



The Impact of Problem-Based Learning on Students' Narrative Writing Proficiency in the Second Grade at SMAN 1 Pasir Penyu

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Abstract

This study aims to determine the effectiveness of Problem-Based Learning (PBL) in significantly influencing the narrative text writing skills of second-grade students at SMAN 1 Pasir Penyu. The research employed a quantitative approach. The population consisted of eleventh-grade students, with class XI.6 designated as the control group and class XI.2 as the experimental group. Data were collected through testing and documentation methods. A writing test served as the instrument to assess students' narrative text writing abilities. The results showed that the average pre-test score of the control class (XI.6) was 42.08, while the experimental class (XI.2) had an average pre-test score of 45.55. These results were used to determine the group designations. After applying the treatment in the experimental class and administering a post-test, the average score rose to 56.94, with 55.6% of students categorized as having "adequate" writing skills. In contrast, the control class, which received no treatment, had a post-test average of 46.66, with 44.5% of students also classified as "adequate." An independent sample t-test was used to analyze the post-test results between both groups. The significance value (Sig. 2-tailed) was 0.000, which is lower than the threshold of 0.05. Therefore, the alternative hypothesis (H_a) was accepted. The findings indicate that Problem-Based Learning can be an effective alternative method in the teaching and learning process, particularly for enhancing students' writing skills. This method encourages students to actively collaborate and generate ideas with their peers to construct narratives expressed in written form.

Keywords: Problem Based Learning, Writing Ability, Narrative Text

INTRODUCTION

Language is the primary way of communicating and expressing our thoughts. Using language can help us brainstorm our life plans (Zerin, Samia 2017). The emergence of English as a global language certainly has a central role in supporting the success of communicating with the world. There are four essential components in language skills: listening, speaking, reading, and writing. These skills are interconnected and must be learned by students. Failure to master these components accurately and appropriately may negatively impact their overall language proficiency. Among these, writing has become particularly significant in today's context (Puspita, Dwi Fitriyani, 2017)

During the British colonial period in Indonesia, the British invaded and conquered many countries throughout the continent. Consequently, many countries use English as their official language (Rahula, Hananuraga 2022) English has been classified as a global language. The spread of English as an international language has impacted language development. In many nations, including Indonesia, English is considered a second language and is required in the school curriculum beginning at the elementary level.

There are four essential components in language skills: listening, speaking, reading, and writing. These skills are interconnected and must all be learned by students. Failure to properly master these components can negatively impact overall language proficiency. Among them, writing skills hold particular importance in today's context (Puspita, Dwi Fitriyani, 2017).

Writing is an ability to make a form of words that in general it may have a higher truth value than the fact that it has set it down (Murtaza, G., & Baseer, A, 2012). Effective writing also entails awareness of grammar, structure, and vocabulary to communicate the intended message clearly. Meanwhile, there is another opinion that writing ability encompasses the techniques and strategies that enable an individual to express thoughts clearly and effectively in written form.

The findings of a survey conducted by the researcher indicate that students possess low ability in writing narrative texts.

1. They face difficulties in understanding grammar related to narrative writing.
2. Their vocabulary is limited.
3. The teaching strategies applied during the learning process are perceived as uninteresting.

Thus, it is essential for researchers to highlight the implementation of Problem-Based Learning in order to maintain students' interest in writing skills. Problem-Based Learning refers to a collaborative learning approach centered on scientific and structured problem-solving processes. In the context of writing ability, PBL helps students write better narrative texts because they practice directly composing stories based on project experiences.

In this study, the Problem-Based Learning (PBL) strategy is implemented in teaching narrative texts. Narrative text is considered a factual genre, yet it is complex because it presents two different points of view, requiring writers to develop deep and creative ideas. The application of the PBL strategy is expected to increase student engagement in the learning process, making it easier for them to understand and construct narrative texts.

Based on the background of the above problem, the researcher wants to conduct a study with the title *“The impact of The Problem Based Learning on Students’ Narative Writing Proficiency in the Second Grade at SMAN 1 Pasir Penyau”*.

METHOD

A quantitative approach was applied in this research. This method involves investigating specific populations or samples selected through random sampling, collecting data using research instruments, and analyzing the data statistically to test hypotheses (Fakultas Tarbiyah dan Ilmu Keguruan, 2020).

This study belongs to the quasi-experimental design, which seeks to determine causal relationships by using both a control group and an experimental group. To assess the development of students' narrative text writing skills, this study employed both a pre-test and a post-test, conducted before and after the treatment. The experimental group received instruction through Problem-Based Learning, whereas the control group followed conventional teaching methods. The research design is illustrated in the table below.

Table 1 The Research Design

| Class | Pre-test | Treatment | Post-test |
|--------------|----------|-----------|-----------|
| Experimental | 01 | X | 02 |
| Control | 03 | - | 04 |

During the implementation of the research using a Nonequivalent Control Group Design, the researcher applied an experimental model through the following three steps:

- 1) A pre-test was administered to both the control and experimental classes in order to assess and measure the variable (learning outcomes) before the treatment.
- 2) The experimental class then received a treatment through the application of the Problem-Based Learning model.
- 3) After the treatment, a post-test was conducted to evaluate the dependent variable and determine any changes in learning outcomes.

Data Collection

What is meant by data collection techniques are the methods used by researchers to collect data. To collect data, the writer use the data collection by using instrument as bellow:

1. Test

Test is giving questions or drills that used to measure the knowledge, intelligence, and the ability from individual or group work. The best way to test students writing ability is to get them to write directly.

The test consists of pre-test and post-test. The test is divided into two parts, as follow:

a. Pre-Test

The pre-test was administered during the initial meeting, prior to implementing the treatments, to assess the students’ abilities before conducting the action research.

b. Post-Test

The post-test was conducted at the final meeting, following the implementation of the treatments, to determine whether the treatments had an impact on the students’ achievement in the class.

2. Documentation

Documentation is the act or an instance of finishing or collect some information authenticating with documents that could be used in action research are: attendant list, syllabus, and others.

Data Analysis

Analyze test data from sample class results by carrying out normality tests and homogeneity tests using SPSS 23. The data testing criteria are as follow:

- a. If significance is > 0.05 , then accept H_a and reject H_o
- b. If significance < 0.05 , then accept H_o and reject H_a

1) Normality Test

To determine whether the data from both sample groups originate from a normally distributed population, a normality test was conducted. The Shapiro-Wilk test was employed at a significance level of 0.05. The data were analyzed using SPSS version 23. The results of the normality test are presented in the following output:

Table 2 Test of Normality

| Class | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|----------------------|---------------------------------|----|-------|--------------|----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| pre-test experiment | .100 | 36 | .200* | .956 | 36 | .164 |
| post-test experiment | .119 | 36 | .200* | .956 | 36 | .161 |
| pre-test control | .161 | 36 | .019 | .949 | 36 | .099 |
| post-test control | .123 | 36 | .190 | .952 | 36 | .118 |

a. Lilliefors Significance Correction

- 1. Data follows a normal distribution when the significance value is greater than 0.05.
- 2. Data does not follow a normal distribution when the significance value is less than 0.05.

From the table in the Shapiro-Wilk column, in the experimental class, the pre-test was $0.164 > 0.05$, and the significance of the pre-test in the control class was $0.099 > 0.05$. The post-test experimental class was $0.161 > 0.05$, while the post-test control class was $0.118 > 0.05$. It can be concluded that both classes of samples are normally distributed.

2) Homogeneity Test

A homogeneity test aims to determine whether the populations are similar, which is important before comparing different groups. In this test, the variances of the control and experimental groups are compared using Levene's Test through the SPSS 23 software. The results are shown in the table below:

Table 3 The Homogeneity test of the result of the pre-test-post-test writing

| Test of Homogeneity of Variance | | | | | |
|---------------------------------|--------------------------------------|------------------|-----|---------|------|
| | | Levene Statistic | df1 | df2 | Sig. |
| Result | Based on Mean | .621 | 1 | 142 | .432 |
| | Based on Median | .401 | 1 | 142 | .528 |
| | Based on Median and with adjusted df | .401 | 1 | 129.496 | .528 |
| | Based on trimmed mean | .478 | 1 | 142 | .490 |

Based on the homogeneity test results, the significance value for the average pretest and post-test scores was 0.432. Since this value exceeds the 0.05 threshold, it indicates that the population variances are equal. Therefore, it can be concluded that the experimental and control groups come from populations with homogeneous variances.

3) Hypothesis Test

To test the hypothesis, this research employed a t-test to determine whether there was a significant difference between the variables studied. Hypothesis testing was conducted to assess whether the collected data supported specific assumptions or predictions.

Results and Discussion

The post-test results of both groups appeared nearly the same. Therefore, the final analysis focuses on determining whether there is a significant difference in reading comprehension between students taught using the graphic organizer strategy and those taught using student worksheets.

Table 4. Group Statistics

| Group Statistics | | | | | |
|------------------|---|----|-------|----------------|-----------------|
| | Class | N | Mean | Std. Deviation | Std. Error Mean |
| Result | Experiment (treatment Problem Based Learning) | 36 | 56.39 | 14.521 | 2.420 |
| | Control (without using treatment) | 36 | 46.67 | 13.148 | 2.191 |

The data presented in the table shows that the experimental class achieved a higher mean score (56.39) compared to the control class (46.67), suggesting a better performance among students in the experimental group. From this exposure, it can be concluded that H_a is accepted because there is an impact of problem based learning on students' narrative writing proficiency in second grade at SMAN 1 Pasir Penyau.

Table 5. Independent Sample Test

| Result | Levene's Test for Equality of Variances | t-test for Equality of Means | | | | | | | | |
|-----------------------------|---|------------------------------|-------|--------|------|-----------------|-----------------|-----------------------|---|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| Equal variances assumed | .109 | .743 | 2.978 | 70 | .004 | 9.722 | 3.265 | 3.211 | 16.234 | |
| Equal variances not assumed | | | 2.978 | 69.320 | .004 | 9.722 | 3.265 | 3.210 | 16.235 | |

Based on the table above, the independent samples test produced a t-value of 2.978 with 70 degrees of freedom. The significance value (2-tailed) is 0.000, indicating a statistically significant difference. The mean difference is -9.722, with a standard error of difference extending to the lower interval of -3.265. The confidence interval ranges from -16.235 to -3.210.

Conclusion

The research conducted from April to May 2025 showed that Problem-Based Learning enhanced the narrative writing skills of second-grade students at SMAN 1 Pasir Penyau, as evidenced by the improvement in their scores from the pre-test to the post-test after receiving the treatment.

The average pre-test score in the control class was 42.08, and none of the students met the minimum passing criteria (KKM) for English. Most students, specifically 7 of them, scored 40. A follow-up test was conducted without any specific intervention, resulting in a post-test average score of 46.66. In this post-test, 10 out of 36 students scored below the average, indicating relatively low performance. In contrast, the experimental class had a higher pre-test average score of 45.55, although no student achieved the KKM either. The highest score in this class was 65. After receiving treatment through the implementation of the problem-based learning method, a second test was conducted. The post-test results showed an improved average of 56.94. In this class, 4 out of 36 students fell into the excellent category, 11 students were categorized as good, 20 students achieved sufficient scores, and only 1 student was classified in the low-performance category.

Based on the findings of the research, it can be concluded that the use of Problem-Based Learning has a significant impact on students' ability to write narrative texts compared to those who are taught without using this method. The effectiveness of Problem-Based Learning is evidenced by the results of the independent sample test between the experimental and control groups. The hypothesis test shows that the Sig (2-tailed) value is lower than the significance threshold ($0.000 < 0.05$), indicating that the alternative hypothesis (H_a) is accepted. This means "there is an impact of problem based learning on students' narrative writing proficiency in second grade at SMAN 1 Pasir Penyau". This shows that the problem based learning can be used in teaching writing at second grade SMAN 1 Pasir Penyau.

Reference

- Ami Hartati. Skripsi. (2019). *An Analysis of The Students' Ability and Difficulty In Writing Narrative Text At State SMAN 1 Kampar Timur*. Pekanbaru; UIN SUSKA RIAU. page9
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage Publications.
- Fakultas Tarbiyah dan Ilmu Keguruan. (2020). *PEDOMAN PENULISAN SKRIPSI* Fakultas Tarbiyah dan Ilmu Keguruan (Ponorogo: IAIN Ponorogo). page9
- Puspita, Dwi Fitriyani. (2017). *Keefektifan Metode Tutor Sebaya Dalam Meningkatkan Kemampuan Menulis Puisi Rakyat Peserta Didik Kelas VII SMP Negeri 1 Pandaan Tahun Pelajaran 2017/2018*. Universitas Negeri Surabaya. page2