

AN ANALYSIS OF PROJECT-BASED LEARNING IN DEVELOPING ARGUMENTATIVE WRITING SKILLS IN ENGLISH LANGUAGE TEACHING AT SMAN 2 KOTA PAYAKUMBUH

Ahmad Abdillah¹, Robi Kurniawan²

^{1,2}Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia
Email: robi.kurniawan@uin.suska.ac.id

Abstract

This study aimed to analyze the implementation of the Project-Based Learning (PjBL) model in teaching argumentative writing in English and to explore students' perceptions of its effectiveness at SMAN 2 Kota Payakumbuh. This research employed a descriptive quantitative approach. The population consisted of 432 eleventh-grade students, from which Class XI F5 (36 students) was selected as the sample using purposive sampling. Data were collected through structured observation (field notes) and a 20-item Likert-scale questionnaire and were analyzed using descriptive statistics. The observation results indicated that the teacher successfully implemented the six essential stages of PjBL systematically, including formulating essential questions, designing the project, developing a schedule, monitoring project progress, assessing outcomes, and evaluating learning experiences, while fully meeting all ten operational indicators. Meanwhile, the questionnaire results revealed that students held very positive perceptions of PjBL in developing their argumentative writing skills, with an overall mean score of 3.25 out of 4.00 (81.25%). The category Teacher Support and Monitoring received the highest rating (mean = 3.35), indicating that students greatly valued active guidance and constructive feedback from the teacher throughout the project. Students also reported that PjBL increased their learning motivation and helped them organize logical arguments effectively in analytical exposition texts. Based on these findings, it is recommended that English teachers integrate PjBL as an alternative method for teaching writing, while future researchers are encouraged to conduct experimental studies to measure the quantitative effectiveness of PjBL on a larger population.

Keywords: *Analysis, Project-Based Learning, Argumentative Writing.*

INTRODUCTION

In this area, learning English as a foreign language, students are often expected to be proficient four language skills. These four language skills are listening, speaking, reading, and writing (Richards & Schmidt, 2010). Writing is the most crucial skill in learning English. Richards & Renandya (2002) stated that there is no doubt that writing is the most difficult skill for the second language learners to master. Learners need to combine a lot of components to compose a good writing, starting from grammar to cohesion and coherence in writing. These will be difficult points for many students to write. The difficulty lies not only in generating and

organizing ideas, but also in translating these ideas into readable text. According to Dilkawaty (2012) “writing is an activity of exploring the writer’s thought to arrange the ideas into words which are communicated in meaningful way”. Meanwhile, According to Kay in Westwood, (2004), “writing is a highly complex process involving multiple brain mechanisms and specific abilities”.

According to Lowenberg (2000), in Indonesia, there are various types of writing that should be learnt by the students including expository, narrative, descriptive, recount and argumentative. Richards and Schmidt (2010) define argumentative writing as composition which the writers give their opinion and arguments as well as evidence in order to support or defend position. In line with this, Zhu (2011, p. 34) describes argumentative writing as the act of forming reasons, making inductions, drawing conclusions, and applying them to the case in discussion; the operation of inferring propositions, not known or admitted as true, from facts or principles known, admitted, or proved to be true.

Writing argumentative is not an easy task. It is supported by Amalia (2016) who argues that all of those skills are useful for students, however; the ability of argumentative writing seems to be the most crucial one. It is because the ability of argumentative writing is used more in field of education and workplace than other. It is needed for writing article and essay, conducting research and applying scholarship and etc. Moreover, Saito (2010) also claims that 4 argumentative writing skill as the most difficult among other writing skill. It is because composing argumentative writing requires students to have a critical thinking, scientific ideas, and argumentative expression.

students need something new to encourage them to learn to argumentative writing. When teachers use inappropriate or monotonous techniques in teaching argumentative writing, students can become bored and unmotivated to learn. Students will learn more easily when they feel comfortable. One innovative approach that has gained traction is *Project-Based Learning* (PjBL). PjBL allows students to actively learn by engaging in meaningful, real-world projects. According to Dori & Belcher (2014), PjBL can improve students' ability in argumentative writing by providing relevant context and encouraging students to collaborate in constructing arguments.

In the Merdeka Curriculum, PjBL is integrated as a learning method that allows students to engage in real projects relevant to everyday life. Through these projects, students not only learn academic content, but also develop critical and creative thinking skills.

Argumentative writing becomes an important part of this process, where students are expected to formulate and convey their arguments clearly and logically based on the research conducted during the project. The Merdeka Curriculum emphasizes the importance of argumentation skills as part of literacy competencies. In the context of PjBL, students are invited to conduct research, collect data, and analyze relevant information to support their arguments. This process not only improves argumentative writing skills, but also helps students understand how to construct strong and convincing arguments.

Based on the preliminary observations, several problems were identified in students' analytical exposition writing. Some students have weak conceptual understanding of analytical exposition text. They also have inadequate research skills to obtain relevant and credible information. In addition, some students demonstrate ineffective collaboration during learning activities. Some students struggle to formulate a clear thesis statement and develop logical arguments supported by credible evidence. Furthermore, some students have limited knowledge of the generic structure and the use of appropriate transitions, which affects the coherence and organization of their writing. Learning (PjBL) in teaching argumentative writing is still limited.

The objectives of this research are to investigate the implementation of Project-Based Learning (PjBL) in English language teaching at the eleventh grade of SMAN 2 Kota Payakumbuh and to analyze the students' perceptions of the use of Project-Based Learning (PjBL) in developing their argumentative writing skills in English language teaching at the eleventh grade of SMAN 2 Kota Payakumbuh.

LITERATUR REVIEW

Project-Based Learning is based on the students and allows them to conduct in-depth research on important topics. According to Asrull et al (2021) project-based learning (PBL) is a group-work approach in teaching and learning, through which students are exposed to situations regarding real-life issues and practices. Project-Based Learning is a student-centered learning strategy that provides students with relevant learning opportunities (Syarifah & Emiliasari, 2019). The products created during the project-based learning process serve as a foundation for students' learning experiences and concepts. Implementing project-based learning can assist students in developing certain abilities such as writing, as well as offering a learning process that can be extremely useful to students, such as increasing creative thinking,

motivation, discipline, and teamwork. Project-Based Learning is being used at all levels of education, including junior high, senior high, and college.

Moreover, project-based learning has several benefits that can improve language skills. Students have the opportunity to utilize language in a relatively natural setting while participating in meaningful activities that demand authentic language as they engage in meaningful communication to complete authentic activities.

1. Advantages and Disadvantages of Project-Based Learning

There are so many advantages of using project-based learning in teaching English learning. According to Sukiawati (2020), project-based learning has some advantages in teaching English such as:

- a. Increase students' learning motivation to learn, encourage their ability to do important work, and they need to be rewarded.
- b. Improve problem-solving skills.
- c. Increasing student engagement and success in solving complex challenges.
- d. Students work together to access and manage information in order to solve challenges. The evaluation process is carried out continuously.
- e. Students reflect on the activities they have completed on a regular basis.
- f. The quality of the learning activities' final outcome will be assessed.
- g. The learning situation is very tolerant of mistakes and changes.

According to Santoso (2017) said that the disadvantages of project-based learning as follows:

- a. Project-based learning necessitates a significant amount of time to address complicated challenges.
- b. Take a lot of time to solve the problem or product.
- c. Applying project-based learning in the classroom may be intimidating for some experienced teachers and will be even worse for beginners.
- d. When each group is given a separate topic, it is feared that students would not fully comprehend the subject.

2. The Characteristics of Project-Based Learning

Project-Based Learning poses the following features (Santoso, 2017).

- a. Project-based learning is genuine education. Experiential learning is the foundation of project-based learning. It allows pupils to participate in projects that are relevant to their lives. Students are exposed to real- world problems while working on their projects in project-based learning.
- b. Project-based learning is focused on the students. Project-based learning emphasizes the importance of the student as an active learner. It provides students with several possibilities to use their skills and expertise to find a solution to a particular problem.
- c. Project-based learning is student-centered. Project-based learning focuses on the student to be an active learner. It gives students wide opportunities to discover the solution to the given project using their skills and knowledge.
- d. Project-based learning encourages collaboration. Students can collaborate as a group through project- based learning. Project-based learning encourages students to work together to solve problems and analyze what they have learned.
- e. Project-based learning promotes skill integration. Students' skills and knowledge are assimilate through project-based learning.
- f. Project-based learning leads to the creation of a product. The product's outcome can be shared and demonstrated to others. A presentation, poster, bulletin, board, magazine, report, or performance can all be used to create the final output. As the project work has a process and product orientation, the value of the product rests in both the finished product and the process of making it.

3. Procedure in Project-Based learning

According to Dewi (2022), there are five steps in conducting project-based learning in the classroom.

- a. Lead-in activities. The teacher should devise an exercise to utilize as an introduction to the topic. The activity should assist the teacher in demonstrating what the students should to do. Bridging exercises can be used to practice specific language skills or to prepare students for cooperative working, open-ended tasks, and communicative language output.

- b. Planning. In this stage, the teacher and students examine and decide on the project's concepts, themes, and theme. Furthermore, the teacher and students discuss the deadline for completing the output.
- c. Carrying out the project. Students can begin developing the project after the preparations are completed. During the project's development, teachers' tasks are to monitor and check the project's progress.
- d. Creating the final product. Students use their knowledge and abilities to produce something real. When the students can produce a final product, they can gain a sense of achievement that is important for their motivation.
- e. Evaluation. This stage includes participant evaluations of the activities, discussion of whether the initial goals and objectives were met, process implementation, and final products.

Sweat (2012) stated that argumentative writing is a genre of writing that allows writers to express their opinion on a topic and support that opinion with strong logic and evidence. The main purpose of argumentative writing is to convince the readers that the writer 'particular view or opinion on a controversial issue is correct and to persuade the audience to take some sort of action (Langan, 2008). In argumentative writing, a writer attempts to support or defend a position or difference point on with his/her logical arguments, ideas, and opinions.

METHOD

This study employs a descriptive quantitative research design with the primary objective of identifying and analyzing the current condition, characteristics, and interrelations of the variables under investigation. Specifically, it focuses on the implementation of Project-Based Learning (PjBL), Within English Language Teaching (ELT), Ccontext's and examines students' perceptions of its effectiveness in enhancing their argumentative writing skills. Through the use of structured questionnaires and quantitative data analysis, this research seeks to provide an empirical description of how PjBL is applied in classroom settings, the extent to which it supports students' development of critical and argumentative writing abilities, and the factors influencing their overall learning experiences. According to Ary, Jacobs, & Sorensen (2010), quantitative descriptive research is designed to obtain information about the current status of phenomena and to describe "what exists" with respect to variables or conditions in a situation. Creswell (2012) notes that descriptive research is appropriate when the aim is to

provide numerical descriptions of trends, attitudes, or opinions of a population. Best & Kahn (2006) emphasize that descriptive quantitative studies are not intended to test hypotheses but to collect factual information, often through surveys or questionnaires, and then present it systematically. Gay, Mills, & Airasian (2012) add that descriptive research helps the researcher describe and interpret conditions and relationships that exist, focusing on the “what is” rather than “why” it exists. In educational research, McMillan & Schumacher (2010) state that descriptive quantitative approaches are highly effective for documenting practices, perceptions, or conditions in natural educational settings, allowing for generalization when appropriate sampling techniques are used. Similarly, Kerlinger & Lee (2000) argue that quantitative descriptive design provides a systematic and empirical approach to studying educational problems by collecting quantifiable data for statistical analysis.

The data collected in this research were analyzed using descriptive quantitative analysis. Since this research employed two research instruments, namely observation and questionnaire, each instrument was analyzed using different techniques according to its purpose. The data analysis process was assisted by IBM SPSS Statistics and Microsoft Excel. Microsoft Excel was used to organize, tabulate, and calculate the raw data, while IBM SPSS Statistics was utilized to perform descriptive statistical analysis, including calculating the mean scores, percentages, validity, and reliability of the questionnaire.

The researcher use questionnaire as a tool to collect data. According to Dörnyei (2003), questionnaire are written instruments that present respondents with a series of questions or statements, then react in the manner of writing out their answers or selecting from among existing answers.

After the instrument met the validity and reliability requirements, the questionnaire responses were analyzed by calculating the mean score of each item using the following formula:

$$P = \frac{\text{Mean Score}}{4} \times 100\%$$

Where:

$\bar{X}$ = Mean score

$\sum X$ = Total score obtained

N = Number of respondents

After obtaining the mean score, the researcher converted it into percentage using the following formula:

RESULTS AND DISCUSSION

The first research question concerned how PjBL was implemented at the eleventh grade of SMAN 2 Kota Payakumbuh. Observation was carried out during English learning sessions using a structured checklist covering six stages of the PjBL model: (1) determining the fundamental question, (2) designing the project, (3) arranging the schedule, (4) monitoring the project, (5) assessing the results, and (6) evaluating the experience. The observation was conducted by the researcher alongside the supervising teacher, Suvina Meiria Sari, S.Pd.

The results of the classroom observation are presented in Table 1 below:

Table 1

No	PjBL Stage	Observed Indicator	Result
1	Determining the Fundamental Question	Students responded to the teacher's questions	Yes
		Students expressed opinions related to the issue	Yes
2	Designing the Project	Students actively discussed in groups	Yes
		Task division was observed within groups	Yes
3	Arranging the Schedule	Groups agreed on project completion timeline	Yes
4	Monitoring the Project	Students actively worked on the project	Yes
		Cooperation among group members occurred	Yes
5	Assessing the Results	Project results matched the theme	Yes
		Project contained solutions/actions	Yes
6	Evaluating the Experience	Students were able to reflect on the learning experience	Yes

Based on the observation data in Table 4.1, all ten indicators across the six PjBL stages were observed as present (Yes) during the learning activities. This indicates that the teacher implemented PjBL in a complete and systematic manner, following all required procedural stages from the initial question to reflective evaluation.

The observation results confirm that PjBL was implemented systematically and comprehensively at SMAN 2 Kota Payakumbuh, with all six stages of the PjBL model fully executed. This finding is consistent with the theoretical framework proposed by Dewi (2022), who outlines the core PjBL stages including lead-in activities, planning, carrying out the

project, creating the final product, and evaluation. In this study, the implementation followed a similar sequence, with the addition of a structured monitoring stage.

The complete execution of all PjBL stages is significant because each stage serves a distinct pedagogical function. The fundamental question stage activates prior knowledge and generates genuine inquiry, while the project design and scheduling stages develop students' planning and collaborative skills. The monitoring stage, during which the teacher provided continuous guidance, is particularly important as it ensures that students remain on track and receive support when needed. This corresponds to findings by Pratiwi (2020), who emphasized that teacher monitoring during PjBL positively influences the quality of students' collaborative and argumentative outputs.

The observation also revealed that students demonstrated cooperation in groups and took ownership of their project tasks. This is consistent with Sukiawati (2020), who identified increased student engagement and collaboration as key advantages of PjBL. Furthermore, the reflection stage — where students evaluated their learning experience — contributes to the development of metacognitive awareness, which is a critical component of effective language learning (Anggraini, 2021).

Based on the results of the data analysis, it can be concluded that the Dictogloss technique positively impacts students' listening ability in the second grade of Junior High School 20 Pekanbaru. Before using the Dictogloss technique, students' listening ability was categorized as low, indicating significant challenges in comprehension. However, after implementing the technique, their listening ability improved to a high category, demonstrating its effectiveness. The statistical analysis further supports this improvement, showing a significant difference in students' listening ability before and after using the Dictogloss technique. The Sig. (2-tailed) value of 0.000 is smaller than 0.05, indicating a statistically significant result, and the t-count value of 1.692 is greater than the t-table value of -1.507, further confirming the difference. These findings highlight the effectiveness of the Dictogloss technique in enhancing students' listening skills, as reflected in the pretest-posttest scores

The questionnaire results demonstrate a generally positive perception of Project-Based Learning (PjBL) among the 36 students, with an overall mean score of 3.25 out of 4.00 (81.25%). This indicates that students perceived PjBL as a beneficial approach for developing argumentative writing skills. The findings are in line with Hidayati (2019) and Pratiwi (2020), who reported that students involved in PjBL activities showed increased motivation and

improvement in writing skills. The positive responses across all categories suggest that PjBL was not only implemented effectively but also received positively by students as a meaningful learning approach.

CONCLUSION

The implementation of Project-Based Learning (PjBL) in teaching English argumentative writing at the eleventh grade of SMAN 2 Kota Payakumbuh was carried out successfully and systematically. The classroom observation demonstrated that the teacher comprehensively executed all six essential stages of the PjBL model, namely: determining the fundamental question, designing the project, arranging the schedule, monitoring the project, assessing the results, and evaluating the experience. All ten indicators under these stages were fully met, resulting in a well-structured, collaborative, and highly student-centered learning environment.

Students from class XI F5 showed a positive perception toward the use of Project-Based Learning in developing their argumentative writing skills. This is demonstrated by the overall questionnaire mean score of 3.25 out of 4.00 (equivalent to 81.31%). Among the six analyzed categories, Teacher Support and Monitoring achieved the highest mean score (3.35), indicating that students appreciated the teacher's guidance, assistance, continuous monitoring, and constructive feedback throughout the writing project. Furthermore, students agreed that PjBL increased their engagement, provided a more relevant learning experience, and supported the improvement of their argumentative writing skills, particularly in organizing ideas and developing logical arguments.

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