

## **Asian Journal of Science Education**

Journal homepage: http://jurnal.unsyiah.ac.id/AJSE/



## Identification of Lecturer Difficulties in Implementing of Blended Learning in the Covid-19 era

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(Received: October 12, 2020; Accepted: October 14, 2020; Published: October 27, 2020)

#### **ABSTRACT**

Learning in the Covid-19 era requires lecturers and students not to study in the same place. This condition is a new challenge for lecturers and students to continue implementing effective learning using a suitable approach that is blended learning. This research is a preliminary study to determine the difficulties of lecturers in implementing blended learning at Department of Physics Education, FKIP – Universitas Syiah Kuala. The method used in this research is a survey using a questionnaire containing 30 statements. The indicators measured in this study were 9 (nine) indicators from 2 aspects, namely the readiness and skills of lecturers in implementing blended learning in the Covid-19 era. The questionnaire was distributed to 15 lecturers in the Department of Physics Education, and the results of the responses obtained were analyzed using descriptive statistics. The results of the analysis show that 29.23% of lecturers are not ready to apply the blended learning approach because 53.85% of lecturers rarely access the internet and learning platforms to facilitate lecture activities, so they are not used to using it. 44% of lecturers are not yet skilled in using learning platforms which are shown by 46.16% of lecturers having difficulty changing the general appearance of the virtual class, and 46.15% of lecturers have difficulty interacting using the learning platform. These difficulties are the obstacles for lecturers to apply the blended learning approach in lecture activities, so it is necessary to immediately find solutions to help the lecturer difficulties so that lectures in the Covid-19 era continue to run effectively like previous lectures.

Keywords: Blended Learning, Covid-19, Lecturer Difficulties, Obstacles

#### INTRODUCTION

Coronavirus disease 2019 (COVID-19) caused by Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) first broke out in the city of Wuhan, Hubei Province of China (Susilo, A. et. al., 2020). The most recent data accessed on October 9, 2020, shows an increase in the worldwide COVID-19 transmission chart, with 36,754,395 confirmed cases and 1,064,838 deaths due to Covid-19 (WHO, 2020). Indonesia is one of the countries that has become a victim of the spread of Covid-19, which as of October 11, 2020, it is known that 333,449 positive cases of Covid-19 have been confirmed, as many as 255, 027 recovered, and 11,844 deaths (BNPB, 2020). In Aceh province, there were 5642 confirmed cases, 3370 people recovered, and 209 people died due to Covid-19 (Dinas Kesehatan Provinsi Aceh, 2020) accessed on October 11, 2020. The number of cases is not small and can continue to increase in the absence of effective prevention efforts so as not to be infected with this coronavirus.

One of the efforts made by the government in tackling the case of the spread of Covid-19 is in the field of education. The need to carry out distance learning in the era of the Covid-19 pandemic is a change in the learning system that the government is striving for in reducing the frequency of the spread of Covid-19 throughout the world including Indonesia, Aceh in particular. This change in the learning system is a challenge for the world of education to adapt to new habits in the teaching and learning process. Lecturers have a very important role in the effectiveness of the course of lectures because they are the ones who determine the right strategy for learning activities. Changes in the current learning system really require the readiness of strategies and techniques used for online distance learning (Aliyyah, R. R., et. Al), so that lecturers as educators at the college level need to prepare themselves to face changes in this learning system quickly.

Combining two learning environments, namely synchronous (same time) and asynchronous (different times) has been proven effective for content delivery, active learning, and increasing student engagement for the learning system in the Covid-19 era (Sunasee, R., 2020). The combination of these two learning environments is one of the developments of learning using the Blended Learning approach (Febriantoro, W., 2018). Blended learning is proven to be effective regardless of gender differences so that it can be used to improve the learning outcomes of all male and female students (Herliana, F., et. al., 2020). By applying this approach, it is hoped that distance learning in this era can be as effective as previous learning. Applying new things to conditions that change suddenly, of course, is not easy. Certainly, there will be some obstacles in its application, as well as changes in the current learning system. Lecturers as educators who play an important role in the implementation of lectures, of course, experience several obstacles in the application of the blended learning approach. Lack of confidence, time, and the desire to learn new things to teach using the blended learning approach is one of the obstacles experienced by lecturers (Lightner, C. A., & Lightner-Laws, C. A., 2016). In addition, lecturers experience technological literacy and competency problems in the application of blended learning because of the difficulty of learning new technologies to create and manage online courses (Rasheed, R. A., et. Al).

Based on this, identification of the difficulties of lecturers in implementing blended learning in the Department of Physics Education, Teacher Training and Education Faculty - Unsyiah needs to be done to find out what obstacles are experienced by the lecturers so that further reviews can be carried out to find solutions to solve these obstacles so that the lecture process can run effectively in during the Covid-19 pandemic and beyond.

## **Problem of Research**

This research was conducted because the necessity of learning online during the Covid-19 pandemic has become a new habit for lecturers. Learning activities using a blended learning approach that combines face-to-face learning with independent learning using a learning platform are considered effective in overcoming the current shift in learning styles. So that before it is implemented in the Department of Physics Education, Teacher Training and Education Faculty - Unsyiah, it is necessary to identify the difficulties of the lecturers in implementing the blended learning approach to find out what obstacles the lecturers have in

applying this approach. After it is known, of course, it is necessary to carry out further reviews to overcome these obstacles in order to carry out effective lectures such as lectures directly in the campus environment.

#### **Research Focus**

The focus of this research is to determine the difficulties of lecturers in implementing the blended learning approach in the covid-19 era.

#### METHODOLOGY OF RESEARCH

## **General Background of Research**

This research is a descriptive study, by conducting a survey of lecturers in the Department of Physics Education, Teacher Training and Education Faculty – Universitas Syiah Kuala.

### **Subject of Research**

The subjects of this study were all 15 lecturers of the Physics Education Department, Teacher Training and Education Faculty – Universitas Syiah Kuala.

#### **Instrument and Procedures**

The questionnaire instrument that will be used for data collection is based on 9 (nine) indicators of 2 measured aspects, including Readiness of lecturers to implement Blended Learning in terms of facilities, understanding related to applications, and frequency of application use; and The skills of lecturers in implementing Blended Learning in terms of downloading and installing applications, entering the application, changing the general appearance of the application, uploading teaching materials, evaluating learning, and interaction in learning. Questionnaires that have been compiled are tested for validity by experts who understand blended learning and obtained 30 statement items copied into the google form system. Furthermore, the questionnaire link is distributed to all lecturers to provide responses.

### **Data Analysis**

The data from the lecturers' responses were analyzed using descriptive statistics and the percentage of each statement item was obtained which showed the difficulties experienced by the lecturers in implementing the blended learning approach in the Covid-19 era.

#### RESULTS AND DISCUSSION

Blended learning is not a strange thing in this era of the COVID pandemic because all educators in the world are required to implement it. In the Department of Physics Education, Training Teacher and Education Faculty - Unsyiah, which is required to apply this learning approach during the Covid-19 pandemic. The obstacles of the lecturer in implementing blended learning must be known for reaching the effectiveness of quality lectures. If the lecturer can implement a blended learning approach, of course, the learning process will run smoothly with all the readiness and skills of the lecturers in managing lectures. However, this will become a problem and obstacle in the learning process if it turns out that the lecturer cannot implement this blended learning approach. Lectures will not run effectively, and may even tend to be of not good quality. So it is necessary to know the obstacles of lecturers in implementing blended learning as a preparation effort made to carry out the effective learning in the Covid-19 pandemic era and by knowing the difficulties of these lecturers, the further review can be carried out to find solutions for lecturers who have problems in implementing ready to carry out blended learning when lectures have started.

The data obtained from the results of questionnaires that have been answered by respondents showed that 70.77% of lecturers are ready to carry out blended learning approach in the Department of Physics Education, Teacher Training and Education Faculty - Unsyiah, while 29.23% have several obstacles in the readiness of this blended learning approach. After the percentage of the 3 aspects that were asked of the respondent, the results of the data from the readiness of the lecturer in implementing blended learning can be seen in the graph below:

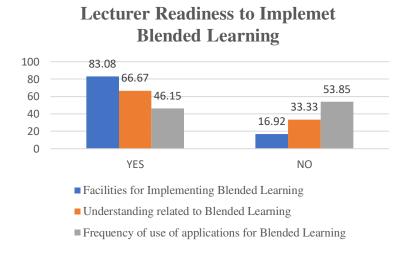


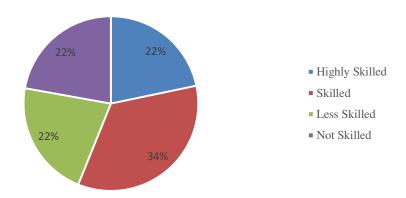
Figure 1. Graph of Percentage Lecturer Readiness to Implement Blended Learning

The graph above shows 83.08% of the facilities owned by the lecturers adequate to implement the Blended Learning approach. Only 16.92% do not have adequate facilities. Based on that the lecturers do not have significant problems with online learning facilities. However, only 66.67% of the lecturers understand various applications that can be used in the blended learning approach. With this change in the learning system, lecturers are forced to understand and be able to teach using technology. Besides, the frequency of lecturers using the internet for the learning and teaching process is only 46.15% who use it at least 1 week - 1 month. This shows that there are still a few lecturers who are accustomed to using the internet network to carry out lectures, especially based on blended learning. Several studies have shown that low understanding in implementing blended learning can occur due to reluctance to learn and use

technology to teach (Hung, M. L., & Chou, C., 2015). This lack of understanding resulted in the lack of lecturers using the learning platform/ LMS to implement blended learning. This is also an obstacle for lecturers because they lack experience in creating instructional content on learning management systems (Maycock, K. W., et. al., 2018). The high understanding and frequency of using blended learning show that lecturers are ready to implement blended learning, so this needs to be improved so that all lecturers in the Department of Physics Education, Teacher Training and Education Faculty - Unsyiah are ready to implement blended learning in future lectures.

In addition to facilities, understanding, and frequency of use, the skills of lecturers in managing lectures certainly determine whether or not lectures can take place effectively. In the application of blended learning, skills in using various learning platforms/ LMS are very important in this pandemic era where all learning activities must take place in the network (online). The data obtained from questionnaires that have been answered by respondents shows that 21.72% are highly skilled, 34.39% are skilled, 21.72% are less skilled, and 22.17 are not skilled in using various applications for the blended learning approach, as shown in the table below:

# Skills in Using the Learning Platform / LMS to implement Blended Learning



**Figure 2.** Graph of Percentages Lecturer Skills in Using the Learning Platform / LMS to implement Blended Learning

In general, the lecturers of the Department of Physics Education, Teacher Training and Education Faculty - Unsyiah are skilled at using various applications to implement blended learning, only 44% of the lecturers are still less skilled. However, this needs special attention to improve these skills. If no further review is carried out, this can become a problem when the lecture has taken place. Lectures can be hampered and run ineffective because knowledge and skills in implementing blended learning affect student competency achievement (Pilgrim, M., et.al., 2018). In detail, the skills of lecturers in using applications for blended learning can be seen in the table below:

**Table 1.** Percentages Lecturer Skills in Using the Learning Platform / LMS to implement Blended Learning per Indicator

No	Indicator	Highly Skilled	Skilled	Less Skilled	Not Skilled
1	downloading and	34,62%	34,62%	15,38%	15,38%
	installing applications				
2	entering the application	30,77%	34,62%	19,23%	15,38%
3	changing the general	19,23%	34,62%	23,08%	23,08%
	appearance of the				
	application				
4	uploading teaching	23,08%	32,31%	23,08%	21,54%
	materials				
5	evaluating learning	17,31%	38,46%	15,38%	28,85%
6	interaction in learning	21,15%	32,69%	26,92%	19,23%

From the results above, it can be shown that the skills of lecturers in the Department of Physics Education, Training Teachers and Education Faculty - Unsyiah are generally already proficient and skilled in using various applications for blended learning approach. However, there are not a few lecturers who are still not skilled. Of the 6 measured skill indicators, 2 indicators have the highest percentage of lecturers' unfamiliarity, namely changing the general appearance of the application (46.16%) and interaction in blended learning approach (46.15%). Skills to use applications, learning platforms, or learning management systems determine the effectiveness of learning using blended learning because e-learning and blended learning have a strong relationship. The survey results show that blended learning benefits students because it can create a sense of community or belong (Tayebinik, M., & Puteh, M., 2013), and learning using blended learning could be increase outcome learning students (Herliana, F., et.al., 2015). Without a blended learning approach, learning by utilizing a learning management system can be more difficult to use (Hameed, S., Badii, A., & Cullen, AJ, 2008), so that skills in using elearning in applying blended learning need to be improved to achieve the effectiveness of the course.

Efforts to help other lecturers who are not yet skilled need to be made so that they can implement a blended learning approach for the effective online lectures in the era of the Covid-19 pandemic. The results of this study can be used as the basis for further reviews to determine steps that must be taken to increase the understanding, frequency of use, and skills of lecturers in using e-learning to apply blended learning to lectures in the coming semester. One of the efforts that can be made is training activities to improve the understanding and skills of lecturers in implementing blended learning.

#### **CONCLUSIONS**

This research was conducted to determine the obstacles of lecturers of the Department of Physics Education, Teacher Training and Education Faculty - Unsyiah in implementing a blended learning approach to lectures during the Covid-19 pandemic. From the survey results, it was concluded that the lecturer had problems in understanding the application of blended learning, the frequency of use, and the skills to use learning applications/platforms (e-learning) in the application of blended learning. Therefore, it is necessary to conduct further reviews to find solutions to overcome these obstacles. One of the efforts that can be done is training activities related to increasing the understanding and skills of lecturers in implementing blended learning

## Acknowledgements

I thank Allah SWT, Head of the Department, and all lecturers of the Department of Physics Education who were involved in this research.

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