THE EFFECTIVENESS OF PROJECT-BASED FLIPPED CLASSROOM (PjBFC) LEARNING ON EFL STUDENTS' WRITING PERFORMANCE

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ABSTRACT

PjBFC is a learning integration of project-based learning (PjBL) and flipped classroom (FC) supported by video. According to Béres, et all (2018) Integrating PjBL and FC can develop critical thinking skills, writing performance, increase motivation and effectiveness of learning outcomes. Integration of project based learning and flipped classroom is recommended for learning written recount texts. In implementing the flipped classroom the teacher provides learning material three days before the meeting via the Whatsapp group. The task or project given to each group is for students to compose a recount text with historical events. Based on these two studies, this study will adapt and adjust the activities in the Project-Based Flipped Classroom (PjBFC) research syntax from (Listiqowati et al. 2022). Based on these two studies, this study will adapt and adapt the Activity in Syntax (PjBFC) research from Listiqowati (2022).

The integration of the PjBL and FC models has been shown to improve performance, motivation, activity, collaboration, knowledge construction and critical thinking skills. PjBFC encourages students to participate in online learning (Shih et al, 2018). his study used a quasi-experimental with non-random sampling technique with a total of 34 classes using a post-test using an independent t-test. These findings include students' writing skills using the PjBFC learning model. Researchers can conclude that from the results of data analysis on the Independent T-Test it can be seen that Sig. for the method obtained is 0.002 which is lower than 0.05.

This means that statistically there is a significant difference between learning outcomes using PjBFC on students' writing learning outcomes compared to using conventional teaching. So, the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. The average calculation shows that the post-test score for the experimental class is 70.35 and for the control class is 54.12. It is hoped that in the future PjBFC will become an alternative learning to improve writing achievement.

Keywords: *Project-Based Flipped Classroom (PjBFC), EFL student writing performance, historical recount text*

INTRODUCTION

Learning other languages is important in this era because language is our tool to communicate with people in the world like the other languages, English is divided into four skills which are listening, speaking, reading, and writing. Reading stands for the third skill and will be always discussed in here. It is a skill that works as a communication way of a written text between a writer and a reader. By using this skill, the readers try to understand what the idea or the information of a text that wanted to deliver by the writer. Mastering reading skill is also become a must for all of the students which are studying English as a foreign language. Understanding through reading is to understand what is learned and is supported by the ability to re-explain their understanding (Pittariawati, 2020: 74). Stating that understanding is a person's ability to be able to understand, conclude and be able to express what is conveyed or heard is also taught to him. By reading, people can increase their knowledge, reading comprehension, or get information from the reading. Rodiyana (2018: 49) states that; Understanding, namely the ability of a person to understand something that is being studied is also supported by the ability to re-explain his understanding. People can get information from aspects of reading that have been read continuously. It has been stated above that reading is a process that is not only reading but also reviewing or concluding reading that has been understood or that has been read in order to understand the purpose or ability to read from the text that has been read.

Wahyu Budi (2020) state that the massive popularity of manga (Japanese comic) has led it to be translated into different languages, one of them is English. Despites the origins, English translated mangas are authentic

English literature because they are written by a team of a bilingual Japanese-English translator and a native English-speaking translator-editor, who ensures that the text is natural and meaningful. So from the statement above it can be concluded that manga comics are very useful for those who use these techniques to improve student learning. Zul Fiqhri (2022) state that the Manga comics can act as a medium for delivering information and can be interesting because they are equipped with images and text that can support a person's visual understanding to understand and understand that information can function. In everyday life, manga comics are very popular in several circles, not only among children, teenagers, and adults who are also connoisseurs of this one art work. This can be interpreted that indirectly in a manga there are educational messages implied in it that can be accepted by society as a form of learning. The learning contained in manga comics, especially Naruto, is divided into text learning and also visuals that tell stories that can provide lessons for the reader. The conclusion from the statement above is, the researcher succeeded in using Manga comic by using a comic entitled Naruto by taking messages from the contents of the Manga comic.

The previous study with Manga comics done by Armadi (2018) showed the students got difficulties to determine main idea and answer questions based on the text. It was because they still used books that contain many texts and monotonous material. As the result, their reading achievement was below the expectation. To overcome this situation the teacher should generate students' interest by applying the various techniques and selecting the proper text. By using the good teaching material, the teacher could help the students think critically and develop their ideas. More importantly, the students could comprehend the idea easier and reached optimal results in reading. In this decade, many language teachers did not provide attractive teaching materials when they teach in classroom. They still used books that contain many texts and monotonous material. So that what made students not interested to learn about reading especially reading narrative text because when they learn it, they get bored and sleepy. Krashen (2002) said that psychology and mood can influence students in learning in classroom. As a result, when they were faced an exam, their score was below average the standard quality of the school. The cause is the students were not attracted when they studied about reading narrative text.

The implications are also aimed at individuals who work in the education sector, in particular, English teachers in formal or non-formal institutions and public or private schools. Creative and innovative tools in supporting the process of delivering English material related to reading comprehension skills are challenges that must be answered by English teachers. Comic strips can be one of the materials that is considered to appear in class to help students achieve a better learning process. Bringing comic strips to class must pay attention to several aspects to ensure the effectiveness of comic strips. These aspects can be related to the type and purpose of comic strips, student skills and other relevant aspects. Teachers should promote reading habits among students in increasing students' interest in reading. By improving reading comprehension skills, it will personally influence students' abilities which will make them professionals in the future. For developers of English materials, in designing materials visual aids must be considered. It can be in the form of pictures, cartoons, comics or other visuals. In line with the findings of this study, visuals can help students to retrieve the necessary information for better production as output. Responding to these facts, this study aims to determine whether the use of anime comics as a reading tool will affect reading comprehension. It is hoped that this research can provide insight regarding the use of learning management systems, especially this anime comics and its effectiveness in the subjects taught.

This article tries to prove the effect of manga comics on reading comprehension on student's learning English. There are 2 classes as research, control class and experimental class. Gerund was chosen because this article was conducted on students of SMK Negeri 1 Jombang, a public school and to look for differences in the use of language between control class and experimental class as indicated by the way they use reading comprehension in reading. The reason shows that there are things that are different from the previous research above. This article is expected to be useful for anyone who wants to do research on reading comprehension in reading skills.

METHODS

This article was conducted by using quasy-experimental design that is in quantitative research. It was used to test and prove the hypothesis by giving a treatment to the sample. According to Gay (2011:260) the experimental method is one of the method of research that can test hypothesis concerning cause and effect relationships. This research design is conducted through quasi-experimental design research. According to Creswell (2012) quasi-experimental design the researcher could not create the group or participant randomly. In quasi-experimental design using treatment in one group where this group is usually called the experiment

group, while in the other group did not apply the treatment and this group is usually called control group. So, here the researcher determine the experimental class and the control class without any random assign.

In this research, the researcher applied quasi-experimental post-test only design. The researcher assigned the experimental and control groups, carry out treatment activities with the experimental group only, and provide a post-test to assess the differences between the two groups. In this case, the researcher wants to know.

FINDING AND DISCUSSION

A. FINDING

The research was conducted to investigate the effectiveness of Project-Based Flipped Classroom (PJBFC) on EFL students writing performance at SMK Kreatif Hasbullah Bahrul Ulum. This research involved Project-Based Flipped Classroom (PJBFC) as the independent variable and students' writing performanceas the dependent variable. The researcher analyses the data from both the experimental group and control group statistically by using Independent T-Test. It was due to the fact that this research was not use random sampling and use groups that were already selected by the teacher. Further, there was a possibility that the initial conditions of students would affect their reflective thinking skills when there was a treatment. In other words, the different of dependent variable between control group and experimental group was not only due to the independent variable. Therefore, in this study was writing performance reflective thinking skills before giving PjBFC.

Classic Assumption Test

a. Residual Normality Test

Table 4.1 Residual Normality Test

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.102	17	.200*	.969	17	.809

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

From the results of table 4.1, a significant value is obtained for the Kolmogorov Smirnov normality residual of 0.200, which means that the residuals are normally distributed. with Shapiro Wilk, a significant value of 0.809 was obtained with a normal distribution.

Normality Test

Table 4.2 Normality Test

Tests of Normality

	Kelas	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Test	HasilBelajarEksperimen	.187	17	.118	.909	17	.095
	PostTestEksperimen	.177	17	.165	.960	17	.634
	HasilBelajarControl	.176	17	.169	.939	17	.306
	PostTestControl	.113	17	.200*	.966	17	.737

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

In table 4.2 the Normality Test shows its significance in the Kolmogorov-Smirnov outcomes of the experimental class which is equal to 0.118. In the post-test in the experimental class the results were 0.165. In the post-test learning outcomes of the control class, it was found to be 0.169. In the post-test control class, the result was 0.200. The normality test on Shapiro-Wilk shows outcomes of the experimental class, namely 0.095. In the post-test in the experimental class, the result was 0.634. In the post-test learning outcomes of the control class, it was found to be 0.306. In the post-test control class, the result was 0.737. If the value is above 0.05

then the data is declared normally distributed, and if the value is below 0.05 then it is interpreted as abnormal. The table above is normally distributed because it exceeds 0.05.

Homogeneity Test

Table 4.3 Homogeneity Test

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Hasil Test	Based on Mean	1.705	3	64	.175
	Based on Median	1.115	3	64	.350
	Based on Median and with adjusted df	1.115	3	45.076	.353
	Based on trimmed mean	1.563	3	64	.207

In table 4.3 the homogeneity test uses the Lavene Statistical value which includes learning outcomes and the post-test. Based on Based on Mean the significant value is 0.175. From the calculation of the significant value data greater than 0.05 it can be conclude that the data in this study has homogenous variance.

Descriptive Statistics

Table 4.4 Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PostTestEks	17	49	95	70.35	14.186
PostTestControl	17	34	75	54.12	13.081
Valid N (listwise)	17				

From Table 4.2 Descriptive Statistics above it can be seen that the average value of the control class is 54.12 and the experimental class is 70.35. Thus it can be interpreted that the average value of the experimental class is higher than the control class.

Referring to the test results between subject effects and descriptive statistics, it can be concluded that students who were taught English using the PjBFC learning model in writing performance provided a significant difference in students' writing performance compared to students who were taught English using conventional techniques., Next the researcher analyzes using the Independent T-Test to calculate the magnitude obtained. Significant values were obtained by the two grubs in the table below.

Independent Sample T-Test

Table 4.5 Independent T-Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Nilai Hasil Post-Test	Equal variances assumed	.072	.791	3.329	32	.001	.002	7.35588	2.20977	2.85473	11.85703
	Equal variances not assumed			3.329	31.015	.001	.002	7.35588	2.20977	2.84912	11.86265

In table 4.5 the independent t-test uses the Lavene Test score which includes learning outcomes and post-test scores. Based on the significance of one-sided p, the significance value is 0.01 and the two-sided p, the significance value is 0.002. The basis for decision making from the Independent Sample T-Test is found in the Sig value two-sided p. Ha is accepted if the Sig two-side p <0.05 and Ha is rejected if the Sig. two-sided p>0.05. In statistical on the data obtained, the result Sig two-sided p gets a value of Sig two-sided p 0.002. This shows that statistically, students can reject H0 and accepted Ha which indicated There is a significant difference in writing performance taught using Project-Based Flipped Classroom (PjBFC) and those taught using conventional teaching.

A. DISCUSSION

This study was conducted to find out whether there are significant differences in influencing writing performance when taught using PjBFC and those taught using conventional teaching. Based on the research findings, it shows that students taught to write using PjBFC using the PjBFC learning model have significantly different writing performance compared to students who are not taught the PjBFC model. Students who were taught with PjBFC were grouped in the experimental class, and students who were not taught with PjBFC were grouped in the control class.

After the treatment was given to the experimental class and after the control class was taught using the conventional teaching, both groups were given a post-test about writing performance in writing recount text. The results showed that the null hypothesis (H0) was rejected and the alternative hypothesis (Ha) was accepted. So, it means that there is a significant difference in the use of the PjBFC learning model on students' writing performance at SMK Kreatif Hasbullah Bahrul Ulum. Recount text that uses the PjBFC learning model has the ability to write skills that are significantly different compared to those that are not taught the PjBFC learning model. Students who were taught with PjBFC were grouped in the experimental class, and students who were not taught with PjBFC were grouped in the control class. After being given treatment in the experimental class and after the control class was taught using the conventional model, the two groups were given a post test about writing ability.

The results showed that the null hypothesis (Ho) was rejected and the alternative hypothesis (Ha) was accepted. So, it means that there is a significant influence on the use of the PjBFC learning model on students' writing performance at SMK Kreatif Hasbullah Bahrul Ulum. The PjBFC model is an alternative learning model that can build critical thinking to face the challenges of the 21st century. Effective in developing students' writing performance skills.

This study proves that the PjBFC learning model is an effective model for students' writing abilities because the two classes have different writing performance than the experimental class. In PjBFC learning, teachers can use projects or activities as learning tools to achieve attitudes, knowledge, and skills competencies achieved by students. Students have writing ability skills that improve their performance.

Because writing performance is the most important thing in encouraging learning as long as students are able to actively participate in learning. These results are in line with research conducted by Sumarmi (2022) who applied the PjBFC learning model in teaching English to students in junior high schools. Their research states that learning on PjBFC has better cognitive abilities to invite students to play an active role in the learning process, especially in an alternative learning model that can build critical thinking to face the challenges of the 21st century. Effective in developing students' writing performance skills.

Andrini (2019) also points out that the PjBFC learning model is believed to be able to enable students to learn and understand content at Bloom's highest level while taking an active part in their learning. There is a large and significant influence from the use of PjBFC learning to improve students' problem solving abilities and make students more active in working on a project in it. Opinion of Farida (2019) that PjBFC has a positive impact on student learning outcomes in cognitive, affective and psychomotor aspects. Therefore, this study proves that students who have writing performance tend to have the ability to develop ideas to develop in learning.

Another component in PjBFC learning plays an important role in developing students' writing skills. The PjBFC model is more significant for students' collaboration skills in learning content at school compared to learning using conventional methods. This is in accordance with the results of Fitrah's research (2018) which states that there is a high cooperative ability in students who receive learning with a combination of PjBFC strategies. The ability to cooperate in the learning process is able to train writing skills and more easily form understanding in the learning process Shihah (2019). In other words, by using the PjBFC learning model, students are directly involved in studying problems and can develop ideas within themselves.

This research is in line with the opinion of Riha et al., (2013) which states that the PjBFC learning model provides space for students to learn to make decisions and create new competencies critically. So, students who get learning with PjBFC learning have the ability to work together and can express more varied ideas in making projects of their learning outcomes. So that students are able to practice their writing skills very well.

Based on Ratna et al., (2020) Student writing performance refers to writing achievement in which students use vocabulary and structure to clarify and organize their thoughts coherently and fluently.

Writing performance is structured around the 'tools' of performance writing — words, bodies, spaces, and objects. These tools serve as a pivot for understanding how writing for performance should be done in relation to other people, places, objects, history, and practices.

In addition, students are more careful and attentive in solving a problem. This can be seen in the increase in the average score before and after treatment with the PjBFC learning model, there is a significant difference. Thus it can be concluded that the application of the PjBFC learning model is effective for students' writing performance, especially for EFL SMK Kreatif Hasbullah students.

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This study proves that the PjBFC learning model is an effective model for students' writing abilities because the two classes have different writing performance than the experimental class. In PjBFC learning, teachers can use projects or activities as learning tools to achieve attitudes, knowledge, and skills competencies achieved by students. Students have writing ability skills that improve their performance.

C. CONCLUSION

In relation to the formulation of the research problem, the purpose of this study was to investigate whether there were differences between PjBFC learning and conventional learning in students' writing performance. In the findings of this study, it can be concluded that there were several main points related to these findings including students' writing performance using the learning model PjBFC. The researcher can conclude from the results of the data analysis on the independent T-test that Sig. for the method obtained is 0.002 which is lower than 0.05. This means that statistically there is a significant difference between learning outcomes using PjBFC on students' writing performance rather than using conventional teaching. So, the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. The average calculation shows that the result of the post-test score for the experimental class is 70.35 and for the control class is 54.12. In conclusion, based on the results of the Independent T-Test, and because the effect refers to a significant difference between the average scores of the experimental group and the control group, the researchers argue that there is a significant difference between the PjBFC learning model and that which uses conventional teaching in writing performance.

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