

## UTILIZING PROJECT BASED LEARNING TO IMPROVE WRITING SKILL AND READING COMPREHENSION ACHIEVEMENT OF THE EFL STUDENTS

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### Abstract

This study is aimed at finding out whether or not there was any significant difference on reading comprehension achievement between the students who were taught by using Project Based Learning and those who were not and to find out whether or not there was any significant difference on writing skill between the students who were taught by using Project Based Learning and those who were not. This study used quasi experimental study with the nonequivalent research design. The sample was the third semester students of English Study Program at Tridinanti University selected by using purposive sampling technique. Reading comprehension test and essay writing test were used as the instruments. In order to analyze the data, the researchers used paired and independent sample t-test. Having analyzed the data, the findings revealed that both experimental group and control group perform better on the posttest in writing essays. The two groups made progress, the student were mostly in developing category in pretest but they were then in proficient and basic category in posttest. Even though both groups made progress, it can also be stated that students in experimental group performed more progress on posttest in making more structured essay writing than the control group did. Regarding the findings of reading comprehension achievement, it indicates that the students had no significant difference between the students who were taught by using project-based learning and those were not. Although the experimental group had significant improvement in reading comprehension achievement by using Project based learning.

**Keywords:** project based learning, utilizing, writing skills, and reading comprehension

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### Introduction

Many people learned English language to be able to communicate with other countries. Jaya (2019, p. 5) claims that learners must learn English in order to communicate with other countries. Speaking has become an important role in communication. Leong & Ahmadi (2017, p. 34) claim that speaking is an effective means of communication that must be developed, which can help us to interact with other people in daily life. Speaking also must be spoken fluently and accurately so that the other person can understand what we are saying. Hermansyah (2021, p. 2) found that students had a lot of difficulty in

mastering speaking skill because they have to focus on grammar. Speakers need to focus on listening and speaking at the same time so that communication becomes effective and is understood by the other person.

Writing is an essential across academia, the workplace, and the future life. Effective writing is a vital life skill that is important in every subject of education as well as in the real life of the world. Furthermore, writing is a method of thought in its own right which definitely involves a great analytical effort that typically takes place over a significant period of time (White and Arndt, 1991). Writing is taught in

Indonesia from primary to tertiary level. Writing is a significant part of the research and is included in most curricula for undergraduate studies. Aunnurahman, Fuad, and Emilia (2017) claimed that writing at the tertiary level requires knowledge of the writing genres with their unique linguistic characteristics and requires strong critical thinking. In addition, to write long and difficult texts is required to make the statements and do the projects or write papers from all disciplines (Jurecic, 2006). However, writing skills get very low attention in teaching and learning process in Indonesia. Teachers of writing skills, in teaching and learning English as a second or foreign language at the university level in Indonesia have not been given proper attention. In addition, Nugraha (2015) states that writing is not easy to acquire and provide opportunities to practice to enhance the ability to write well, especially, for tertiary English level as a Foreign Language (EFL) students. Writing is a challenging job for them and it makes it more difficult and complicated to learn grammar and other language structures. In addition, students must be able to cohesively and coherently organize and incorporate knowledge within paragraphs and texts.

Several researchers argue that undergraduate students have problems in writing performance. Putra, et. al (2014) claimed that the problems covered narrow ideas of development and shallow content. In addition, there are two major problems, namely: (1) the lack of students' ability in developing and organizing ideas in writing, and (2) the lack of guidance given by the lecturer in process writing. Moreover, the factors that cause students' difficulties in writing an English essay are lack of understanding of the topic, the purpose of writing, and organizing ideas into writing (Syarifah and Emiliasari, 2019).

Many teachers mistakenly believe that teaching writing is solely teaching sentence structure, tenses, and punctuation. Teachers frequently seek to enhance students' writing by correcting their grammar and asking to translate sentences from L1 to L2, which is English. It is proven by Sukandi and Rianita (2018), in some ways, writing successfully in English is a challenge for Indonesian students because Indonesian students mentioned that there are numerous grammatical rules to remember to be applied to writing.

However, students must have the appropriate attitudes, personal motivation, and perspective on writing lessons in order for writing instruction to be effective. External factors like teacher-led activities and peer collaboration, on the other hand, may have an impact. As a result, there has been a recent shift in the way we teach writing, demonstrating that learning to write is both a passive receipt and an active invention. Peer or collaborative activities are required to promote the process of learning how to write an excellent piece of writing. Cahyono and Rahayu (2020) stated that Motivational factors must be addressed and included in the writing teaching and learning process, particularly in teaching and learning activities, educational media use, and the relationship between writing teachers and students. Activities should focus not only on the issue of data collecting and writing assignments, but also on intriguing themes that students are familiar with before they begin working on writing projects. Before beginning to work on writing assignments, the activities should include not only topic selection and writing assignments, but also discussion of intriguing subjects that the students are familiar with.

Seyabi and Tuzlukova (2014) mention that the obstacles are how to use

proper grammar, express their thoughts in a cohesive manner, have enough ideas on the themes they are requested to write about, select proper terminology, begin, develop, and end their ideas in their writing. In brief, students regard the challenge of establishing, developing, and completing ideas in writing to be the most challenging component of the writing process. Similarly, these problems also faced by the students of English education study program at Tridianti University. To solve this concern, teachers should provide instruction as input to students before they begin to write (Seyabi and Tuzlukova, 2014).

In addition to writing, the students also face difficulties in reading activity. Reading and writing are, in practice, closely related to cognitive skills that are best taught through an active or learner-centered approach. Language literacy abilities of reading and writing should be actively practiced by learners. Reading and writing are two of the most effective ways to acquire English as a second language (Rachmawati and Asmara, 2017)

For undergraduate EFL students, reading takes on a central role in their learning process. Reading is important but some of them still consider that reading is a boring activity, especially when they think that it is hard for them to understand the content of the text (Sari & Atmanegara, 2018). The students also lacked of motivation. They also had a decreased extra effort and no strategies to increase their levels of reading (Kavlu, 2015). Furthermore, the difficulties of reading faced by the students were unfamiliar vocabulary, finding the main idea and understanding in content of paragraph (Rachmawati and Asmara, 2017)

Lecturers can overcome challenges with reading and writing by

utilizing some of the techniques available in the classroom, such as the Project Based Learning (PjBL) methodology. Through collaborative effort, project-based learning has been shown to potentially improve students' critical thinking, communication, and creativity (Praba, Artini, and Ramendra, 2018).

According to Putra (2014), PjBL implementation increases students' writing abilities, particularly in terms of primary concept, topic, details, parts of essay, and word choice. Meanwhile, Kavlu (2015) claims that PjBL is successful in increasing students' reading comprehension. She claims that PBL provides language learners with possibilities to have understandable input and to be able to provide comprehensible material. Furthermore, learners can use PjBL projects to improve their analytical abilities, time management, and sense of responsibility. She also discovered a link between the use of PjBL and the level of reading comprehension skills of the students.

Many studies have proven that using PjBL technique in teaching writing and reading was effective to implement. Therefore, the researchers are interested in teaching writing and reading by using PjBL. The objectives of this study were to find out whether or not: There was any significant difference on reading comprehension achievement of the third semester of English Study Program at Tridianti University Palembang between the students who were taught by using Project Based Learning and those who were not. There was any significant difference on writing skill of the third semester of English Study Program at Tridianti University Palembang between the students who were taught by using Project Based Learning and those who were not.

### Project Based Learning Approach

The project-based language approach is a versatile methodology that allows for the development of multiple skills in an integrated, purposeful, and continuing activity (Poonpon, 2018). By implementing project based learning could increase the students' language skills. This project requires the steps of the process, important consideration and tasks to be completed by collaboration or a team. It is proven by Shiraz and Larsari (2014) that team projects are the ideal classroom devices for practicing socio-affective strategies because they provide problems to solve, require a lot of teamwork, activate creative thinking skills, and demand the presentation of a product in English. The team projects encourage students to reflect, plan, and deliver items in front of the class in small groups.

Here are some steps of PjBL processes as follows (Ell toolbox, 2007):

**Step 1:** Identifying project-related critical skill

The first stage in creating a project is determining which skills will be covered. The purpose is to educate both basic course content and workplace skills such as cooperation, professional presentation, and so on. Several of these abilities are also listed in the learning objectives.

**Step 2:** Formulating a driving question

Another crucial part of the project is coming up with a unique inspiring question. When the task is authentic, students are more engaged since they are not doing it because it is a fun class assignment.

**Step 3:** Describing the project

The entering event serves as an introduction to the project and serves to motivate students to work in accordance with the specifications of the final projects or goods.

**Step 4 :** Students-Centered Learning (Know and Need to Know List)

The next stage in developing a student-centered learning environment is crucial. Students will build a "know and need to know" list based on the topic – specific wording in the admittance letter, which will guide future instruction in the course.

**Step 5:** Implementing project

Two basic parts of the PBL pedagogy must be used during the project's implementation. Students who have a voice and a choice are more likely to make their own decisions and learn from their failures. There should also be time set aside for revision and reflection so that students can consider how to enhance their laboratory work and final result.

**Step 6:** Making a public presentation

At the end of the course, students show their output to the audience in the form of a poster or a piece of paper.

### Research of Method

This experimental research was conducted by applying quasi experimental design. The sample of this study taken by purposive sampling technique was the third semester students by taking into accounts that the students had already taken *Basic English Writing Course* and *Paragraph Writing Course* and they would take an *Essay Writing Course* in the third semester that would be used to measure their essay writing. The total of group variables was eleven students divided into two groups, experimental group consisting of six students and control group comprising five students.

For reading comprehension test, the researchers used Reading comprehension section on the TOEFL test adopted from Deborah Phillip, longman (2003) consisting of 50 items of questions in the form of multiple choices. The test was reliable and validity that would be accepted by any countries as a standard of English test to measure the

students' proficiency in reading comprehension.

For writing test, the scoring system is based on the General Writing Rubric adapted from Elltoolbox (2007) that is used to analyze the students' writing in terms of content and ideas, organization, vocabulary, voice, sentences, and grammar and spelling.

To measure the validity of reading comprehension and writings tests in this study. The instruments were given to two experts who are two university lecturers who have had experiences in developing the test instruments. For measuring reading comprehension test adopted from Longman (2003), the score of reading comprehension test in the TOEFL test was reliable by considering the reliability coefficient of reading comprehension test. However, the test was reliable and valid since it is already accepted by any countries as a standard of English test to measure the students' proficiency in reading comprehension.

For writing test, the researchers used the inter-rater reliability by analyzing the results of students' writing test given by the two experts using *Pearson Product-Moment Correlation*. The correlation results between rater 1 and rater II were significantly reliable since all of the correlation scores are higher than 0.70. Based on the Cronbach's alpha, it can be seen that the tests were valid by scoring as follows: 0.837 (pretest), 0.796 (posttest) for experimental groups. Similarly, the test for control group was valid as follows: 0.878 (pretest), and 0.800 (posttest).

In this study, the treatment would be given for the experimental groups for eight meetings that consist of 90 minutes for each meeting. The specific procedure of Project Based Language Learning in teaching and learning are as follows:

- The writers asked the students to read the text assigned for the first

time. The writers and students discussed about the text. The writers asked the students to read the text for the second time to write essential information in their notes.

- The writers asked the students to formulate some questions they asked to their groups' member later to strengthen their analytical skills.
- The writers divided the students into some groups that consists of 2 people in each group and asked them to discuss their notes and questions.
- The writers let the students read the text assigned once more to confirm their understanding and get more details.
- The writers and students discussed the kind of text they have read and its generic structure.
- The writers asked the students to reconstruct the text they have read to collaboratively. The students had to write and include as many as details of reading text by using their own words.
- The writers asked each group to read the results of writing.
- The writers asked the students to conclude the material they have discussed. The writer closed the teaching and learning process. The writers divided the students into some groups consisting of 2 members in each group and let them discuss their notes and questions.
- The writers let the students read the text assigned once more to confirm their understanding and get more details.
- The writers and students discussed the kind of text they had read and its generic structure.

- The writers asked the students to reconstruct the text they had read collaboratively. The students had to write and include as many details of reading text by using their own words.
- The writers asked each group to read the results of writing.

### Results and Interpretation of the Study

Firstly, the results of reading comprehension test is scored based on the amount of items answered correctly in the total of the items. Meanwhile, for the writing test, two raters were asked to rate students' writing scores for both

pretest and posttest by using general writing rubric adapted from Ell toolbox. (2007). The aspects scored in the rubric are content and ideas, organization, vocabulary, voice, sentences, and grammar and spelling. For each aspect, the raters were asked to give 1 to 4 based on the appropriate criteria of the students' writing. The significance improvement of students' reading comprehension pretest and posttest in both groups were analyzed by using paired sample t-test. The results are shown in table 1.

**Table 1.** The Results of Paired Sample t-test of Reading Comprehension

Variable		Mean	Std. Deviation	Std. Error Mean	t <sub>obtain</sub>	df	Sig. (2-tailed)
Experimental	Pretest-posttest	76.20	3.701	1.655	46.034	4	<b>0.001</b>
Control	Pretest-posttest	70.50	7.635	3.117	22.617	5	<b>0.001</b>

Based on the table above, there was a difference on students' reading comprehension between before and after getting the treatment in experimental group. Since *p*-output of reading comprehension were lower than 0.05, it means that there was significant difference. Then, in control group, the students' reading comprehension from pretest and posttest also showed a different. The total result in posttest was

higher than the pretest. The *p*-output showed that there was a significant difference, since it was higher than 0.05.

The significance difference of students' writing posttest in both groups was analyzed by using independent sample t-test. The results of reading comprehension achievement are presented in table 2.

**Table 2.** The Results of Independent Sample t-test of Reading Comprehension Achievement

Variable	Mean difference	t <sub>obtain</sub>	Df	Sig. (2-tailed)
Post-test (Experimental-Control)	5.867	2.190	9	0.056

The table 2 shows the result of independent sample t-test in which there was no significant difference between experimental and control groups since *p*-output was higher than 0.05.

The significance difference of students' writing pretest and posttest in both groups were analyzed by using paired sample t-test. The results are presented in table 3.

**Table 3.** The Results of Paired Sample t-test of Writing Score

Variable		Mean	Std. Deviation	Std. Error Mean	t <sub>obtain</sub>	df	Sig. (2-tailed)
<b>Experimental</b>	Pretest-posttest	5.500	1.870	0.763	7.201	5	<b>0.001</b>
<b>Control</b>	Pretest-posttest	5.000	1.732	0.774	6.455	4	<b>0.003</b>

Table 3 shows that there was a difference in students' writing pretest and posttest in both groups. The posttest score in writing skills was improved. Then, the result of paired sample t-test showed that the students writing in experimental group was significantly different before and after getting the treatment since the *p*-output were lower than 0.05. Meanwhile, in control group there was a significant difference of

writing skill before and after the treatment, since *p*-output was lower than 0.05.

The significance difference of students' writing posttest in both groups was analyzed by using independent sample t-test. The results of independent sample t-test of writing achievement are in table 4.

**Table 4.** The Results of Independent Sample T-Test of Writing Skill

Variable	Mean difference	t <sub>obtain</sub>	df	Sig. (2-tailed)
<b>Post-test (Experimental-Control)</b>	2.500	2.453	9	<b>0.037</b>

The table shows the result of independent sample t-test in which the *p*-output of students writing posttest achievements in both groups were lower than 0.05, it means that the experimental and control groups showed a significant difference.

### Interpretation

Some interpretations are described based on the findings. First, in terms of the results of reading comprehension test, there was a significant difference in students' reading comprehension achievement before and after the getting the treatment in the experimental group. It was claimed that the results of the application of PjBL in teaching reading comprehension had significant improvement. It is proven by Kavlu (2015) in her findings which showed that there was a positive correlation between the use of PjBL and students' reading

comprehension abilities. In addition, the students could increase their critical thinking due to the students engaged in PjBL research information on particular topic in greater depth in order to create culminating project (Hammond, 2010). Moreover, Adriansyah, Fitriyani, and Fadloeli (2019) stated that the use of PjBL assist the students to find out the information from any sources in order to increase their curious in understanding and complete the tasks.

### Conclusion and Suggestions

Based on the interpretations, the use of PjBL has successfully improved the students' reading comprehension and writing achievement. The students in experimental group performed better than the control group in writing skill and reading comprehension. Moreover, in terms of reading comprehension achievement, it was found that there was no a significant difference between the

students who were taught by using Project based learning and those were not. In other words, the results of pretest and posttest in experimental and control groups had significant improvement. It indicates that Project Based Learning could assist the students' reading comprehension in experimental group. The use of PjBL could increase their reading levels by gaining vocabularies and more knowledge of the content.

Regarding the results of writing test, the students had significant improvement after getting the treatment. Based on the results of pretest and posttest, there was significant difference before and after being taught by using project-based learning. Then, being compared to the control group who did not get the treatment, the results showed that there were a significant difference of students' writing pretest and posttest results. Moreover, the results of posttest in writing skill for both groups had significant difference in writing skill. In other words, through practicing writing the essay and using the feedback discussed which became the guidelines in making revision on their writing were the reasons that made their writing skill improved.

In line with the above conclusions, first of all, the writer would like to address the suggestion to the students. Realizing that the students at the tertiary English level as a Foreign Language (EFL) are required to have the ability to write well for many academic purposes, such making an essay, article or even writing a research report, they need to be self-reliant to practice in order to improve their writing skill. Writing is a skill which can only be mastered by practicing it. Peer editing can also become one of the ways in which students can give contribution for each other in order to perform a better writing or before they consult to their lecturers. They can use any technique including PjBL or any other techniques which they find may help them to write well. The

suggestion is also addressed to lecturers who teach writing in order to have a commitment to give a strong foundation in writing skill at earlier stages, facilitate the students to practice their writing skill and guide them to be a better writer.

In terms of reading comprehension skill, the students were suggested to read various genres of reading texts, such as articles, literary works, reports, news, and etc. The more they read many kinds of genres, the better their thinking will increase. Also, it will enlarge their knowledge of any fields. By using Project Based Learning, the students could be more active in engaging their reading activities. However, the use of Project Based Learning is better to be implemented to the students who had high reading levels to ease accommodating the students' needs. PjBL is recommend to the teachers in teaching reading by formulating the expected learning outcome, providing the appropriate materials with the students' reading levels, designing and executing the task of project, and evaluating the process of PjBL in order to be successful in teaching reading comprehension.

Finally, the researchers believe that with a more intense time spent for practice in making essay writing, students in experimental group will perform a much better progress. The researchers realize that the treatment that was given online to students during the covid 19 pandemic might also decrease the effectivity of the process in collecting the data. The researchers had not had enough time to have a face-to-face discussion with students. They also believe that offline class at classroom enables them to monitor students' progress easier which they believe will be more effective in conducting this study. The idea is similar to what Nugraha (2015) said that writing is not easy to acquire and provide opportunities to practice to enhance the ability to write well, especially, for



tertiary English level as a Foreign Language (EFL) student.

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