

The Effect of Problem-Based Learning Method on Students Writing Descriptive Text

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Abstrak: Penelitian tentang pengaruh metode pembelajaran berbasis masalah sangat perlu untuk dilakukan. Penelitian ini bertujuan untuk mengetahui efektivitas metode pembelajaran berbasis masalah (PBL) dalam meningkatkan kemampuan menulis siswa. Penelitian ini menggunakan metode kuantitatif. Penelitian ini dilakukan dengan desain kuasi-experimental yang melibatkan dua kelompok siswa, satu kelompok menerima pengajaran konvensional tanpa perlakuan, sementara kelompok lainnya menerima perlakuan berupa pengajaran PBL. Data dikumpulkan melalui pre-test dan post-test penilaian menulis, dan hasilnya dianalisis menggunakan t-test. Hasil penelitian menunjukkan bahwa siswa yang menerima pengajaran dengan metode PBL menunjukkan peningkatan yang signifikan dalam keterampilan menulis mereka dibandingkan dengan mereka yang menerima pembelajaran konvensional. Penelitian ini menyimpulkan bahwa PBL dapat menjadi metode yang efektif untuk meningkatkan kemampuan menulis siswa dengan memberikan kesempatan untuk pemecahan masalah dunia nyata, pembelajaran kolaboratif, dan revisi berdasarkan umpan balik.

Kata kunci: PBL, Keterampilan Menulis, Desain kuasi-experimental

Abstract: Research on the influence of problem-based learning methods really needs to be carried out. This research aims to determine the effectiveness of the problem-based learning (PBL) method in improving students' writing skills. This research uses quantitative methods. This research was conducted with a quasi-experimental design involving two groups of students, one group received conventional teaching without treatment, while the other group received treatment in the form of PBL teaching. Data was collected through pre-test and post-test writing assessments, and the results were analyzed using a t-test. The research results showed that students who received teaching using the PBL method showed significant improvements in their writing skills compared to those who received conventional learning. This research concludes that PBL can be an effective method for improving students' writing skills by providing opportunities for real-world problem-solving, collaborative learning, and revision based on feedback.

Keywords: PBL, Writing Skills, Quasi-Experimental Design

Submission History:

Submitted: 25 Februari 2024

Revised: 29 Februari 2024

Accepted: 1 Maret 2024

INTRODUCTION

English language learning is one of the subjects implemented in education in Indonesia. English learning has four language skills that student must have, namely listening, speaking, reading, and writing skills (Hameed & Ali, 2022). English is one of the subjects taught from primary education to higher education. The four language skills should be mastered by learners. There are learners who master all these language skills, on the other hand there are also learners who are skill in speaking skills, but less skill in using language skills in writing, or vice versa.

One of the numerous texts that are taught in English classes is how to write descriptive writings. According to Meyers, who was quoted by (Suriyanti & Yaacob, 2016),

descriptive language is essential to all forms of writing and contains components that elicit thoughts, feelings, perceptions, and reactions from the reader. In English classes, among the plethora of texts taught, there is a notable focus on instructing students in the art of crafting descriptive writings. Meyers, as cited by Suriyanti and Yaacob (2016), underscores the significance of descriptive language across various writing genres, highlighting its capacity to evoke thoughts, feelings, perceptions, and reactions within the reader. This emphasis on descriptive writing not only cultivates students' ability to vividly depict scenes and characters but also enhances their overall writing proficiency by encouraging nuanced expression and engaging storytelling techniques (Parasamy & Wahyuni, 2017).

Duch (2001) Problem-based learning (PBL) is a teaching method that emphasize the use of the real-life contexts as a basic for learning and provides students with opportunities to develop essential problem-solving skills. Problem-based learning (PBL) has been found to be effective in enhancing student's writing skills by engaging them in active, collaborative, and context-based learning. Problem-based learning (PBL), as elucidated by Duch (2001), stands out as a dynamic pedagogical approach that places significant emphasis on real-life contexts to foster learning. By immersing students in authentic scenarios, PBL nurtures their problem-solving abilities, thereby equipping them with essential skills crucial for their academic and professional journey. Moreover, research indicates that PBL not only cultivates problem-solving prowess but also serves as a catalyst for enhancing students' writing skills. Through active participation in collaborative endeavors within contextual frameworks, students are empowered to articulate their thoughts effectively, thereby refining their written expression and communication skills (Uno, 2010).

Furthermore, the interactive nature of PBL encourages students to delve into complex issues, fostering a deeper understanding of the subject matter (Amir, 2015). By engaging in discussions, research, and practical applications within a supportive learning environment, students not only refine their writing abilities but also develop critical thinking and analytical skills essential for navigating contemporary challenges. Thus, the holistic approach of problem-based learning not only enhances academic outcomes but also equips students with invaluable competencies vital for success in diverse personal and professional endeavors (Amir, 2017).

Based on the results of observations by the research team at SMA IT Al-Qur'aniyyah Pondok Aren, South Tangerang, English language learning was still carried out using conventional methods. Even though in this modern era teachers have to use various methods in teaching. This is as stated by Hotimah (2020) that in this modern era teachers must become facilitators who provide a variety of interesting learning methods. In the learning process that has been taking place at SMA IT Al-Qur'aniyyah, they still use the lecture learning model so that students become passive. The above research shows that teachers still use the old learning model, namely lectures, so that students are not active in each lesson so that students cannot think. critical in solving questions and problems in the material provided by the teacher.

Therefore, this study aims to investigate the effect of Problem-based learning (PBL) on student's writing descriptive text in secondary school context. The study was

also exploring the factors that many influence the effectiveness of Problem-based learning (PBL) in improving writing skills. By doing so, this study was contributed to the existing body of literature on effective teaching methods for improving writing skill and provide insights for educators and policymakers in designing effective writing instruction.

METHODS

This researcher was conducted to the 10th grade students of SMA IT Al-Qur'aniyyah. The school is located on Jl. Panti Asuhan Ceger- Pondok Aren, South Tangerang. This research was conducted during the first semester, academic year 2023/2024, and on November 2023. The research method that was used in this research is quasi-experimentation. According to (Borg & Gall, 1983), quasi-experimental design is used commonly in educational research with non-random assignment that is applied, as the participants of this research is already set, namely in classroom, and changing the formation of it would not be possible to maintain. Quasi-experimental research is a method that uses experimental groups and control groups. In this study, researchers participated in the study by teaching in the Experimental Class with Problem Based Learning and the Control Class using Conventional learning. The research design used is Pre-test and Post-test design. In this design, the research is carried out Pre-test before action and Post-test after take as a determination of the success of the research.

The population of this research is the first grade of SMA IT Al- Qur'aniyyah Pondok Aren, South Tangerang. There are 3 classes with 95 students. So, the total population of this research is 95 students. Arikunto (2010) said sample is a part of the population which is researched. Sampling is the process of selecting individuals represent the large from which they will be selected (Sugiyono, 2018). The sample in this study is all students of class X.1 and X.2 consisting 60 students; class X.1: 30 students and class X.2: 30 students. The data taken from the tests were calculated by the research to measure the effect of Problem-based learning in enhancing student writing skills. The research was used namely normality test, homogeneity test, and hypothesis test for paired sample T-test. In analysing the test result, the researcher used a scoring rubric of writing adopted from Jacobs et al. in Weigle (2010).

RESULTS AND DISCUSSION

Hypothesis test is carried out with the aim of answering questions previous research is still conjectural. In this study, the research hypothesis is divided into 2, namely the null hypothesis (H₀) and alternative hypothesis (H_a), described as follows:

- a) H₀ (null hypothesis): There is no effect of using Problem Based Learning method on enhancing students writing skills in SMAIT Al-Qur'aniyyah.
- b) H_a (alternative hypothesis): There is an effect of using problem-based learning method on enhancing students writing skills in SMAIT Al-Qur'aniyyah.

Hypothesis testing in this research was carried out using a paired sample t-test. The paired sample T-test is used to determine whether the independent variable has a significant influence on the dependent variable. The calculation of the paired sample T-

test in this research uses the help of the SPSS 23 program. Hypothesis testing aims to determine the effect of using Problem Based Learning (PBL) in enhancing student in writing skill.

Table 1. Result of Hypothesis Test

| | | Paired Differences | | | | | | | | |
|------------|------------------------|--------------------|--------------------|-----------------------|---|---------|-------------|----|---------------------|--|
| | | Mean | Std. Deviat ion | Std. Error Mean | 95% Confidence Interval of the Difference | | t | df | Sig. (2- tailed) | |
| Pai r 1 | Prestest - Posttest | -27.80 0 | 14.10 2 | 2.575 | -33.066 | -22.534 | -10.79 8 | 29 | .000 | |

From the results of the paired sample T-test above, the sig value is known. (2-tailed) of 0.000. According to the decision-making rules in the paired sample T-test, the sig. (2- tailed) < 0.05 or 0.000 < 0.05 it can be concluded that the hypothesis H0 is rejected and Ha is accepted because there is a significant difference between the pre-test and post-test learning outcomes. So, it can be concluded that there is an influence on the Pretest and Post-test scores of students in the Experimental Class.

In the Experiment Class, the average pre-test score was 39.40 and the post-test score was 67.20. So, the distance in the Experiment class after treatment using the Problem Based Learning model is 27.80. While in the Control Class the average pre-test score was 36.20 and the post-test value was 58.40. So, the distance in the Control Class after learning with conventional methods is 22.20. There is a significant effect of the Problem Based Learning method in student's writing descriptive text in the Experiment Class at SMA IT AL-Qur'aniyyah, this evidenced by statistical calculations using the independent t-test with $(\alpha) = 0.05$ dan $df (n1 + n2) - 2 = (30 + 30) - 2 = 60$ so that $t_{count} > t_{table}$ value is $1.011 > 1.69$ then there is a significant influence when learning using Problem Based Learning means H0 is rejected and Ha is accepted. Based on the analysis and calculations above, it states that the Problem Based Learning model effects in student's writing descriptive.

The paired sample T-test results reveal a significant finding with a sig value (2-tailed) of 0.000. In accordance with the decision-making guidelines for this statistical analysis, where the significance level (sig.) is compared to the conventional threshold of 0.05, the obtained value of 0.000 falls well below this threshold. Consequently, the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted, indicating a substantial disparity between the pre-test and post-test learning outcomes. This unequivocally suggests that there exists a discernible impact on the students' scores in the Experimental Class, corroborating the effectiveness of the instructional intervention in facilitating observable advancements in academic performance.

The paired sample T-test is a statistical method used to compare the means of two related groups, such as pre-test and post-test scores in an experimental setting. In this case, the obtained sig value (2-tailed) of 0.000 indicates the probability of obtaining the observed difference between the pre-test and post-test scores purely by chance. With a significance level (alpha) commonly set at 0.05, any sig value less than this threshold

suggests that the observed difference is unlikely due to random variation and is instead attributed to a genuine effect. Consequently, when the sig value (2-tailed) is 0.000, significantly lower than 0.05, the null hypothesis (H_0) is rejected, affirming that there is indeed a significant difference between the pre-test and post-test scores. This leads to the acceptance of the alternative hypothesis (H_a), indicating that the instructional intervention has had a discernible impact on the students' academic performance. Thus, the conclusion drawn is that there exists a clear influence on the pre-test and post-test scores of students in the Experimental Class, underscoring the efficacy of the educational intervention employed.

CONCLUSIONS

PBL encourages the development of critical thinking skills because students must analyze information, evaluate possible solutions, and make decisions based on evidence. Traditional methods may be less effective in building critical thinking skills because of its focus on passive acceptance of information. Based on the findings of this research, there are some suggestions the researcher would like to suggest related to the result, the researcher provide the following suggestions: for teachers, It can be used by the teacher to develop their teaching technique. Hopefully, it can give inspiration to the teacher to make some techniques in teaching English. For students, students must participate in language classes if they want to see progress in learning English. Problem-based learning is a technique that very useful to improve their writing ability. Move over, it also improve their creativity. For further researchers, this research is expected to be a provision when becoming a teacher who is involved in the school environment. As well as input and learning for research that can use the Problem Based Learning model in other materials and subjects.

ACKNOWLEDGEMENTS

First, I would like to express my gratitude to my loving Family, who always been here for me, always support me, for always loving me, and pray the best for me. Second, I would like to say thank you to all my friends for always supporting me.

REFERENCES

- Amir, T. (2017). *Karakteristik Proses Pembelajaran Berbasis Masalah*. Jakarta: Prestasi Pustakarya.
- Amir, M. T. (2015). *Inovasi Pendidikan Melalui Problem Based Learning*. Jakarta: Prenadamedia Group.
- Arikunto, S. (2010). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Borg, W. R., & Gall, M. D. (1983). *Educational research: An introduction*. UK: Longman.
- Duch. (2001). *Belajar dan Pembelajaran* Jakarta: Rineka Cipta.
- Hameed, H., & Ali, H. (2022). The importance of the four English language skills: Reading, writing, speaking, and listening in teaching iraqi learners. *Humanitarian and Natural Sciences Journal*, 3(2). <https://doi.org/10.53796/hnsj3210>
- Uno, H.B. (2016). *Perencanaan Pembelajaran*. Jakarta: PT. Bumi Aksara.

- Hotimah, H. (2020). Penerapan Metode Pembelajaran *Problem Based Learning* Dalam Meningkatkan Kemampuan Bercerita Pada Siswa Sekolah Dasar. *Jurnal Edukasi*, Vol. 7, No. 3, 5-11.
- Parasamya, C.E., & Wahyuni, A. (2017). Upaya peningkatan hasil belajar fisika siswa melalui penerapan model pembelajaran problem based learning (PBL). *Jurnal Ilmiah Mahasiswa (JIM)*, 2(1), 42-49.
- Sugiyono. (2018). *Metode Penelitian Pendidikan: Pendekatan Kualitatif, Kuantitatif, dan R & D*. Bandung: Alfabeta.
- Suriyanti, S., & Yaacob, A. (2016). Exploring teacher strategies in teaching descriptive writing in indonesia. *Malaysian Journal of Learning and Instruction*, 13(2), 71-95. <https://doi.org/10.32890/mjli2016.13.2.3>
- Weigle, S. C. (2010). *Assessing writing*. Cambridge university press. <https://doi.org/https://doi.org/10.1017/CBO9780511732997>