



Journal of Educational Sciences

Journal homepage: <https://jes.ejournal.unri.ac.id/index.php/JES>



P-ISSN
2581-1657
E-ISSN
2581-2203

The Influence of the Project Based Learning Model and Learning Motivation on Fourth Grade Elementary Students' Narrative Writing Skills

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ARTICLE INFO

Article history:

Received: 11 April 2026

Revised: 15 April 2026

Accepted: 16 April 2026

Published online: 21 April 2026

Keywords:

Project Based Learning,
Learning Motivation,
Narrative Writing Skills,
Elementary School Students

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Article Doi:

<https://doi.org/10.31258/jes.10.4.p.1011-1020>

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ABSTRACT

This study was conducted based on the low level of narrative writing skills among elementary school students, which is influenced by less innovative instructional models and low learning motivation. This study aimed to analyze the effect of the Project Based Learning (PjBL) model and learning motivation on the narrative writing skills of fourth-grade elementary school students. This research used a quantitative approach with a quasi-experimental method and a 2×2 factorial design. Data were collected through a narrative writing test and a learning motivation questionnaire, and analyzed using t-test and two-way ANOVA. The results showed that students in the PjBL class achieved higher mean scores, with 89.05 for high motivation and 73.15 for low motivation, compared to 80.21 and 52.64 in the conventional class. The ANOVA test indicated no significant interaction (Sig. = 0.537 > 0.05). It can be concluded that PjBL effectively improves narrative writing skills, while motivation acts as an independent factor.

1. Introduction

Writing skill is one of the essential language competencies in elementary school education, as it serves as a primary medium for students to express ideas, experiences, and knowledge in written form. Writing is not merely a mechanical activity of arranging letters and words, but a complex cognitive process that involves critical thinking, idea organization, and the use of effective and communicative language. In the context of modern education, writing skills are part of literacy competencies that must be developed from an early stage so that students

are able to think systematically and reflectively. Graham & Harris, (2020) and Hyland, (2021) state that writing is a higher-order thinking process that integrates cognitive and linguistic aspects simultaneously, emphasizes that writing skills contribute to the development of students' logical and expressive thinking abilities. Therefore, writing instruction in elementary schools should be designed optimally to support students' cognitive and communicative development as a whole.

In the implementation of the Merdeka Curriculum, writing skills are an important component of literacy learning outcomes that emphasize the development of students' critical and creative thinking abilities. Writing instruction is directed so that students are able to express ideas, feelings, and experiences through various types of texts independently and collaboratively. One of the important text types to be developed at the elementary level is narrative text, as it provides opportunities for students to develop imagination and creativity in the form of structured storytelling. Nurul et al., (2024) explain that learning should be student-centered and contextual, Safitri et al., (2023) state that narrative texts have a systematic structure that trains students' chronological thinking skills. Furthermore, Tarigan, (2020) and Mahsun, (2018) assert that narrative texts help students understand sequences of events logically. Thus, teaching narrative writing plays a strategic role in enhancing students' thinking skills and literacy development.

Writing narrative texts is not only a language skill exercise but also a means of developing students' creativity and character. Through this activity, students are trained to organize ideas coherently, develop story plots, and use language in a communicative and engaging way. In addition, narrative writing can serve as a medium for instilling character values such as responsibility, honesty, and cooperation, as students' stories often reflect their experiences and perspectives. Kaibi et al., (2023) and Winahyu et al., (2024) explain that narrative writing instruction can enhance students' creative thinking abilities and help them understand cause-and-effect relationships in events. Meanwhile, Farida, (2023) highlights that writing activities also play a role in fostering creativity and self-expression. Therefore, narrative writing skills need to be developed through appropriate instructional strategies to optimally support students' cognitive and affective growth.

However, empirical conditions in the field indicate that students' narrative writing skills are still relatively low and have not reached optimal outcomes. Students face difficulties in generating ideas, organizing story sequences, and using appropriate vocabulary. This low ability is influenced by several factors, including lack of writing practice, low reading interest, and the use of conventional teaching methods. Tomlinson, (2021) states that teacher-centered learning makes students less active in the learning process. This is supported by Pramesti et al., (2023), who argue that conventional learning tends to make students passive and less engaged. Moreover, studies by Arrosyad et al., (2023), and Salwa Sausan et al., (2024) show that conventional methods have not been effective in significantly improving writing skills. These conditions indicate the need for innovation in instructional models to improve students' writing abilities.

In addition to instructional models, learning motivation is also an important factor influencing students' writing skills. Learning motivation is an internal and external drive that determines students' level of engagement, persistence, and effort in learning. Slavin, (2020) states that motivation plays a crucial role in determining students' academic success. Research by Etika Sari et al., (2023), Nanda, (2023) shows that students with high motivation tend to have better writing skills compared to those with low motivation. Therefore, improving writing skills must be supported not only by appropriate instructional models but also by strong learning motivation so that students can actively participate and develop their abilities optimally.

One instructional model that can be used to address these problems is Project Based Learning (PjBL), which emphasizes active student involvement through meaningful and contextual project activities. Fauzan et al., (2020) state that PjBL can enhance students' critical thinking and creativity, Safitri et al., (2023) explain that this model provides opportunities for students to learn independently and collaboratively through real-world problem solving. Salwa Sausan et al., (2024) also show that PjBL is effective in improving students' learning outcomes. Furthermore, Anggraini & Wulandari, (2021) emphasize that this model is relevant to 21st-century learning as it promotes creativity, collaboration, and communication skills. Thus, Project Based Learning has great potential to improve students' narrative writing skills effectively.

Based on the above explanation, it can be concluded that the low level of students' narrative writing skills, the lack of innovative instructional models, and low learning motivation are major problems in elementary school language learning. These issues affect the overall quality of students' literacy development. Therefore, an instructional model that actively engages students in meaningful and creative learning is needed. Project Based Learning is considered a relevant alternative as it provides contextual and experiential learning opportunities. In addition, learning motivation plays an important role in determining students' success in writing. Thus, this study aims to analyze the effect of the Project Based Learning model and learning motivation on the narrative writing skills of fourth-grade elementary school students, both partially and simultaneously. It is expected that this study will contribute to improving the quality of instruction and students' literacy development.

2. Methodology

This study employed a quantitative approach using a quasi-experimental method with a 2×2 factorial design to investigate the effect of the learning model and learning motivation on students' narrative writing skills. The independent variables in this study were the learning model, consisting of Project Based Learning (PjBL) and conventional instruction, and students' learning motivation, which was categorized into high and low levels. The dependent variable was students' narrative writing skills. The population of this study consisted of fourth-grade elementary school students, and the sample was divided into two groups, namely an experimental class and a control class. The experimental class was taught using

the Project Based Learning model, while the control class was taught using conventional instructional methods. Both groups were handled by the same teacher, used identical learning materials, and were given equal instructional time to minimize instructional bias and control extraneous variables, thereby strengthening the internal validity of the research design. Prior to the treatment, a pre-test was administered to both groups to ensure that students had relatively equivalent initial writing abilities before the implementation of different instructional approaches, which is essential in establishing baseline comparability between the experimental and control conditions.

The treatment was conducted over several learning meetings in a structured and systematic manner to ensure consistency in implementation. In the experimental class, students participated in Project Based Learning activities that followed a clear sequence of stages, including planning the project, collecting relevant information, organizing ideas, drafting narrative texts, and revising their written work based on feedback. These stages were designed to actively engage students in collaborative learning, encourage problem-solving, and provide meaningful, contextual experiences that support the development of writing skills. In contrast, the control class was taught using conventional instructional methods, where learning was dominated by teacher-centered explanations, followed by individual assignments without structured project activities or collaborative learning processes. Data were collected using two main instruments, namely a narrative writing test and a learning motivation questionnaire. The writing test assessed students' narrative writing skills based on content, organization, vocabulary, language use, and mechanics, while the motivation questionnaire used a Likert scale to classify students into high and low motivation categories. The collected data were analyzed using inferential statistical techniques, including a t-test to examine differences between groups and a two-way ANOVA to test the main effects of the learning model and motivation, as well as the interaction effect between both variables on students' narrative writing skills. Overall, the quasi-experimental quantitative design with a 2×2 factorial structure is appropriate for the data presented in the form of test scores, mean comparisons, and statistical hypothesis testing; however, clearer reporting of procedural details such as treatment duration, step-by-step implementation consistency, and stronger control of external variables would further enhance the methodological rigor, internal validity, and replicability of the study's causal conclusions (Subhaktiyasa, 2024).

3. Results and Discussion

Narrative text is a form of writing that aims to present a sequence of events or experiences in a coherent and systematic manner by considering key elements such as characters, plot, setting, conflict, and resolution (Giawa, 2022). In this study, students were asked to compose narrative texts through project-based activities that emphasize the writing process rather than merely the final product. The results of students' narrative writing projects, as illustrated in Figure 1, indicate that students were able to construct narrative texts with clearer structures, beginning with orientation, followed by a sequence of events, and ending with a resolution. In

addition, the content of students' writing shows improvement in terms of coherence between sentences, appropriate vocabulary usage, and the development of story ideas. These findings suggest that the implementation of Project Based Learning supports students in understanding the structure and characteristics of narrative texts more effectively and helps them produce more organized and meaningful written work.



Figure 1. Narrative Text Compilation Project

The implementation of Project Based Learning provides meaningful learning experiences, as students are actively involved in every stage of the writing process. Students engage in systematic activities, including planning ideas, organizing storylines, drafting texts, and revising their work in a structured manner. This process allows students to develop their writing skills more comprehensively, including cognitive, affective, and psychomotor aspects (Safitri et al., 2023). Furthermore, students become more confident and independent in expressing their ideas through writing because they are given opportunities to explore, discuss, and refine their work collaboratively. As a result, learning becomes more student-centered, and students are no longer passive recipients of information but active participants in constructing their own knowledge and skills in writing narrative texts. The descriptive statistics of students' narrative writing skills based on learning models and motivation levels are presented in Table 1.

Tabel 1. Descriptive Statistics of Narrative Text Writing Skills

Learning Model	Learning Motivation	Mean	SD
PjBL	High	89,05	15,51
PjBL	Low	73,15	15,51
Conventional Instruction	High	80,21	15,51
Conventional Instruction	Low	52,64	15,51

Based on Table 1, there is a considerable difference between the learning outcomes of students who were taught using the Project Based Learning model and those who were taught using conventional instructional methods. Students with high motivation in the PjBL class achieved an average score of 89.05, while those with low motivation obtained a score of 73.15. In contrast, in the conventional class, students with high motivation achieved an average score of 80.21, and those with low motivation scored 52.64. This difference indicates that the Project Based Learning model has a greater impact on improving students' narrative writing skills compared to conventional learning models. The improvement is not only observed among students with high motivation but also among those with low motivation. This suggests that PjBL is capable of accommodating diverse student characteristics.

From a pedagogical perspective, the effectiveness of PjBL can be explained by its emphasis on student-centered learning. Students are given opportunities to explore ideas, engage in discussions, collaborate with peers, and produce tangible outputs in the form of narrative texts. This process enables students to construct their own understanding and enhances their critical and creative thinking skills. In contrast, conventional instruction tends to position students as passive recipients of information, with limited active involvement in the learning process. As a result, students have fewer opportunities to develop their ideas and writing skills optimally, leading to relatively lower learning outcomes. To further illustrate the differences in students' narrative text writing performance across various learning models and motivation levels, the average scores are presented graphically in Figure 2.

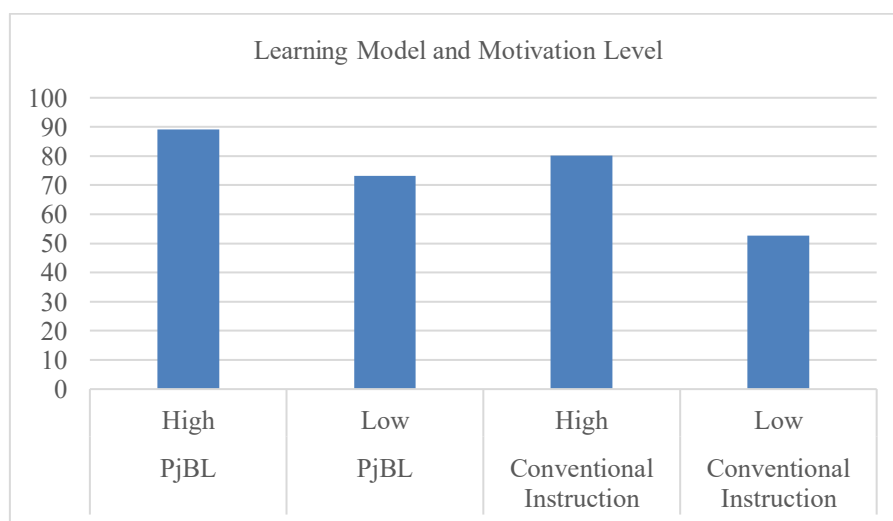


Figure 2. Average Score of Students' Narrative Writing Skills Based on Learning Model and Motivatio.

The ANOVA results presented in Table 2 show a significance value of 0.537 ($p > 0.05$), indicating that no significant interaction exists between the learning model and learning motivation on students' narrative writing skills in Tabel 2.

Tabel 2. Results of The ANOVA on Narrative Writing Skills

ANOVA					
Data	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32.111	1	32.111	.390	.537
Within Groups	2802.111	34	82.415		
Total	2834.222	35			

The results of the two-way ANOVA analysis indicate that the Project Based Learning (PjBL) model has a significant effect on students' narrative writing skills when compared to conventional instructional methods, as reflected in the difference of mean scores between the experimental and control groups. This finding suggests that students who were taught using the PjBL approach demonstrated better performance in organizing ideas, developing story structure, and expressing creativity in narrative writing tasks. The improvement can be associated with the characteristics of PjBL, which emphasizes active learning, student engagement, collaboration, and the production of meaningful learning outcomes through project-based activities. Therefore, PjBL can be considered an effective instructional model for enhancing writing skills in elementary education contexts, particularly in supporting students' ability to construct coherent and meaningful narrative texts. However, this effectiveness should be interpreted within the scope of the current study design and sample characteristics, rather than being generalized broadly without caution.

Furthermore, the ANOVA results revealed that there was no statistically significant interaction effect between the learning model Project Based Learning (PjBL) and students' learning motivation on narrative writing skills. This indicates that the effect of PjBL on students' writing performance was relatively consistent across both high-motivation and low-motivation groups. In other words, students benefited from the PjBL approach regardless of their initial level of motivation, and the improvement in writing skills did not significantly differ between motivational categories. Nevertheless, it is important to emphasize that the absence of an interaction effect does not imply that learning motivation has no influence on writing achievement. Instead, it only indicates that motivation does not significantly change the magnitude of the effect of PjBL within the framework of this factorial design. Therefore, conclusions regarding motivational influence must be derived from the main effect analysis rather than the interaction term.

In interpreting these findings, it is essential to distinguish clearly between main effects and interaction effects in factorial ANOVA analysis to avoid overgeneralization. The main effect of PjBL reflects its overall impact on students' writing performance, while the main effect of motivation reflects its independent contribution to learning outcomes. Meanwhile, the interaction effect examines whether the influence of PjBL differs depending on students' motivational levels. Since no significant interaction was found, the appropriate interpretation is that both high and low motivation groups respond similarly to the PjBL intervention, not that motivation is irrelevant or has no effect at all. Misinterpretation of this result may

lead to inaccurate conclusions, therefore careful statistical reasoning is necessary to maintain scientific validity in educational research reporting.

Finally, these findings should be considered in light of several limitations of the study. The relatively small sample size may limit the statistical power to detect subtle interaction effects, and the categorization of motivation into only two levels may oversimplify the complexity of students' motivational characteristics. Additionally, the results are context-specific and may not be directly generalizable to other populations or educational settings without further replication studies. Despite these limitations, the study provides valuable evidence that PjBL is an effective instructional approach for improving narrative writing skills, while also highlighting that motivation operates as an independent factor rather than a moderating variable in this particular analysis framework.

4. Conclusion

This study examined the effects of Project Based Learning and learning motivation on students' narrative writing skills and interaction present. PjBL improves students' ability to organize ideas, develop narrative structure, and produce more coherent writing compared with conventional instruction in elementary classrooms through active learning activities and student engagement enhancement. Learning motivation contributes to better writing performance, as motivated students are more active, persistent, and confident in expressing their ideas in writing tasks effectively developed. However, no interaction is found between learning model and motivation, indicating PjBL works consistently across different motivational levels equally effective. Overall, PjBL is an effective instructional approach for improving narrative writing skills, while motivation acts as an independent supporting factor for learning outcomes consistently important.

Acknowledgement

The researcher would like to express sincere gratitude to all those who have contributed to the completion of this study. Appreciation is extended to the school administration and fourth-grade teachers who provided permission, support, and cooperation during the data collection process. Special thanks are also given to the students who participated in this study with enthusiasm and commitment, making the research activities run smoothly and successfully. Their involvement was essential in obtaining accurate and meaningful data for analysis. The researcher also acknowledges the guidance and support provided by academic supervisors and lecturers who have offered valuable insights, suggestions, and constructive feedback throughout the research process. Their expertise has greatly contributed to the improvement of the quality of this study. Finally, heartfelt thanks are given to family and friends for their continuous encouragement, prayers, and moral support during the completion of this research. Their motivation has been a great source of strength in finishing this study.

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How to cite this article:

Nisa', A., Sukma, E., Karneli, Y., & Muhammadi. (2026). The Influence of the Project Based Learning Model and Learning Motivation on Fourth Grade Elementary Students' Narrative Writing Skills. *Journal of Educational Sciences*, 10(4), 1011-1020.
