

Improved Learning Outcomes of Basketball Material Students through Blended Learning Model with EUKBM Media against Students of Class X MIPA Daughter SMAN 1 Tuban

Imam Syafi'i¹, Nurkholis², Agus Hariyanto³, Abdul Rachman Syam Tuasikal⁴, Nanik Indahwati⁵, Gigih Siantoro⁶

^{1,2,3,4,5,6} State University of Surabaya, Indonesia
Shifu.p11@gmail.com

Abstract

The educational problems experienced in Indonesia are many, one of which is the Covid-19 pandemic. With the Covid-19, school learning has obstacles until the learning process cannot be done completely, both structural and non-structural learning. The study used a short series of kuantitatif statistics with quasi-experimental research models and used control groups of pretest-posttes design because the study applied pretest before being given treatment and provided post test after treatment. The study was conducted at SMAN 1 Tuban. The subject of this study was a student of class X MIPA daughter SMAN 1 Tuban. The study also included three variables including learning outcomes from attitude values, knowledge values and skill values. The results of research that has been obtained state that the blended learning model with EUKBM media has a significant influence on learning outcomes. This can be known from the average pretest and posttest knowledge scores between the experimental class and the control class. Through the application of blanded learning researchers also found changes in attitudes, behavior, knowledge and also skills of students during the learning process. Students become more participating and interacting with teachers and other students. Through the development of this blended learning model, students are more active when learning both online and offline. So that in the process of his defense does not seem monotonous.

Keywords

improvement; learning outcomes; blended learning



I. Introduction

Indonesia experienced a lot of difficulties when the covid-19 outbreak began to appear. Even the impact of this pandemic is not only in one aspect but many aspects. One of them is the educational aspect. In this aspect of education is then developed to study at home during the pandemic. With the covid-19, learning in school has obstacles until the learning process cannot be done completely, both structural and non-structural learning. Structural learning is learning carried out by teachers by providing material directly in the classroom, to establish communication and interaction between teachers and students. While non-structural learning is teacher learning provides material hammering assignments that are given randomly without face to face with students. Learning problems are also experienced by students throughout Indonesia including students in SMAN 1 Tuban. Then it can be assumed that students will experience a decrease in learning achievement or more commonly called learning outcomes. Thus, a teacher must be good at innovating so that his students still get maximum results. Either in the learning process or with the results obtained. The existence of obstacles in teaching and learning activities in this pandemic makes students and teachers or teachers must be able to make peace with the situation, because students are not allowed to follow

learning in school as usual. This led researchers to take Blended Learning with EUKBM media as a learning innovation in the midst of the covid-19 outbreak. Because if you use the Blended Learning learning model with EUKBM media it feels very appropriate in this covid-19 pandemic. Blended Learning learning model is one of the learning models that educators can use as a means of learning, this learning model is generally referred to as mixed learning that combines online learning (elearning) with face-to-face (conventional) learning. Blended learning is a term derived from the English language consisting of the word blended and learning, basically is a combination of learning advantages that are done face-to-face and virtually. Blended learning is a further development of elearning and conventional learning (face to face). While EUKBM media is a medium in the scope of education. Especially in the covid-19 period, the learning activities of students in learning activities are very disturbed. But with this EUKBM students can follow learning more effectively. Electronic Self-Learning Activity Unit (EUKBM) can be opened using a computer, laptop or handheld phone. With a note all students can access without having to come to school. This EUKBM is also determined based on the Learning Implementation Plan (RPP). Rpp used in EUKBM is designed so that students can learn independently. And thus EUKBM media can be said to be an effective learning model and influential on student learning achievement in the current pandemic. Blended Learning models have previously been discussed in previous research. The results of ni'matul Khiriyah (2017), with the title Blandend Learning Influence and Learning Motivation of Students of Class VII SMPN GUMUKUS, this study aims to find out the difference in learning outcomes between blended learning methods and face-to-face learning methods. This research resulted in research that blended learning methods produce better student learning outcomes compared to face-to-face learning, and students' motivation is also higher for learning. The results of the research Kuntarto, Eko, Asyhar, Rayandra, (2016) with the title of Development of Blended Learning Model in Aspects of Learning Design with Online Social Media Platform as a Supporter of Student Lectures,

This research aims to develop new learning concepts to support the course of elementary school teacher education study program. And the results of this study can conclude that the blended learning model has been able to improve student understanding significantly. By paying attention to this condition and reading some research about blended learning, researchers try to find solutions to the above problems by using blended learning model learning with the support of learning-based Electronic media or EUKBM.

II. Research Methods

This study uses quantitative statistics because researchers want to know the data as well as to review and analyze the difference in grades between pretest and posttest grades of students. The type of quasi-experimental model used is the control group pretest - posttest design because this study applies pretest before being given treatment and provide post test after treatment. Thus the data obtained will be more accurate because the data can be compared before and after treatment. The study also used several variables, the variables of this action research among are as follows:

1. Improvement of students' learning outcomes on attitude assessment.
2. Improvement of students' learning outcomes on knowledge assessment.
3. Improve student learning outcomes on Skills assessment.

To achieve the maximum goal of research, researchers need to plan research methods well. The methods used in this study are quasi experiments with pre test and post test control group design. While the design of the research as shown below:

GROUP	Early	Treatment	Final Test
Experiment	TE1	XE	TE2
Control	TK1	-	TK2

*Figure 1. Quasi Experiment With Pretest and Posttest Control Group Design
(Source: Arikunto: 2013)*

Information :

- 1) TE1 = Early test of the Experimental Group
- 2) XE = treatment
- 3) TE2 = Experimental Group Final Test
- 4) TK1 = initial test Control group
- 5) TK2 = Control group final test

III. Result and Discussion

Based on the distribution of frequency of research data, obtained results that show that the blended learning model with EUKBM media has a significant influence on learning outcomes. This can be known from the average pretest and posttest knowledge scores between the experimental class and the control class. Through the application of blended learning researchers also found changes in attitudes and behavior of students during the process of defense. Students become more participating and interacting with teachers and other students. In addition, researchers also found a significant influence on students' skills during the learning process. This can also be seen in the pretest and posttest skill scores between the experimental and control classes. Through the development of this blended learning model makes students more active when learning both online and offline. In this era of the industrial revolution, students are required to have special skills in carrying out creative and fun learning under these conditions (Sagita & Khairunnisa, 2020). Development is a systematic and continuous effort made to realize something that is aspired. Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired. In addition, development is also very dependent on the availability of natural resource wealth. The availability of natural resources is one of the keys to economic growth in an area (Shah, M. et al. 2020).

So that in the process of his defense does not seem monotonous. Based on the findings of the study, it can be concluded that the blended learning model has a positive effect on students' learning outcomes and skills. Variable testing is also done, this is done to explore hypotheses as a prerequisite test. The prerequisite tests conducted in this study are as follows:

3.1 The Hypothesis of the Value of Knowledge

The basis of decision-making on this hypothesis test is that if the sig value > 0.05 then H_0 is accepted and rejects H_a . And if sig < 0.05 then H_0 is rejected and H_a is accepted. Here is the hypothesis:

H_0 : there is no significant influence of blended learning model with EUKBM media on learning outcomes

H_a : There is a significant influence of blended learning model with EUKBM media on learning outcomes

Table 1. Independent Sample T-test Knowledge Value

Category	Sig
Equal variance assumed	0,010

Based on the table it can be known that the sig value of $0.03 < 0.05$. So a decision is taken where H_0 is rejected and H_a is accepted. This shows that there is an influence of learning model lended learning with EUKBM media on learning outcomes.

3.2 Test Skill Value Hypothesis

The basis of decision-making on this hypothesis test is that if the sig value > 0.05 then H_0 is accepted and rejects H_a . And if sig < 0.05 then H_0 is rejected and H_a is accepted. Here is the hypothesis:

H_0 : there is no significant influence of lended learning model with EUKBM media on learning outcomes

H_a : There is a significant influence of lended learning model with EUKBM media on learning outcomes

Table 2. Independent Test of Sample T Test Skill Value

Category	Sig
Equal variance assumed	0,02

Based on the table it can be known that the sig value of $0.04 < 0.05$. So a decision is taken where H_0 is rejected and H_a is accepted. This shows that there is an influence of learning model lended learning with EUKBM media on learning outcomes.

Based on the results of research that has been done there are three major points taken by researchers. Here's the discussion:

3.3 Student Learning Outcomes without Using Blended Learning Models with EUKBM Media

Based on the results of research that has been done shows that the value of student learning outcomes is greatly influenced by the learning and teaching process both online and offline. Because in the present if only giving explanation in online learning forums then students will definitely experience boredom and may not even listen to the explanation given by the teacher. And with this EUKBM it can be very utilized, because with this EUKBM not only increases the effectiveness and quality of learning, but more importantly to increase the mastery of materials both teachers and students (Hermawan, 2019). Learning outcomes can be said to be good and bad not only judged by the end result but there are several aspects that support the success of the student. The assessments seen in this study contained the value of attitude (affective), the value of knowledge (cognitive) and the value of skills (psychomotor). Learning outcomes with this cognitive learning model can be said both when meeting the first meeting in person. This first learning outcome is the value of students' attitudes during online and offline learning activities. Online and offline learning does have their own weaknesses and advantages. The value of online attitudes can be said to be lower when compared to the value of attitudes obtained offline learning. The second assessment is the assessment of knowledge (cognitive). This cognitive assessment is used to measure students' understanding in the ongoing learning process. This assessment is done twice, namely online and offline assessments. This was done twice because researchers wanted to compare the results of online and offline learning. And the results obtained when offline are higher when compared to assessments when online takes place. Online learning is less optimal both the process and

the result because the learning process is less encouraged to develop thinking skills, therefore there needs to be efforts to improve the quality of education with offline learning (Efendy, 2021). Although using EUKMB it turns out that students' learning outcomes remain higher when learning offline. Because if only doing online when learning students are more easily bored and sometimes ignore questions and explanations from teachers. The last assessment is skill assessment (psychomotor). These assessments are taken when the students practice on the ground when learning is offline and when offline these assessments are taken by way of the students making videos about basketball learning practice materials. The skill value in this study was seen from 4 aspects including basketball, chest passes, shooting and dribbell. The sport of basketball itself is a lesson that is easy to learn and mastered perfectly which also requires the need to do a good exercise (discipline) in order to establish teamwork" Barikah (in Setyaningrum, 2021) states that the game of basketball also presents the audience many things such as dribbling while swerving nimbly, varied shots, fantastic breakthroughs, deceptive movements and the change of beautiful points from the competing squads (Barikah, 2019). From the value of these skills can be said between online learning and offline basketball materials the results of skill values no change when learning offline and offline.

The average grade of students has similarities between the first meeting (online) and the second meeting (offline). This is due when students have difficulty when practicing on the ground. And female students also have many obstacles when making videos for online defenders and practice when learning offline.

3.4 Student Learning Outcomes Using Blended Learning Models with EUKBM Media

The learning outcomes in this study use EUKBM with blended learning model. Blended learning itself is a learning model that combines online and offline learning systems. Blended learning is a learning model that combines face-to-face learning with e-learning. Blended learning is a new concept in learning where the delivery of materials can be done in the classroom and online. A well-done merger between face-to-face teaching where teachers and learners meet in person and through online media that can be accessed at any time.

The combination of face-to-face learning with e-learning is due to limited time and easy to make students feel bored quickly in the learning process and the demands of increasingly widespread technological developments (Wardani, Toenlio and Wedi, 2018).

Learning using blended learning with EUKBM media is a solution for teachers in this pandemic, EUKBM contains detailed instructions and runs from the easiest to the most difficult material. So that students can learn well. In the subjects of tailoring, the problem will be more complex, teachers find difficulty in providing learning based on material or practical activities, requires equipment and pay attention to the safety of learners both. The use of blended learning is based on other research that has been done as a development material. Referring to this, it is expected that the application of blended learning in this study can provide significant results and impacts as a solution for learning Physical education of health sports in the time of the covid-19 pandemic so that the learning of fishermen in this pandemic can be more varied, students can master the basic movement skills of basketball well and with a pleasant atmosphere despite learning from home.

With the combination of online and offline learning models can be obtained more effective and higher learning outcomes. This is due to several factors that cause higher value after blended learning, namely:

- Students are easier to do learning, this is because students are required to play an active role in blended learning where there is in the step of blended learning steps.

- Students are better prepared in the face of learning, this is because of the linking of subjects that provide learning materials first through online.
- Students can look for material that will be provided by the teacher before face-to-face learning, so that students can expand their horizons in the material.

The assessment there are 3 aspects of which is, First is the assessment of attitude. Attitude assessment using the blended learning model with EUKBM media between the first and second meetings is better at the second meeting. This is due to the stimulus or treatment that makes students more enthusiastic in following the learning. Even when viewed from the data obtained, at the first meeting the highest score score is 12 and there are only 2 shiva who achieve this value. While at the second meeting the highest attitude score with a score of 12 there were 7 students. It can be answered that with blended learning models can increase the value of student attitudes while basketball learning takes place. The second is the assessment of knowledge (cognitive). On the ability of knowledge of students using blended learning models and EUKBM media also experienced a very significant increase when compared between the first meeting online and the second meeting offline. Learning results at the first meeting with the highest score only reached 11 with the number of students only 1, while at the second meeting the highest score reached 16 with the number of students reaching as many as 2 students. This proves that using blended learning and EUKBM media can improve students' cognitive abilities. According to Ningsih et al (2017) stated that learning using blended learning models can produce a significant learning process in improving learning outcomes. This means that students who take exhibition classes using blended learning models and EUKBM models can follow learning well and enthusiastically so as to improve their learning outcomes. The third step is skill assessment. This skill assessment is done to measure the success of a person in performing a movement both cognitive, locomotor, nonlocomotor and manipulative in a goal effectively and efficiently. Good skills of the game basketball is a skill that is able to support the game of basketball running well. The basic skills of the ball game that are needed are passing, dribbling and shooting. The results of this skill assessment are done twice. At the first meeting students can only achieve the highest score score only reached 6 with the number of students only 2 while in the second meeting when offline students get a score of 9 as many as 8 students. The improvement of the ability of learners in mastering the basic motion skills of basketball above is the impact of the successful application of blended learning as one of the learning innovations. Learners have more motivation to learn and provide a sense of pleasure during learning activities at home. The results of this study are in line with research by (Margiyani, 2021). which concluded that blended learning is able to provide motivation for students so that they experience improvements in their learning ability.

3.5 Effectiveness of Blended Learning Model with EUKBM Media in Enhancing Student Learning Outcomes

Learning models are basically very diverse, learning models are usually used by educators or teachers by adjusting the needs of their students. And in this study researchers used a blended learning model. Blended learning is considered the most suitable for students during research in this pandemic period. In this study researchers used blended learning for experimental classes and conventional learning for control classes. Comparisons of Blended and traditional or conventional learning in Physical education and health show that Blended-based learning has a higher performance score than traditional learning (Vernadakis et al. 2011). Giannousi et al,(2014) concluded that the application of Blended Learning teaching has practical significance with regard to improving student achievement in children's physical education subjects. These results are particularly promising because students in the Blended

Learning group reduced their class ratios shown with higher learning outcomes. According to Melton, Gran, and Foss (2009) stated that student achievement results using Blended Learning are higher than traditional learning. According to Sari (2021) stated that blended learning during covid-19 in Kota Rantau elementary school by students understand well the presentation of materials provided by teachers because they can learn the material over and over again. Students can learn independently creating and choosing how to learn based on their own learning style so that students feel comfortable. Blended learning is also used for learning Penjasorkes. This was utilized during the covid-19 pandemic which resulted in learning solutions on the basic motion of basketball and progress or improvement. Thus Blended learning can improve the learning of the fishermen so that in this case it is the solution of the learning problem of the fisherorkes in the covid-19 pandemic (Margiyani, 2021). In addition to the learning results obtained higher using blended learning is also not difficult. The results explained that with the application of blended learning model with EUKBM media in class X MIPA daughter SMAN 1 Tuban has an effect on improving student learning outcomes. In the teacher control class only perform learning with a conversional model, while for the experimental class, researchers apply the blended learning model by combining online and offline learning through EUKBM media. In the experiment class, students are more active to follow the learning process carried out with blended learning treatment. This is because they feel that virtual learning can provide an opportunity for direct Q&A related to incomprehensible material. While in the material control class is only delivered consciously, so that students are less effective and even lazy to maintain when the teaching and learning process takes place. With the limitations of the current conditions, the application of the right learning model is needed by students for the teaching and learning process to be maximal and optimal. In line with Aunurrohman's (2013) report that the use of appropriate learning models can foster students' love and interest in lessons so that they can get maximum grades. So it is concluded that the application of blended learning model with EUKBM media is effective in improving student learning outcomes of Physical Education and Sports subjects in SMAN 1 Tuban during the covid-19 pandemic.

IV. Conclusion

Based on the results of research that has been done and through the process of data analysis as outlined, it can be concluded as follows:

1. The application of learning without using blended learning with EUKBM media can be said to be less effective and also seems boring. Because many students who follow online learning but cannot focus and many students who do not listen to the explanations provided by the teacher. The value of attitude on online learning is lower when compared to offline defenders. It also applies to attitude assessments as well as skill assessments.
2. Learning using blended learning with EUKBM media is a solution for teachers in covid-19. Because if you look at assessments that are divided into assessments of attitudes, knowledge and skills, the assessment of students who are initially less good can turn out to be good. With such blended learning model can improve the value of student attitudes while basketball learning takes place
3. Blended learning model learning with EUKBM media is very effective in improving the learning outcomes of students of Physical Education and Sports class X students at SMAN 1 Tuban during the covid-19 pandemic. In addition to learning results obtained higher using blended learning is also not difficult. The results explained that with the application of blended learning model with EUKBM media in class X MIPA daughter SMAN 1 Tuban has an effect on improving student learning outcomes.

References

- Aunurrohman. (2013). *Learning and Learning*. Alfabeta.
- Arikunto, S. 2013. *Research Procedures A Practical Approach*. Jakarta: Rineka Cipta.
- Barikah, A. 2019. *Assessment of Basketball Playing Skills Through Observations on Girls Grade x High School N 1 Jonggolan School Year 2017-2018*. *Journal of Physical Education*. Volume 3 No. 4. (Online) Retrieved September 28, 2021.
- Efendy, A. 2021. *Comparison of Online Math Learning and Offline Math Learning Against Mathematical Learning Outcomes Of Students Class VII MTP Guppi Pagar Alam*. *Scientific Journal of Realistic Mathematics (JI-MR)*. Volume 2 No. 1. (Online) Retrieved September 27, 2021.
- Giannousi, Vernadakis, Derri, Antoniou & Ioumourtzoglou. 2014. A Comparison Of Student Knowledge Between Traditional And Blended Instruction In A Physical Education In Early Childhood Course. Greece : Department of Physical Education and Sport Science. Democritus University of Thrace. Turkish Online Journal of Distance Education-TOJDE. January 2014 ISSN 1302-6488. 15 (1) Article 7.
- Hermawan, F. 2019. *Development of UKBM Digital on Respondent Inequality Material*. *Journal of Mathematics Education*. Volume 2 No. 2. (Online) accessed on September 27, 2021.
- Margiyani. 2021. *Utilization of Blended Learning to Increase Basic Motion Skills to Play Basketball During the Covid-19 Pandemic*. *Rich Scientific Journal of Teachers*. (Online) Retrieved September 10, 2021.
- Melton, Bridget Frugoli., Graf, Helen., dan Foss, Joanne Chopak. 2009. "Achievement and Satisfaction in Blended Learning versus Traditional General Health Course Design" in the International Journal for the Scholarship of Teaching and Learning, III (1), Article.
- Ningsih, Y. L, dkk. 2017. *Improved Learning Outcomes and Independence of Learning Statistical Methods Through Blended Learning*. *Journal of Mathematics Education*. Volume 8 No. 2. (Online) Retrieved September 28, 2021.
- Priambodo, A., Hariyanto, A., & Candra Dinata, V. (2020). *The Development of Schoology-Based Blended Learning Model to Improve Student Motivation of National Training Center (PELATNAS) Athlete*.
- Primajaya, V. A., Indahwati, N., Rachman, A., & Tuasikal, S. (2019). *Semenster Oada High School PJOK Subjects That Implement The Kridit Semeter System*. Example, 4 No. 2.
- PSMA, D. (2017). *Guide to the Development of Self-Learning Activity Unit (UKBM)* ©2017-Directorate of High School Development.
- Sagita, M., & Khairunnisa, K. (2020). E-Learning for Educators in Digital Era 4.0. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 3(2), 1297–1302. <https://doi.org/10.33258/birci.v3i2.974>
- Sari, N. P.N. P. & Sudiana, I. K. 2019. *Assessment of Attitudes as An Impact of The Rationing of Chemical Practices*. *Journal of Chemical Education Undiksha*. Volume 3 No. 2. (Online) Retrieved September 27, 2021.
- Setyaningrum, R. K. *Efforts to Improve Shooting Skills In Basketball Games Through Learning Model Of Playing Throw Targets At Elementary School Students Grade V sd State Pandeyan 1 Ngemplak Boyolali*. *Scientific Journal of Spirit*, ISSN: 1411-8319. Volum 21 No. 2. (Online) Retrieved September 27, 2021.
- Shah, M. et al. (2020). The Development Impact of PT. Medco E & P Malaka on Economic Aspects in East Aceh Regency. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*. P. 276-286.
- Vernadakis, dkk. 2011. The Impact Of Blended And Traditional Instruction In Students'

Performance. Greece : Democritus University of Thrace, Department of Physical Education and Sport Science. 16 (1) 439 – 443.

Wardani, D. N dkk. 2018. *The Attraction of Learning in the 21st Era With Blanded Learning. Journal of Educational Technology Studies. Volum 1 No. 1. (Online) Accessed September 26, 2021.*