presented in the form of distribution and frequency tables and interpreted as statistical tests.

### 3. RESULT

#### Univariate Analysis

Table 1. Descriptive Statistics

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Pre-test</i>	7	39	48	42.14	3.024
<i>Post-test</i>	7	54	59	56.71	1.704
<i>Valid N</i>	7				

Source: Primary data,2020

Table 1 showed that from the descriptive analysis results, the pre-test and post-test values of e-learning had an average value of 42.14 and 56.71. The pre-test and post-test standard deviation values were 3.024 and 1.704. The minimum pre-test score was 39, and the maximum pre-test score was 48, while the minimum post-test score was 54 and the maximum post-test score was 59.

Table 2. Frequency distribution before the learning process through the e-learning model at Megarezky University, Makassar

<i>Pretest Class Interval</i>	<i>Frequency</i>	<i>%</i>
High (44-48)	2	29
Low (35-43)	5	71
Total	7	100

Source: Primary data,2020

Table 2 shows data obtained from the distribution of questionnaires before the learning process through e-learning. The lecturer who provides high scores as many as two respondents (29%) while the lecturers who provide low scores were five respondents (71%).

Table 3. Frequency distribution after the learning process through the e-learning model at Megarezky University, Makassar

<i>Postest Class Interval</i>	<i>Frequency</i>	<i>%</i>
High (54-56)	2	29
Low (57-59)	5	71
Total	7	100

Source: primary data,2020

Table 3 shows the data obtained from the distribution of questionnaires after the learning process through e-learning. The lecturers who provided high scores were two respondents (29%), while the lecturers who provided low scores were five respondents (71%).

**Bivariate Analysis**

Table 4. Normality test in evaluating the improvement of the role of lecturers before and after the learning process through the e-learning model at Megarezky University, Makassar

	Value	Shapiro-Wilk			Conclusion
		Statistic	Df	Sig.	
Lecturer evaluation	Pre-test	0.883	7	0.242	Normal
	Post-test	0.929	7	0.545	Normal

Source: Shapiro-Wilk test

Table 4 shows the results of the normality test with the Shapiro-Wilk test. The probability value (Sig.) of the pre-test value was 0.242, and the post-test value was 0.545. Since this value was more significant than 0.05, it can be concluded that the pre-test and post-test value data were normally distributed. Thus, the requirements or assumptions for normality in the use of paired samples t-test had been met.

Table 5. The evaluation of the increase of the lecturer role before and after e-learning model usage at Megarezky University, Makassar

	Mean	SD	Difference	SD	confidence interval 95%	t-count	P
Pretest of e-learning n = (7)	42.14	3.024	-14.57	3.735	-18.026 sampai -11.117	-10.321	0.000
Posttest of e-learning n = (7)	56.71	1.704					

Source: Paired Samples T-Test

Table 5 shows the output of the Paired Samples Test. The pre-test average value of e-learning was 42.14, with a standard deviation of 3.024. The post-test average value of e-learning was 56.71 with a standard deviation of 1.704, resulting in an average difference value of -14.57 with a standard deviation of 3.735. Based on the confidence interval (CI 95%), the difference was between -18.026 to -11.117.

The results of the Paired Samples Test also showed that the t-value obtained was -10.321. The t-count was negative because the pre-test average value was lower than the average post-test result. The negative t-count can be positive, to be 10.321. The result was that t-count > t-table was 10.321 > 2.365. While the significance value obtained was 0.000. Because the probability (Sig.) 0.000 < 0.05, meaning that there was a significant effect of learning through the e-learning model on the increasing role of lecturers.

#### 4. DISCUSSION

E-learning is a learning system that can help implement learning activities from lecturers and deliver teaching materials to all students using the internet as a tool available whenever and wherever needed. With learning through e-learning, lecturers can manage lecture materials such as compiling a syllabus, uploading lecture materials and assigning assignments to students (Suartama, 2015).

According to (Rusman, 2011), the characteristic of e-learning was that it uses independent teaching materials. It is also stored on a computer so lecturers and students can access it anytime and anywhere if needed. In comparison, the characteristics of e-learning system are flexibility. The students are flexible in choosing the time and place to study as desired and do not need face to face in class to obtain course material.

Based on lecturers' evaluation results who taught in Associate Degree of Midwifery before introducing the learning method through e-learning, precisely using the *Indonesia Kuliah Online*. Many lecturers thought that online learning was difficult to understand; conventional learning methods were better than e-learning. E-learning was less helpful than conventional learning in the teaching and learning process. After the lecturer was introduced to the *Indonesia Kuliah Online* application and taught how to use the application in the learning process, the lecturers' view of e-learning changed. This application's use was the best alternative to increase the lecturers' role in the learning process through e-learning.

The data obtained from the lecturers' evaluation results before and after online learning were then tested using the Shapiro-Wilk test to determine whether the data was normally distributed or continued to test the hypothesis using the Paired Samples T-Test.

The analysis results with the Paired Samples T-Test showed that the significance value obtained was 0.000, where the value of 0.000 was less than 0.05 so that  $H_0$  was rejected and  $H_a$  was accepted. (Salamun, 2012) states that the provisions for taking the hypothesis were based on the probability value (Sig.)  $> 0.05$ , while the probability value (Sig.)  $< 0.05$ . The result indicated a significant effect of learning through the e-learning model on the increasing role of lecturers.

Based on the analysed data results, e-learning model learning would not replace conventional learning models' position. Both of these learning models have an essential role so that they are still used or applied. Suppose there is a lecturer who cannot attend face-to-face learning. In that case, the lecturer can provide learning through the e-learning model by sharing or uploading all material and assignments for students through an online application. Students need to take the material and collect assignments in the application (Ucu et al., 2018).

It was in line with the research that has been done. In this study, the lecturer uploads the learning material and assignments that would be given to students. Students need to take the material and collect the assignments given through e-learning classes with the *Indonesia Kuliah Online* application's help.

#### 5. CONCLUSIONS AND SUGGESTIONS

Lecturers had successfully implemented e-learning at Associate Degree of Midwifery at the Megarezky University through the website [www.indonesiakuliahonline.com](http://www.indonesiakuliahonline.com). There were differences in lecturer evaluations before and after using the *Indonesia Kuliah Online* application as an alternative to learning through the e-learning model. Thus, the *Indonesia*

*Kuliah Online* application might increase the lecturer's role in the learning process through the e-learning model. Furthermore, the learning process through the e-learning model should be prioritised the network's quality so that errors do not occur when accessing the application.

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