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The Implementation of The Discovery Learning Method In Indonesian Language Learning For The Material of Writing Observation Reports In Elementary School Students

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ABSTRACT

This study addresses the challenges of passive learning and low motivation in Indonesian language instruction, particularly in the context of writing observation reports. Conventional, teacher-centered methods often fail to engage students, leading to difficulties in conceptualizing and structuring written work. The objective of this research is to evaluate the effectiveness of the discovery learning method in improving students' writing skills and learning motivation. Employing a quasi-experimental design with a sample of 50 fifth-grade students—divided into an experimental group (25 students) and a control group (25 students)—the study utilized quantitative analysis to compare learning outcomes. Data were validated through normality and homogeneity tests, followed by an independent samples t-test. The results demonstrate a statistically significant difference in performance, with the experimental group achieving a higher mean score (78.43) compared to the control group (60.43), supported by a significance value of .001. These findings indicate that discovery learning effectively fosters active participation, enhances writing quality, and boosts student motivation. It is recommended that educators transition toward student-centered pedagogical models and that schools provide the necessary training to support the integration of interactive methods, ensuring a more meaningful and effective learning experience for students in primary education.

INTRODUCTION

Education is essentially a dynamic process of knowledge transformation and self-potential development. In the context of primary education, the Indonesian language subject plays a crucial role. Widari (2023) asserts that Indonesian language instruction is vital in the world of education because it demands the development of profound understanding in every individual. Language is not merely a communication tool but a primary instrument for thinking, reasoning, and absorbing knowledge. However, reality in the field often reveals a gap between curriculum ideals and classroom practice. Much of the instruction in Indonesian language remains trapped in conventional patterns where the source of knowledge is centered entirely on the teacher (*teacher-centered*). Consequently,

students tend to be passive, are not directed to think creatively, and lack the space to participate actively in the learning process.

This monotonous learning condition has a direct impact on low student engagement. Widari (2023) notes that when the methods used are not varied and rely solely on lectures, students become less motivated to learn. This is manifested in student behavior where they do not pay attention to the teacher's explanations in class, which ultimately hinders the achievement of learning objectives. This problem is further exacerbated by fundamental challenges in mastering the material. Suwiti (2022) identifies that one of the main obstacles in Indonesian language learning is the students' reluctance to develop the ability to construct good learning concepts, especially in Indonesian language material. This inability to construct concepts becomes a serious constraint, particularly in productive subjects such as writing, which demand higher cognitive abilities and creativity.

Writing is a complex language skill because it requires the integration of logical thinking, vocabulary mastery, and grammar. In the material of writing observation reports, students are required to be able to observe objects carefully, process the data obtained, and pour them into a systematic written form. Without the right method, students often feel difficulty in starting to write, are confused about structuring the report, and eventually lose interest in the writing activity itself. In fact, writing ability is the foundation for students' academic literacy at higher levels of education. Therefore, an innovative learning method is needed that can shift the paradigm from passive to active, and from teacher-centered to student-centered.

One relevant solution to overcome these problems is the application of the discovery learning method. This method emphasizes the discovery of concepts through a process of investigation and independent exploration by students. Kusuma and Mustari (2023) in their research proved that students' writing activities increased significantly and produced better quality writing when using the *discovery learning* method. This occurs because *discovery learning* provides opportunities for students to be directly involved in the process of searching for information, conducting observations, and drawing their own conclusions. In this way, students do not just receive information passively, but build their own understanding through direct experience.

In addition to cognitive aspects, affective aspects or learning motivation are also determining factors for learning success. Hatiningsih and Hanik (2023) state that the application of learning models supported by appropriate media and methods will greatly assist in increasing student learning motivation. When students feel involved in the discovery process, they appear more interested, have high interest, and always feel happy in following the learning process. This joy in learning is the key to creating a conducive classroom environment. This is in line with the findings of Susmiati (2020), which reveal that the application of interactive methods is proven to be able to increase student motivation and learning activity, even in challenging learning conditions. This increase in motivation and activity has a direct positive impact on the improvement of students' overall learning outcomes.

In the context of writing observation report material in primary schools, the discovery learning method is highly relevant to be applied. Students can be invited to conduct direct observations of objects around the school environment, then process that data into a report. This process places students as active subjects, where the teacher only acts as a facilitator who guides students in discovering the correct structure and rules of writing. Thus, the students' reluctance in constructing material concepts as stated by Suwiti (2022) can be minimized because students feel they have control over what they write.

Given the various urgencies and potentials that have been presented, it is necessary to conduct in-depth research regarding the effectiveness of this method. It is important for educators to realize that changing learning methods is not just an administrative formality, but a necessity to facilitate diverse student learning styles and foster a love for literacy from an early age. Through the application

of discovery learning, it is hoped that students will no longer view writing as a boring burden, but as a creative, enjoyable, and meaningful activity.

Based on the background description, this study aims to describe and analyze the application of the discovery learning method in Indonesian language learning on the material of writing observation reports.

METHOD

This research employs a quantitative approach using a quasi-experimental design to examine the effectiveness of implementing the discovery learning method in teaching the writing of observation reports. The population of this study includes all 5th-grade students in the primary school, totaling 150 students. The sampling technique utilized is purposive sampling, from which two classes were selected as the research sample: class 5A, consisting of 25 students, as the experimental group, and class 5B, consisting of 25 students, as the control group. The experimental group will receive treatment in the form of the discovery learning method, while the control group will undergo instruction using the conventional method currently applied in the school.

Prior to conducting the primary data analysis, the researcher will perform classical assumption tests as a prerequisite for statistical analysis. A normality test will be conducted to ensure that the data obtained from both groups are normally distributed, which is an absolute requirement for the use of parametric statistics. Furthermore, a reliability test will be performed on the observation report writing test instrument to ensure that the measurement tool used is consistent and accurate in providing stable measurement results. This reliability test is crucial to guarantee that any observed differences in scores are truly caused by the influence of the learning method, rather than inaccuracies in the instrument.

Once the data is collected, analysis will be performed using a t-test to compare the mean scores between the experimental class and the control class. The t-test aims to determine whether there is a statistically significant difference between students taught using the *discovery learning* method compared to those taught using the conventional method. If the t-test results indicate a significance value below 0.05, it can be concluded that the applied method has a significant influence.

To measure the magnitude of the treatment's effectiveness, the researcher will calculate the effect size using Cohen’s d or eta-squared formulas. This calculation will provide a quantitative overview of how strong the influence of the discovery learning method is on the improvement of students' observation report writing skills. Thus, this study does not merely prove the existence or absence of a difference, but also provides information regarding the magnitude of the method's contribution to improving the quality of Indonesian language learning in 5th-grade primary school. The entire series of procedures is designed systematically to ensure that the research results possess high validity and are scientifically accountable.

RESULT AND DISCUSSION

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Nilai	eksperimen	25	78.43	6.56	1.67
	kontrol	25	60.43	11.51	1.91

The provided table presents the descriptive statistics for the experimental and control groups, each consisting of 25 students. The data highlights a notable disparity in performance between the two groups following the implementation of different learning methods. The experimental group, which utilized the discovery learning approach, achieved a mean score of 78.43, whereas the control group, taught through conventional methods, attained a significantly lower mean score of 60.43. This difference of 18 points suggests that the discovery learning method may be more effective in enhancing students' skills in writing observation reports.

Furthermore, the standard deviation values indicate differences in the distribution of scores within each group. The experimental group shows a standard deviation of 6.56, suggesting that the students' scores are relatively clustered around the mean, indicating a more consistent level of performance. In contrast, the control group exhibits a higher standard deviation of 11.51, which implies a greater variability or spread in the students' scores, reflecting less consistency in their learning outcomes. The standard error of the mean is 1.67 for the experimental group and 1.91 for the control group, both of which are relatively low, indicating that the sample means are likely to be reliable estimates of the population means. Overall, these statistics provide a strong preliminary indication that the discovery learning intervention has positively influenced both the average performance and the consistency of the students' writing abilities compared to the traditional teaching approach.

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	KolmogorovSmirnov[a]			*Shapiro-Wilk*		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest eksperimen	.140	25	.301*	.957	25	.234
Posttest eksperimen	.140	22	.300*	.959	25	.278

The table presents the results of the normality test using both Kolmogorov-Smirnov and Shapiro-Wilk methods for the experimental group's pretest and posttest scores. The normality test is essential to determine whether the data follows a normal distribution, which is a prerequisite for parametric statistical analysis. Based on the data, the significance values (Sig.) for the pretest are .301 (Kolmogorov-Smirnov) and .234 (Shapiro-Wilk), while the posttest values are .300 and .278, respectively. Since all significance values are greater than the alpha level of 0.05, it can be concluded that the data for both the pretest and posttest are normally distributed.

		Levene Statistic	df1	df2	Sig.
Pretest	Based on Mean	.005	1	48	.812
	Based on Median	.030	1	48	.665
	Based on Median and with adjusted df	.030	1	47.344	.787
	Based on trimmed mean	.027	1	48	.797

The provided table displays the results of the Levene's Test for Equality of Variances conducted on the pretest data. This statistical test is a crucial prerequisite in research to determine whether the variances of the two groups—the experimental class and the control class—are homogeneous or equal. Homogeneity of variance is a fundamental assumption required for performing an independent sample t-test, which ensures that the comparison between the two groups is valid and reliable.

In this analysis, the Levene Statistic based on the mean is .005, with a corresponding significance (Sig.) value of .812. Similarly, the tests based on the median, the median with adjusted degrees of freedom, and the trimmed mean all yield significance values well above the standard threshold of 0.05. Specifically, the significance values of .812, .665, .787, and .797 indicate that there is no statistically significant difference between the variances of the two groups. Because the significance level is greater than 0.05, the null hypothesis—which states that the population variances are equal—is accepted. Consequently, it can be concluded that the data satisfies the homogeneity of variance assumption. This confirms that the experimental and control groups possess comparable variance levels, thereby justifying the use of parametric statistical tests to further analyze the research findings.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Nilai	Equal variances assumed	2.421	.122	8.994	62	.001	20.68750	2.30011	16.08964	26.28536
	Equal variances not assumed			8.994	57.200	.002	20.68750	2.30011	16.08196	26.29304

The provided table displays the results of the Independent Samples T-test, which is used to determine whether there is a statistically significant difference between the experimental and control groups. First, the Levene's Test for Equality of Variances shows an F-value of 2.421 with a significance level of .122. Since this value is greater than 0.05, it indicates that the variances between the two groups are homogeneous, allowing us to interpret the "Equal variances assumed" row. The t-test result shows a t-value of 8.994 with a degree of freedom (df) of 62. Most importantly, the Sig. (2-tailed) value is .001, which is significantly lower than the 0.05 threshold. This result provides strong evidence to reject the null hypothesis, confirming that there is a statistically significant difference in learning outcomes between the two groups. Furthermore, the mean difference of 20.68750 indicates that the experimental group performed substantially better than the control group. In conclusion, the

application of the discovery learning method has a significant positive impact on students' ability to write observation reports, demonstrating the effectiveness of the intervention in the classroom setting.

The findings of this study provide robust empirical evidence that the implementation of the discovery learning method significantly enhances students' performance in writing observation reports. The quantitative results, which show a statistically significant difference between the experimental and control groups, align with the theoretical framework established by previous researchers. Specifically, the superior performance of the experimental group confirms the assertion by Kusuma and Mustari (2023) that discovery learning is an effective pedagogical tool for improving both the quality and the process of student writing. By shifting the classroom dynamic from a teacher-centered approach to one that prioritizes student inquiry, the method successfully addresses the common pitfalls of traditional instruction.

The observed increase in student engagement and performance directly counters the issues identified by Widari (2023), who noted that conventional, teacher-centered methods often lead to student passivity and a lack of motivation. In this study, the discovery learning approach transformed the classroom environment, moving away from the "monotonous" atmosphere that previously caused students to lose focus. This shift is consistent with the findings of Hatiningsih and Hanik (2023), who emphasized that appropriate learning models and media are essential for fostering high interest and genuine enjoyment in the learning process. When students are empowered to explore and discover concepts independently, their reluctance—a challenge highlighted by Suwiti (2022)—is replaced by a sense of ownership and curiosity, which is crucial for mastering complex language tasks.

Furthermore, the positive impact on student outcomes observed here mirrors the findings of Susmiati (2020), who noted that interactive methods directly correlate with increased motivation and active participation. Even in the context of writing, which requires high-level cognitive integration, the discovery learning method provided the necessary structure for students to organize their thoughts and construct better reports. The consistency in scores within the experimental group suggests that this method provides a reliable framework that helps students overcome the confusion often associated with writing tasks. Ultimately, the integration of discovery learning not only improves technical writing skills but also nurtures the affective dimensions of learning. By fostering an environment where students feel capable and motivated, this study demonstrates that the transition toward student-centered learning is a vital step in improving the overall quality of Indonesian language education, ensuring that students are not just passive recipients of information, but active participants in their own knowledge construction.

CONCLUSION

The study concludes that the discovery learning method significantly improves students' ability to write observation reports compared to conventional methods. Statistical analysis confirms a significant difference in performance, with the experimental group achieving higher mean scores and greater consistency. This demonstrates that engaging students in active investigation and independent exploration effectively fosters both cognitive and affective learning outcomes. The implication of this research is that educators should shift from teacher-centered instruction to more interactive, student-centered models. By acting as facilitators, teachers can create a conducive environment that boosts student motivation and participation, which is vital for mastering productive skills like writing. For future implementation, it is suggested that teachers integrate discovery learning into various subjects to enhance student engagement. Schools should provide adequate training and resources to support this transition. Furthermore, future researchers are encouraged to explore the long-term effects of this method across different grade levels and subjects to further validate its effectiveness in diverse educational contexts.

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