DEVELOPMENT OF BLENDED LEARNING ON ENGLISH LEARNING OUTCOMES IN PJKR STUDY PROGRAM

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Abstract

The study aims to determine the development of blended learning based on the results of learning English in the PJKR study program. The method used in this research is quasi-experimental. The quasi-experimental method is different from the actual experiment. In the quasi-experimental method, there is a control group. The sampling technique used in this research is cluster sampling, also called group sampling. Data collection is the most important part of research. Effective and complete data determine the quality of the researchers. In this study, the researchers used the learning achievement test technique, test, observation, and documentation. Based on the results of the research that had been done, the size of the concentration and distribution of the pretest result data for the experimental group were: the largest score was 75 and the smallest score was 36, the mean (mean) was 51.67, the median was 52, the mode was 40.5 and the standard deviation was 11.91. While the post-test data results, the highest score was 91 and the lowest score was 45, the mean (mean) was 72.8, the median was 76.9, the mode was 77.6, and the standard deviation was 15.58. So, the objectives to be achieved in the learning design have been implemented, and the blended learning model is able to influence student learning outcomes in English.

Keywords: *blended learning; learning outcomes; English*

1. Introduction

Education in Indonesia is an important aspect that aims to increase the potential that exists in students. During the process of teaching and learning activities, the active role of teachers as educators and students as learners is needed to achieve maximum learning success. Conversely, if one of the parties, both educators and students, does not play an active role, then the results obtained will be less than optimal. The current development of information technology, especially the internet, is capable of presenting virtual interaction spaces as well as providing information and resources in abundance that can be accessed quickly online. Because of the limitations of space and time in the learning process, it becomes increasingly open and even felt like it is disappearing slowly. Thus, various daily

activities, including education, can actually be done more easily, cheaply, efficiently, and democratically (Sutomo, 2012).

Theoretically, for this reason, in efforts to improve learning achievement, there are many ways that can be done, including using a learning model in implementing classroom learning. In this case, the researchers examine the picture and picture learning model. According to (Siregar et al., 2022) learning activities that are not planned and well-designed pose obstacles to achieving the expected learning outcomes. Therefore, learning activities must be designed in such a way that the learning process and learning outcomes can be optimally achieved. Many adjustments have occurred in learning policies during this pandemic. In this situation, all parties, starting with teachers, parents, and students, must be able to live a new normal through learning by utilizing information technology and electronic media so that teaching can continue well. However, in practice, teachers and students still need to carry out face-to-face learning. So a learning system is raised by the Ministry of Education and Culture, namely the blended learning method. This method encourages the digitization of teaching and learning activities. Blended learning is a method in the teaching and learning process that combines and integrates the conventional education system with an all-digital system. Blended learning involves face-to-face class sessions accompanied by online activities (a mix of face-to-face learning and distance learning). Understanding the background as described above, blended learning is the right solution. Through blended learning, teachers can still interact with students and carry out their functions as educators, but at the same time, they can take advantage of technology through the use of e-learning. Thus, in carrying out face-to-face learning, teachers also utilize technology-based learning so that students can meet their needs by either interacting directly with the teacher or surfing through gadgets or computers to explore subject matter.

In this modern era, technology develops in various fields, such as education, including at the basic education level. The use of renewable technology in elementary schools, such as augmented reality, continues to develop. Augmented reality technology is a technology that can display virtual objects in 2D and 3D in real time (Hidayat, Sukmawarti & Suwanto, 2021). Technological development is one of the results of productivity for people who have the knowledge obtained from education. Where the development of science and technology has broad implications in human life, it is hoped that these humans need it to deepen to take advantage of it optimally and reduce the negative implications. Technology can only be developed, especially in educating students (Rusydi, 2013).

Therefore, learning with the e-learning model is considered no better than conventional or face-to-face learning. The conventional method is considered better than PJJ because the material is easy to understand and accompanied by direct interaction and explanation by the teacher, making it easier for students to solve problems that occur during the learning process (Febriyana, 2022). This research was appointed so that researchers and English teachers know the effect of the blended learning method on English learning outcomes, are able to master and apply the blended learning method, and are able to design learning media that can later encourage student learning interest so that students don't feel bored when participating in the learning process. According to Lasi & The (2018), unlike the teacher-centered teaching and learning approach, the student-centered learning approach gives a larger portion to student activities. Teaching and learning activities are designed

according to the needs, interests, aspirations, and cultural background of the learner, as well as their uniqueness. Students are motivated to show their skills and are required to come up with creative ideas.

Blended learning involves face-to-face class sessions accompanied by online activities (a mixture of face-to-face learning and distance learning). The researchers chose blended learning as the topic of this study because the teaching and learning process requires a two-way reciprocal process between teachers and students so that learning outcomes are better and more perfect. The researchers examined more deeply the implementation of blended learning in learning English in elementary schools (Suwarti et al., 2022).

According to Misnawaty & Nurming (2021), mastering a foreign language is not an easy thing because the range of material is very broad, involving four language competencies. The four competencies are listening, speaking, reading, and listening. To be proficient in the four language competencies, students are required to have adequate vocabulary mastery. The problem that is commonly experienced by students when learning foreign languages is a lack of vocabulary.

Relevant learning is learning that combines conventional learning with information and communication technology-based learning, better known as blended learning, which combines conventional learning (only face-to-face) with learning by utilizing information and communication technology. Through blended learning, the learning system becomes more flexible and less rigid (Majir, 2019).

Based on the problems described above, the researchers are interested in researching and discussing the title of the article entitled "Development of Blended Learning Against English Learning Outcomes in the PJKR Study Program". The purpose of this research is to find out the development of blended learning and the results of learning English in the PJKR study program, to find out the effect of blended learning on English learning outcomes in the PJKR study program.

1. Literature Review

It is understood that students will be able to master speed reading techniques effectively when they are already proficient at basic-level reading. In other words, the success of students who are proficient at reading is largely determined by the basic reading skills they have learned before. This is a form of advanced skill that is applied to students (Siregar et al., 2022). Blended learning-based learning has started since the discovery of computers, although before that there had also been blended learning. Initially, learning occurred due to face-to-face interaction between the teacher and students; after the printing press was found, the teacher used printed media (Idris, 2018). In the current pandemic conditions, students are required to study from home. This is in accordance with the recommendation of the Ministry of Education and Culture, which states that the safety and health of students are priorities. Distance learning is carried out through several online learning media, such as Google Classroom, WhatsApp groups, Edmodo, and several other learning applications (Fauziah, 2020).

According to Siregar et al. (2022), reading is an important basic skill that is taught to students from elementary school, starting from the elementary school level, even from

kindergarten/RA. On this basis, it is necessary to gradually train students' reading skills. This is important because there are differences in the reading abilities of each student; some have high abilities, some have low abilities. Provision of a good stimulus is a way of helping children to be able to achieve aspects of development well; it is also a coaching effort aimed at children from birth to the age of six, which is carried out through providing educational stimuli to help physical and spiritual growth and development so that children have readiness to enter further education (Siregar et al., 2022). The learning process organized by the teacher is adapted to the cognitive development of children. Improving children's ability to communicate, interact to support others, and maximize all sensory abilities such as seeing and hearing optimally (Siregar, 2018).

3. Research Method

The method used in this research is quasi-experimental. The quasiexperimental method is different from the actual experiment. In the quasi-experimental method, it has a control group, but cannot fully function to control external variables that affect the implementation of the experiment (Sugiyono, 2014).

The sampling technique used in this research is cluster sampling, also called group sampling. At this stage, it is often used in two stages: the first stage determines the sample area, and the next stage determines the people in that area by sampling as well. Data collection is the most important part of research. Effective and complete data determine the quality of the researchers. In this study, the researchers used learning achievement test techniques, tests, observations, and documentation to collect research data. Analysis of the data obtained. The data analysis technique in this study aims to describe the opinions, suggestions, and responses of all validators obtained from the criticism and suggestions table. The data from the questionnaire are qualitative and can be quantified using a Linkert scale with four standards, then analyzed by calculating the percentage of item scores for each answer to each question in the questionnaire.

4. Results and Discussion

The results of the development of blended learning media images.

Figure 1. The media ses Blended Learning

Figure 2. Blended Learning Media Using Infocus

This research was conducted in six meetings between the experimental group and the control group. The research provides different treatments for the two groups. The experimental group studied using a blended learning model, while the control group studied using a conventional learning model. The data obtained in this study were collected from tests given to students in the form of a pretest and a post-test, which were given to both groups, namely the control and experimental groups. The pretest was given before the treatment of the blended learning model was carried out to determine students' initial abilities. While the post-test was given after the treatment was carried out using the blended learning model, The instruments used in the pretest and post-test in this study included data on student learning outcomes through a cognitive test of 30 validated multiple-choice questions.

Pretest and Post-test Results of the Experiment Group and Control Group

Based on the pretest and post-test results of the experimental group consisting of 30 students, the result is presented in the following table:

Data	Experimental Group		Control Group	
	Pre--test	Pos-ttest	Pre-test	Post-test
Highest Score	75	91	72	89
Lowest Score	36	45	0	0
Mean	51,67	72,8	54,2	65,7
Median	52	76,9	50	54,3
Mode	40,5	77,6	52,8	55,25
Deviation Standard	11,91	15,58	16,8	15,04

Table 1. Summary of Distribution of Pretest and Post-test Results of Experimental and Control Group Data

Based on the table above, the size of the centering and distribution of pretest results data for the experimental group is: the largest score is 75 and the smallest score is 36; the mean (mean) is 51.67; the median is 52; the mode is 40.5; and the deviation standard is

11.91. While the post-test data results showed the highest score was 91 and the lowest score was 45, the mean (mean) was 72.8, the median was 76.9, the mode was 77.6, and the deviation standard was 15.58.
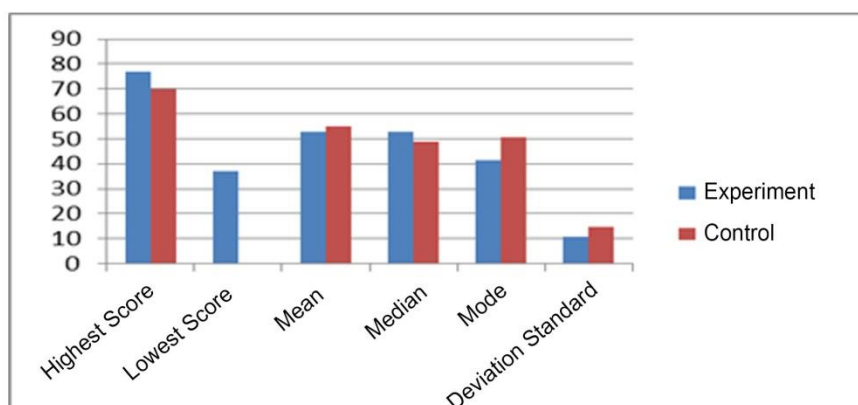

Figure 1. Histogram of Experimental Group Pretest Result Data and Control Group

Analysis of Learning Outcome Data
Normality test

The Normality Test was carried out to find out whether the sample under study was normally distributed or not. In this study, the normality test used was the Liliefors test. The acceptance criteria for whether the data are normally distributed or not are determined by using the following formula:

If Lcount < Ltable means the data are normally distributed
If Lcount > Ltable means the data are not normally distributed

Statistics	Experiment		Control	
	Pre-test	*Post-test*	*Pre-test*	*Post-test*
N	34	34	32	32
X	51,67	72,8	50,2	62,7
S	11,91	15,58	15,8	17,04
Lcount	1.116	1.126	1.122	1.124
Ltable	1.124	1.144	1.124	1.114
Decision	Normal	Normal	Normal	Normal

Tabel 2. Normality Test Data Result of *Pretest-Posttest*
of Experiment and Control Groups

From the table of normality test results it can be concluded that the data from the pretest and post-test results of the two groups are normally distributed because they meet the criteria, namely Lcount <Ltable.

Hypothesis Testing Results
a. t-test

After the data analysis prerequisite test was carried out, it was found that the learning data of the two groups in this study were normally distributed and homogeneous, so testing the learning outcomes data for the two groups continued with the next data

analysis, namely hypothesis testing using the "t" test with the following criteria: If t count < t table then Ho is accepted, Ha is rejected.
If t count > t table then Ho is rejected, Ha is accepted To

$$\frac{\overline{X}_1 - \overline{X}_2}{s\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$ determine the t count value, the following formula is used:

tcount $=$

Statistics	Pre-test		Post-test	
	Experiment	Control	Experiment	Control
N	30	30	30	30
X	51,57	54,2	70,8	62,7
S2	129,02	215,04	212,57	246,28
t count	-0.72		2.172	
t table	2.037		2.037	
Decision	There is no difference		There is difference	

Tabel 3. Hypothesis Testing

From table 3, the pretest score shows that t count < t table, namely - 0.72 < 2.172 so that the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected. So there is no significant difference between the pretest results for the morning class as the experimental group and the evening class as the control group. Thus, both classes have homogeneous abilities and both classes are appropriate as research samples. **a. Test Gains**
The collection of research data on learning achievement tests was carried out using a data collection tool in the form of multiple choice objective tests. The design used in this study was the nonequivalent control group design, so the data presented for the two sample groups were classified into pre-test and post-test results. To find out the results of the research conducted, it is necessary to carry out a pre-test and post-test comparison of the two groups, as well as comparing the normal gain of the two groups. From the Gain calculation results, the following data are obtained:

Explanation	Experiment	Control
X	0.454	0.180
Conclusion	Low	Low

Table 4. Test of the Similarity of Two Average Gains

Based on the table above, the calculation of student scores in the experimental group is generally moderate (0.454), while in the control group the increase in student scores is low (0.180). so, it can be concluded that the experimental group has a high increase in understanding than the control group.

5. Conclusion
From the results of the study, it can be seen that the average value of learning outcomes in the experimental class experiences a significant increase, where the average post-test learning score of 89 is greater than the pretest learning achievement score of 97 so that the blended learning model has an effect on English learning outcomes in the PJKR study program. If blended learning is done well, there are at least three benefits that can be

obtained, one of which is improving learning outcomes through distance education. In this study, it is clear that the blended learning model is able to provide changes in student learning outcomes. So the blended learning model is one of the distance learning models that can be carried out by teachers for learning activities to create a new learning atmosphere by providing convenience for students through long distance education. Through the t-test conducted, there is a significant difference, meaning that the difference is due to the treatment with the blended learning model. With a significance level of 0.05, the acceptance area for Ha is t table < t count or 2.036 < 2.172, so Ho is rejected and Ha is accepted. Based on the normal gain test, it is known that the normal average gain of the experimental class is 0.454 and that of the control class is 0.180. From these scores, it can be said that the average normal gain in the experimental group is greater when compared to the control group. Based on the results of observations made by the researchers, it shows that the aspects assessed are in accordance with the steps and learning plans made by the researchers. therefore the objectives to be achieved in the learning design have been implemented, and the blended learning model is able to influence student learning outcomes in English.

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