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**THE EFFECTIVENESS OF PROJECT-BASED LEARNING
BY USING THE REAL OBJECT ON STUDENTS' DESCRIPTIVE WRITING
AT MTs MIFTAHUN NAJAH**

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Abstract

This research addressed to find out whether project-based learning by using the real object is effective or not for students' descriptive writing achievement. It used quasi-experimental research which involved 27 students of experiment group and 26 students of control group. A test was used as an instrument for collecting data that would be analyzed by Independent sample t-test to determine whether there is a statistically significant difference post-test mean between the experiment and control group. The result of data analysis calculated that the average of post test is higher than pre-test. The pre-test score is 10.63 and the post-test score reaches 15.74 . Meanwhile, the result of independent sample t test showed that the mean score of experiment group is higher than control group. The mean score of experiment group is 15.74 and control group is 14.08. It also showed that the sig (2-tailed) is $0.005 < 0.05$. It means the alternative hypothesis was accepted that there is significantly different descriptive writing achievement between the experiment and control group. Based on those calculation, it can be concluded that applying project-based learning by using the real object is effective for students' descriptive writing achievement.

Keywords: Effectiveness, Project-based learning, Real object, Descriptive writing

Penelitian ini ditujukan untuk mengetahui apakah Project-based learning dengan menggunakan real objek efektif untuk prestasi menulis teks deskriptif siswa. Penelitian ini menggunakan penelitian eksperimen semu yang melibatkan 27 siswa sebagai kelompok eksperimen dan 26 siswa sebagai kelompok kontrol. Tes digunakan sebagai instrumen untuk mengumpulkan data yang akan dianalisis dengan uji-t (Independent sample t-test) untuk menentukan apakah ada perbedaan nilai rata-rata post-test yang signifikan secara statistik antara kelompok eksperimen dan kelompok kontrol. Hasil analisis data menunjukkan bahwa rata-rata post test lebih tinggi dari pada pre-test. Skor pre-test yaitu 10,63 dan skor post-test 15,74. Sementara itu, hasil uji-t menunjukkan bahwa nilai rata-rata kelompok eksperimen lebih tinggi daripada kelompok kontrol. Nilai rata-rata kelompok eksperimen adalah 15,74 dan kelompok kontrol adalah 14,08. Hasil uji t juga menunjukkan bahwa sig (2-tailed) adalah $0,005 < 0,05$. Ini berarti hipotesis alternatif dapat diterima bahwa ada perbedaan prestasi menulis teks deskriptif yang signifikan antara kelompok eksperimen dan kelompok kontrol. Berdasarkan perhitungan tersebut, dapat disimpulkan bahwa menerapkan Project-based learning dengan menggunakan real objek efektif untuk prestasi menulis teks deskriptif siswa.

Kata kunci: Efektifitas, Project-based learning, Real object, Tulisan teks descriptive.

Introduction

Writing is the process of expressing ideas or thoughts in words (Leo, 2007: 1). In fact, the English language learners faced some problems in it, such as the grammatical structure, paragraph organization, and motivation (Rahmatunisa, 2014: 8). For those situations, the teacher should conduct the way to minimize or avoid the problem. In practice, the research provided project-based learning as the alternative approach. It is an instructional approach built upon learning activities and real tasks that have brought challenges for students to solve (Stiver, 2010 :1). It is applied by using the real object as the media in learning.

This research aimed to find out whether project-based learning by using the real object is effective or not for students' descriptive writing achievement. Descriptive text becomes a good decision because it is as the first step for mastering the other text type based on the basic competence of curriculum 2013. This research hopefully can give the contribution theoretically in enriching the concepts of project-based learning by using the real object and practically in giving an information about the process of Project based learning and how to apply it through real object in teaching writing especially descriptive text (describing an animal).

Theory

The relevant theories of the research are discussed as follows:

1. Project-Based Learning

Project-based learning (PBL) means the use of activities designed for students to do some research for new bodies of knowledge on their own, using the scientific method under supervision of the subject teacher (Supadol *et al.*, 2013: 1446). It can be defined that project-based learning applies students-centered learning. It involves the majority of students' existence. The students are given the opportunity to take part in the learning environment and become the responsibility of their own learning. It is related to the students' intention and aptitude. So, they will have the motivation in learning activity in order to gain the knowledge and solve the learning problem easily. Finally, they could creat and present their product well.

According to Larmer et al., (2015: 2), project based learning is a powerful teaching approach that motivates students, prepares students for college, careers, and citizenship, helps students meet standards and do well on tests that ask students to demonstrate in-depth knowledge and thinking skills, allows teachers to teach in a more satisfying way, provides schools and districts with new ways to communicate and to connect with parents, communities, and the wider world.

The project in this research did the six processes as stated by Inthachot *et al.*, (2013:1013) below:

- a. Introduction that attract the attention of the students to motivate them to learn
- b. Selection that allow the students to choose topics that interest them
- c. Planning to design and develop the work plans and implement the plans
- d. Collecting the data, information, and other resources
- e. Presentation of the project
- f. Evaluation which assesses the project.

2. Real Object

According to Soulier (1981:7), real objects are the things we come in contact with everyday. It means real object is the real thing related to our environment. The

real object is also known by realia. In this case, Berwald and Pierre (1987:3) states that realia refers to real objects. In practice, real objects can be the media in teaching. It can lead the real life into the classroom and serve the real world to the students. The use of real object as the media can be useful in teaching learning activity. It can stimulate the students in learning. According to Anderson (1994:181), real objects or realia can give an important stimulus to the students in learning the materials because it can make the students use their five senses. The real objects also conduct the active students in learning.

In this research, the real object is the real animal. Every group of students has to carry the animal as the real object by considering agreed specifications of the animal as follows:

- a. The animal should be easy carrying
- b. The animal should not cause the crowded in the classroom
- c. The animal should not has a very small body or a very big body
- d. The animal should be kept well in transparant can
- e. The animal should not die

The students observe the real object to get the ideas about its general information and specific characteristic by using their five senses in order to transfer the idea into written form.

3. Descriptive Text

According to Stanley as stated in Syahputra and Ardi (2013:62), descriptive text presents the appearance of things that occupy space, whether they are object, people, buildings or cities. The definition can be the representative of descriptive text definition. Simply, it describes about particular subject. It may be told verbally or written form but the research only focuses on the written form. A description usually follows a pattern of organization/spatial order. It is the arrangement of things in space.

Every text has special characteristic that can differentiate each other. It consists of generic structure and linguistic features. Gerot & Wignell in Nopriato (2017:67) point out the generic structure of descriptive text as follows:

a. Identification

It introduces and identifies specific participant such as a person, a thing, a place, an animal, and or an event to be described

b. Description

It is structured to describe that participant from its characteristics, appearances, personality, and habits or qualities.

Then, talking about the grammatical feature of descriptive text, Anderson (1998:26) states below:

- a. Verb in present tense
- b. Adjective to describe the feature of the subject
- c. Topic sentence to begin paragraph and organize the various aspects of the description

Method

The researcher used quasi-experimental design which random assignment to treatment groups is not used (Ary, 2010: 316) for the sample of seventh grade students at MTs Miftahun Najah Karanglo Mojowarno Jombang. The researcher decided two

groups as an experiment group that would get treatment by applying project-based learning through real object in writing descriptive text and a control group that would get treatment by applying project-based learning without real object. The experiment group is class VII B consisting of 27 students and the control group is class VII A consisting of 26 students. Both of experiment and control group did the pre and post-test by using the valid instrument contained of three kinds of supporting validity evidence namely construct, content, and face validity and also using the reliable instrument which is consistent and dependable (Brown, 2004:26). Getting the instruments' validity and reliability, the researcher involved the English lectures of STKIP PGRI Jombang and some deliberation members of English teacher for Islamic Junior High School in Jombang or it is called by MGMP. After getting the result of the test that became the data in this research, the researcher used the analysis of Independent-sample t test in analyzing the data. It becomes an inferential statistical test that determines whether there is a statistically significant difference between the means of experiment and control group which are unrelated.

Result

This research was conducted on October, 21st to November, 6th 2018. The experiment and control group did three activities namely pre-test, treatment, and post-test. Both of groups did the same pre-test and post-test but they got the different treatment. The experiment group applied project-based learning by using the real object, while the control group applied project-based learning without real object. It was shown through the table below:

	Value Label	N
Learning approach	1 Project-based learning by using the real object	27
	2 Project-based learning without real object	26

Based on the table above, the first learning approach is the treatment for experiment group and the second learning approach is the treatment for control group, while "N" shows the total students of each group.

As mentioned above, the data was from the test result that would be analyzed by using independent sample t-test. It should be analyzed after calculating the homogeneity and normality of the post-test for both of groups. The criteria of homogeneity and normality are based on their significance values. If the value of $\text{sig} > \alpha$ ($\alpha=0.05$), the test result is homogeneous and the distribution is normal. It can be calculated as follows:

1. Homogeneity

Test of Homogeneity of Variance

	Levene Statistic	df1	df2	Sig.	
Result_ posttest	Based on Mean	1.769	1	51	.189
	Based on Median	1.825	1	51	.183
	Based on Median and with adjusted df	1.825	1	50.999	.183
	Based on trimmed mean	1.755	1	51	.191

It shows that the significance (sig) based on mean is 0.189. As mentioned above, if the significance > 0.05 , it will meet the homogeneity of test. It means the post-test result is homogenous.

2. Normality

**The Normality of Post-test
One-Sample Kolmogorov-Smirnov Test**

		Data_pretest
N		53
Normal Parameters ^a	Mean	14.92
	Std. Deviation	2.209
Most Extreme Differences	Absolute	.159
	Positive	.091
	Negative	-.159
Kolmogorov-Smirnov Z		1.154
Asymp. Sig. (2-tailed)		.139

a. Test distribution is Normal.

The interpretation of the normality is as the same as the homogeneity that the distribution is normal if the significance > 0.05 . Based on the table above, the asymp. Sig. (2-tailed) is 0.139. It means the distribution of post-test result is normal.

After getting the homogeneity and normality, the researcher conducted an independent sample t-test to test the hypothesis in order to know whether there is different mean score of descriptive writing achievement between the students who apply project-based learning by using the real object and the students who apply project based-learning without real object. It was taken from the result of post-test for experiment and control group. The following table can be the representative of its calculation:

Group Statistics

Group		N	Mean	Std. Deviation	Std. Error Mean
Result_posttest	Experiment group	27	15.74	1.873	.360
	Control group	26	14.08	2.244	.440

According to the table above, the mean score of experiment group is higher than control group. The mean score of experiment group is 15.74 and control group is 14.08. After getting the mean score of their post-test, it should be continued to analyze the significantly different mean between both of groups. The analysis would be presented below:

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Data posttest	Equal variances assumed	1.769	.189	2.935	51	.005	1.664	.567	.526	2.802
	Equal variances not assumed			2.925	48.714	.005	1.664	.569	.521	2.807

In this research, the t-test used equal variances assumed because both of experiment and control group are homogeneous. Based on the sig (2-tailed) above, the value is $0.005 < \alpha$ ($\alpha=0.05$). It means H_0 could not be accepted and H_a was accepted. As the result, there is significantly different descriptive writing achievement between the students who apply project based-learning by using the real object and the students who apply project based-learning without real object.

Discussion

The treatment in this research was done in three meetings. It consisted of different learning activities as follows:

1. The students in groups are led to discuss about social function, generic structure, and language features of descriptive text about an animal.
2. The students in pairs are led to write the sentences about the animal characteristic and its behavior and arrange the jumble sentences into the good descriptive text.
3. The students in groups are led to apply project-based learning by using the real object to write descriptive text.

Those kinds of treatment proposed to understand and train the students to write the descriptive text about animal. It would be the background of their knowledge before doing the post-test especially for the experiment group. As the result, both of experiment and control groups got better post-test score than pre-test score. The average of pre-test score for the experiment group was 10.63 and the control group was 10.88 with the significance based on mean 0.447. Meanwhile, in the post-test score, the experiment group reached 15.74 and the control group reached 14.07 with the significance based on mean 0.189. In practice, the improvement between the pre-test and post-test of both especially experiment group could be seen on the right usage of simple present tense, the right paragraph organization, and the right spelling, punctuation, and capitalization. In other hand, the comparison between post-test result of the experiment and control group was significantly different. The experiment group got the higher post-test score than the control group.

Furthermore, the comparison between both of groups was known from the calculation of independent sample t-test in testing the hypothesis. It got the sig (2-tailed) value $0.005 < \alpha$ ($\alpha=0.05$). It indicated that an alternative hypothesis was accepted.

As the result, students' descriptive writing achievement for experiment group who applied project based-learning by using the real object and students' descriptive writing achievement for control group who applied project based-learning without real object were significantly different. So, the alternative hypothesis was accepted and the null hypothesis could not be accepted.

Finally, the result of data analysis showed that the post-test score is higher than the pre-test score and also there is the different post-test score between the experiment and control group. The experiment group got the higher score than the control group in writing descriptive text about animal.

Conclusion

Based on the data analysis, applying project-based learning by using the real object for seventh grade students of MTs Miftahun Najah increase their writing score and the mean of post-test score for the experiment group who applied project-based learning by using the real object is higher than the control group who applied project-based learning without real object. Furthermore, the analysis of independent sample t-test showed that both of groups have the significantly different descriptive writing achievement. As the conclusion, applying project-based learning by using the real object is effective for students' descriptive writing achievement.

Looking at the result of this research, it will be better if the practitioners or the other researchers try to learn the weakness of this research and try to refine and modify it to reach the most eligible research. Here, the researcher recommend the following suggestios:

1. Project-based learning by using the real object might be applied for the other English learning materials and the other skill.
2. Applying project-based learning should have the good preparation and enough time to gain the good and accurate findings.
3. Project-based learning might be applied outside of the class to get the real experience based on its environment.
4. Project-based learning by using the real object might be appropriate to be applied for unstructured students assignment.
5. The animals as the real object should not be limited on the specification decided by the teacher.

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