



THE EFFECT OF PROJECT-BASED LEARNING MODEL THROUGH PICTURE MEDIA ON STUDENTS DESCRIPTIVE WRITING SKILL AT GRADE X OF SMK TAMAN SISWA SUKADAMAI IN 2025/2026 ACADEMIC YEAR

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Abstrak

Penelitian ini bertujuan untuk mengevaluasi pengaruh model Project-Based Learning (PjBL) yang dikombinasikan dengan media gambar terhadap kemampuan siswa dalam menulis teks deskriptif pada kelas X SMK Taman Siswa Sukadamai tahun ajaran 2025/2026. Penelitian ini menggunakan pendekatan kuantitatif dengan desain eksperimen. Populasi penelitian terdiri dari 103 siswa, dan sampel dibagi menjadi dua kelompok, yaitu kelas eksperimen (X-1) dan kelas kontrol (X-2). Kelas eksperimen diajar menggunakan model Project-Based Learning melalui media gambar, sedangkan kelas kontrol diajar menggunakan metode pembelajaran konvensional. Data dikumpulkan melalui tes menulis dalam bentuk pre-test dan post-test. Hasil penelitian menunjukkan bahwa perlakuan yang diberikan meningkatkan kemampuan menulis siswa. Peningkatan pada kelas eksperimen lebih signifikan dibandingkan dengan kelas kontrol. Data dianalisis menggunakan uji t. Hasil perhitungan menunjukkan bahwa nilai t-hitung lebih tinggi daripada nilai t-tabel pada taraf signifikansi 0,05. Berdasarkan temuan tersebut, hipotesis alternatif (H_a) diterima dan hipotesis nol (H_0) ditolak. Oleh karena itu, dapat disimpulkan bahwa penerapan model Project-Based Learning yang didukung oleh media gambar memiliki pengaruh signifikan dalam meningkatkan kemampuan siswa dalam menulis teks deskriptif.

Kata kunci: Pembelajaran Berbasis Proyek, Media Gambar, Kemampuan Menulis, Teks Deskriptif

Abstract

This study aims to evaluate the effect of the Project-Based Learning (PjBL) model combined with picture media on students' ability in writing descriptive texts at grade X of SMK Taman Siswa Sukadamai in the 2025/2026 academic year. This research employed a quantitative approach with an experimental design. The population consisted of 103 students, and the sample was divided into two groups: the experimental class (X-1) and the control class (X-2). The experimental class was taught using the Project-Based Learning model through picture media, while the control class was taught using conventional teaching methods. The data were collected through writing tests in the form of pre-test and post-test. The results of the study showed that the treatment improved students' writing ability. The improvement in the experimental class was more significant compared to the control class. The data were analyzed using the t-test. The result of the calculation indicated that the t-count value was higher than the t-table value at the significance level of 0.05. Based on the findings, the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) was rejected. Therefore, it can be concluded that the implementation of the Project-Based Learning model supported by picture media has a significant effect on improving students' descriptive writing skills.





Keywords: Project-Based Learning, Picture Media, Writing Ability, Descriptive Text

INTRODUCTION

English has developed into a universal language that is essential in many fields, such as commerce, education, technology, and international communication. English is taught as a required subject in Indonesian secondary schools, including vocational high schools, with the goal of enhancing students' language skills and equipping them to handle global issues (Giawa, 2022). Writing is regarded as one of the most difficult and crucial of the four language skills since it allows pupils to transmit experiences, thoughts, and information in an organized and significant manner (Imron et al., 2022)

Writing is a useful skill that requires not just language proficiency but also creative and cognitive abilities. Pupils must be able to come up with ideas, arrange them logically, and use proper grammar and language. (Kurnia, 2022) asserts that writing calls for higher-order cognitive abilities including creativity, organization, and critical thinking. Students in vocational high schools are expected to be proficient in a variety of texts that are pertinent to their academic and professional requirements. Descriptive text, which is used to provide a detailed description of a person, location, or item, is one of the key text categories. For this kind of work, students must adhere to a particular general structure—identification and description—and use suitable linguistic elements such as adjectives, linking verbs, and the simple present tense (Lailatul et al., 2021)

In reality, though, a lot of students still struggle with producing descriptive writings. Preliminary observations at SMK Tamansiswa Sukadama indicate that students frequently have difficulty coming up with ideas, structuring their writing, and using proper syntax and terminology. Their writing frequently lacks organization and consistency. Additionally, when asked to write in English, children usually exhibit low desire and lack confidence. This result is consistent with studies by (Swasta et al., 2024), which found that low motivation, restricted vocabulary, and poor grammatical proficiency are frequently linked to students' writing difficulties.

The teaching strategies employed in the classroom have a direct bearing on these difficulties. Students are typically passive consumers of information in traditional teacher-centered systems, which are still extensively used. These approaches restrict students' chances to actively participate in their education, investigate concepts, and cultivate their creativity (Susanti et al., 2022) Students' writing abilities do not grow to their full potential as a result.

An inventive, student-centered learning strategy is required to address these issues. Project-Based Learning (PjBL) is thought to be a successful strategy for raising students' writing proficiency. PjBL places a strong emphasis on learning via worthwhile projects in which students actively engage in investigating real-world subjects, performing research, and generating observable results. This approach promotes critical thinking, peer collaboration, and creative expression of ideas (Cahyono et al., n.d.).

Numerous studies have demonstrated how well project-based learning enhances students' writing abilities. According to research by (Nakuu et al., 2023), PjBL greatly enhanced students' capacity to arrange concepts and use suitable linguistic elements when composing descriptive prose. In a similar vein, a research by (Mukhlisin et al., 2023) found that students who were taught using PjBL performed better in writing and were more motivated than those who were taught using traditional methods. These results show that PjBL boosts students' confidence and engagement in studying English in addition to improving their writing abilities.

The purpose of this study is to examine how Project-Based Learning (PjBL) affects students' descriptive text writing skills at SMK Tamansiswa Sukadama throughout the 2025–





2026 school year. This study focuses on how well students grasp the general structure and linguistic elements of descriptive texts. It is anticipated that the findings of this study would enhance English instruction, especially at vocational high schools.

METHOD

The research methodology used in this study was quantitative. In order to test hypotheses, look at links between variables, and provide objective answers to research problems, this method focuses on gathering numerical data and evaluating it using statistical techniques. (*John W. Creswell.,2021*) defines quantitative research as a strategy that uses statistical techniques to analyze numerical data and measure variables in order to evaluate theories. This approach's main goal is to generate results that can be applied to a larger population.

To determine the cause-and-effect relationship between the independent and dependent variables, this study used an experimental approach. According to Sugiyono (2020), experimental research is performed to ascertain how a treatment affects specific variables under controlled circumstances. Two groups—the experimental group and the control group—were included in the pre-test and post-test research design. A pre-test was administered to both groups prior to therapy, and a post-test was administered following treatment. While the control group was taught using traditional means, the experimental group was taught using the Project-Based Learning (PjBL) approach. The study was carried out in SMK Tamansiswa Sukadamai, which is situated at Jl. Protokol, Desa Perhutaan Silau, Kecamatan Pulo Bandring, Kabupaten Asahan, North Sumatra Province. During the school year 2025–2026, the study was conducted from April 6–April 20, 2026. All 58 eleventh-grade students, split into two classes (XI-1 with 29 students and XI-2 with 29 students), made up the study's population.

Random sampling was the method of sampling employed in this investigation. Because both courses were thought to have comparable levels of English competence, this method was selected. Class XI-1, which had 29 students, was designated as the experimental group based on the random selection, and class XI-2, which also had 29 students, was designated as the control group. Thus, 58 students made up the study's entire sample.

A topic-based essay writing test served as the data collection tool. Pre-test and post-test were the two phases of the exam. While the post-test was used to assess the students' progress following the application of the Project-Based Learning (PjBL) paradigm, the pre-test was used to gauge the students' pre-treatment proficiency in producing descriptive texts. Five criteria were used to objectively and methodically evaluate the students' writing: (1) identification; (2) description; (3) organization of ideas; (4) grammar and vocabulary usage; and (5) coherence and the use of linking words.

RESULT AND DISCUSSION

Data Analysis of the Research

In order to answer the research questions and explain the correlations between the variables, data analysis was performed in this study. The pre-test and post-test that were given to the experimental and control groups provided the data. To paint a more accurate picture of the kids' development, the researcher then computed measures of central tendency, especially the mean, and looked at data variation.

Data Description

Data analysis was done in this study to address the research objectives and provide an explanation for the correlations between the variables. The data came from the pre-test and post-test administered to the experimental and control groups. The researcher then calculated



measures of central tendency, particularly the mean, and examined data variation to provide a more realistic picture of the children's progress.

Treatment Description

The Project-Based Learning (PjBL) approach was used to instruct the experimental group. A pre-test was given to the pupils prior to the treatment to ascertain their starting writing proficiency. Students actively participated in project-based activities, including idea generation, group work, and debates, during the course of the program. A post-test was given at the conclusion of the course to gauge how much the students' writing abilities had improved.

1. Experimental Class

The Project-Based Learning (PjBL) approach was used to instruct class XI-1, the experimental group. A pre-test was given to the children prior to the treatment to gauge their starting writing proficiency. Students actively engaged in project-based activities, such as idea generation, teamwork, and group discussions, during the course of the treatment. A post-test was administered at the conclusion of the treatment to gauge how much their writing had improved.

2. Control Class

Class XI-2, the control group, received instruction using a traditional approach. With this method, pupils tended to be passive and finished their own assignments while the teacher took the lead in imparting the knowledge. To gauge students' development, a pre-test was administered at the start of the learning process and a post-test at the conclusion, much like for the experimental group. To guarantee a fair comparison, the post-test administered was identical to the one given to the experimental group.

The Analysis of the Data

The Kolmogorov-Smirnov method was used for a normality test to make sure the data satisfied the necessary assumptions. If the significance value (p-value) was higher than 0.05, the data were deemed to be regularly distributed. Additionally, the Independent Sample T-Test was used for hypothesis testing in order to ascertain whether the experimental and control groups differed significantly. According to the findings, at the 0.05 significance level, the t-count exceeded the t-table. As a result, the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) was rejected. This suggests that the two groups differed significantly, indicating that students' writing skills were significantly impacted by the Project-Based Learning (PjBL) paradigm.

Independent Sample T-Test

In order to ascertain if the mean scores of the experimental group (class XI-1) and the control group (class XI-2) differed statistically significantly, the Independent Sample T-Test was employed in this investigation. Because the two groups are independent and were given distinct treatments, this test is appropriate. Following the post-test, the Independent Sample T-Test was used to assess the data from both groups at a significance level of 0.05. The analysis's outcome revealed that, with a degree of freedom (df) of 56, the t-count value was greater than the t-table value. The alternative hypothesis (H_a) was accepted while the null hypothesis (H_0) was rejected since the t-count was greater than the t-table.

This finding suggests that the writing abilities of students in the experimental group and those in the control group differ significantly. Put differently, students' writing skills were significantly impacted by the application of the Project-Based Learning (PjBL) model.

Research Findings

The results of this study show that students' writing abilities improved when the Project-Based Learning (PjBL) paradigm was used. This is demonstrated by the experimental



group's (class XI-1) improved mean score, which went from 63.97 on the pre-test to 82.93 on the post-test. The majority of students had not yet reached the anticipated level of writing skill, as evidenced by the fact that 25 out of 29 students on the pre-test scored below the Minimum Mastery Criterion (KKM). However, students demonstrated notable improvement following the PjBL model's introduction. In the post-test, the majority of them were able to attain the KKM and showed improved performance in terms of concept organization, vocabulary use, and grammatical structure application. Thus, it can be said that the PjBL paradigm is successful in raising students' writing proficiency.

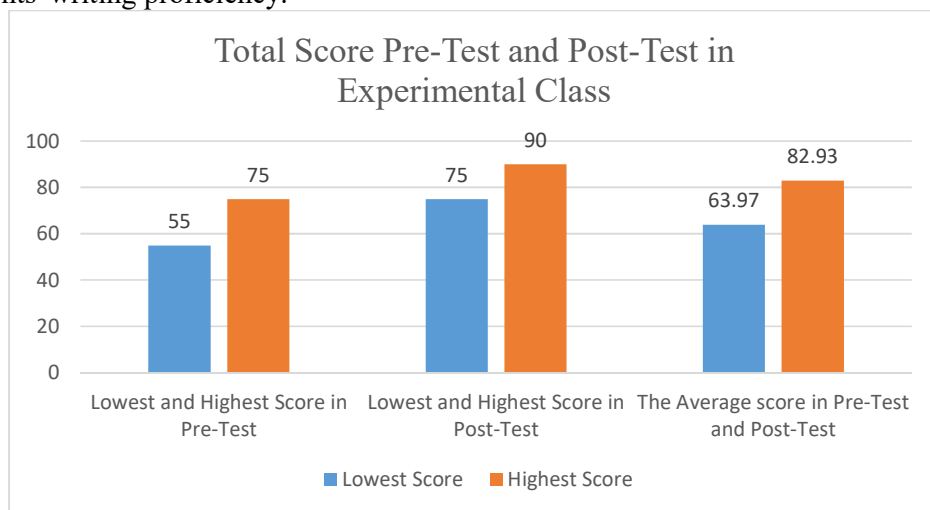


Figure 1. Total Score in Experimental Class

The improvement was rather slight in the control group (X2), which used traditional teaching techniques. Between the pre-test and the post-test, the average score rose from 58.27 to 68.79. Even while there was progress, only a small percentage of pupils were able to meet the KKM on the post-test; the others were still below the necessary level. On the post-test, this class's highest score was 80.

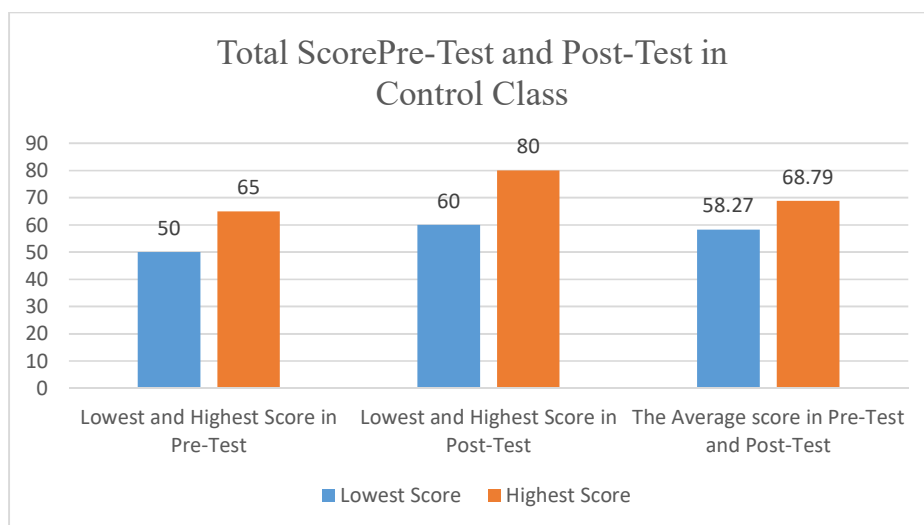


Figure 2. Total Score in Control Class



The comparison of the two groups shows that the Project-Based Learning (PjBL) model outperforms traditional teaching techniques in terms of enhancing students' writing abilities. The null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted as a result of the statistical analysis showing that the t-count value was greater than the t-table value at a significance level of 0.05. Thus, it can be said that the PjBL model significantly improves the descriptive writing abilities of tenth-grade students at SMK Tamansiswa Sukadamai.

DISCUSSION

The primary goal of this study was to enhance the descriptive writing abilities of tenth-grade students at SMK Tamansiswa Sukadamai by applying the Project-Based Learning (PjBL) model after conducting the research, analyzing the data, and running tests of normality, homogeneity, and hypothesis. Additionally, this study sought to ascertain whether the PjBL model had a substantial impact on students' writing skills and how it aids in idea development, writing organization, and the use of relevant language elements.

58 students made up the research sample, which was split into two groups: class X1, which included 29 students for the experimental group, and class X2, which included 29 students for the control group. The sample was chosen because many students still had trouble writing in English, especially when it came to descriptive passages. They frequently had trouble applying suitable linguistic elements and methodically arranging ideas. Additionally, the traditional teaching techniques that were previously employed offered few chances for engagement and teamwork, which led to low motivation and passive learning.

The researcher was motivated to use the PjBL paradigm in the classroom by these circumstances. By relating learning to real-world situations, this approach fosters critical thinking, group cooperation, and active learning through project activities. Students became more involved and imaginative as a result, particularly when it comes to creating content and organizing their texts.

With an average score of 63.97 for the experimental class (X1) and 58.27 for the control class (X2), the pre-test results demonstrated that both groups had comparatively similar starting abilities. The post-test findings revealed a substantial difference between the two groups following the application of the therapy. The control group only achieved an average score of 68.79, whereas the experimental group increased to 82.93. This suggests that pupils who were taught using the PjBL model improved more than those who were taught using traditional approaches.

The PjBL approach at SMK Tamansiswa Sukadamai concentrated on five essential elements to enhance students' writing abilities: content, organization, vocabulary, language use, and mechanics. Students were able to write better and think more critically thanks to this method, and the majority of students in the experimental class met the Minimum Mastery Criteria (KKM).

The results show that using the project-based learning approach is a successful way to improve students' writing abilities. Under this paradigm, students collaborate in groups to finish assignments and create written texts, with the teacher serving as a facilitator. This result is further supported by the statistical analysis, which confirms the adoption of the alternative hypothesis (H_a) because the t-count value was greater than the t-table value at the 0.05 significance level.

CONCLUSION

The application of the Project-Based Learning (PjBL) paradigm significantly improves students' descriptive writing abilities and increases their enthusiasm to write, according to data analysis and study findings. According to the findings, the experimental class (X1) improved



more than the control class (X2), which obtained an average post-test score of 68.79 through traditional learning, with an average score of 82.93.

The average pre-test score in the experimental class was 63.97, but once the PjBL model was applied, it dramatically jumped to 82.93. In the meantime, the control group's average pre-test score increased from 58.27 to 68.79 in the post-test. The experimental class exhibited a more significant and steady gain, even though both groups showed progress.

These results show that the PjBL model is quite successful in helping students become better writers. This conclusion is also supported by the hypothesis testing, since H_0 was rejected and H_a was accepted because the t-count value was more than the t-table value at the 0.05 significance level ($t\text{-count} > t\text{-table}$). This demonstrates that the writing performance of students taught using the PjBL paradigm differs significantly from that of those taught using traditional approaches.

Students' excitement and active engagement in the learning process are further indicators of this model's effectiveness. Through project activities, the PjBL paradigm promotes critical thinking, group collaboration, and the creation of tangible results. Students consequently become more engaged, imaginative, and capable of formulating concepts and skillfully structuring their writing.

Suggestion

Based on the researcher's experience and the findings at SMK Tamansiswa Sukadamai in the 2025/2026 academic year, several suggestions are proposed:

1. Applying Effective Teaching Strategies
English teachers are encouraged to use the *Project-Based Learning* (PjBL) model as an alternative teaching strategy, as it has been proven to effectively improve students' writing skills.
2. Promoting Active and Collaborative Learning
Teachers should create a more engaging learning environment by encouraging students to work collaboratively in groups through project-based activities. This approach can enhance both writing skills and students' motivation and creativity.
3. Recommendations for Future Research
Future researchers are recommended to explore the PjBL model further by applying it to different types of texts or other language skills such as listening, speaking, or reading. Additionally, involving larger sample sizes may provide more comprehensive results.

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