



Improve Students' Description Text Writing Skills using Higher Order Thinking Ability-Based Learning

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Abstract

Students' limited descriptive writing skills can hinder their ability to express ideas clearly, expand their vocabulary, and develop their imagination. This, in turn, may restrict their communication skills when conveying experiences or concepts in a detailed and structured manner. This study seeks to examine the impact of higher-order thinking skills-based learning on students' descriptive writing abilities in the context of Indonesian language education, potentially offering valuable insights into effective learning strategies. The research employed a quasi-nonequivalent control group experimental design, dividing junior high school students into two balanced groups. The experimental group, consisting of 35 students, utilised higher-order thinking Ability Based Learning, while the control group, also comprising 35 students, did not. The study encompassed the entire population of seventh-grade students, totalling 70 individuals. Data collection involved observation, tests, and documentation, with analysis conducted using Descriptive Statistics and Inferential Statistics via the SPSS application. The findings indicate a significant positive impact of higher-order thinking skill-based learning. Students who

engaged in this approach demonstrated substantial improvement in their descriptive writing skills, enhancing their capacity to critically analyse information, think creatively, and solve problems.

Keywords: *description text writing skills; higher order thinking ability; Indonesian language learning*

Introduction

In this age of technology and information, the ability to write descriptive text is essential for junior high school students (Porat et al., 2018; Sutarman et al., 2019). This skill is not just ordinary; it unlocks profound expressiveness and boundless creativity. In a world filled with text and digital content, proficient descriptive writers can effectively communicate their ideas, drawing readers into the worlds they create (Widaningsih, 2019). Moreover, descriptive writing teaches students to understand the power of words, select the right expressions, and craft compelling sentences. With these skills, students are not just passive consumers of information but also capable of inspiring and moving others with their written works (Rusyan et al., 2020). As we prepare for a future of technological advancements, descriptive writing skills are an indispensable foundation for student progress in the 21st century.

Moreover, the capacity to craft vivid narratives provides students with the chance to delve into a broader sphere (Arief & Wiratman, 2023). Through this proficiency, they can articulate a myriad of experiences, broaden their perspectives, and gain insight into diverse cultures and realities. Beyond the mere transmission of information, descriptive writing establishes a groundwork for students to comprehend others' viewpoints, foster empathy, and establish cross-cultural ties, which are vital in today's globalised world (Sun, 2023). Clearly, the skill of composing descriptive texts for middle school students in the 21st century represents not only a skill but also a force capable of effecting change on a global scale. Equipped with this ability, they will evolve into not only adept writers but also innovative thinkers, inspirational leaders, and influential agents of change in the future. Hence, education that fortifies and refines descriptive writing skills is imperative, given its pivotal role in shaping the upcoming generation and preparing them to confront the challenges of evolving times.

Observations at SMP YP PGRI 2 Makassar reveal that students struggle with creating mind maps and developing them into descriptive essays due to difficulties expressing ideas in writing with the appropriate style and language. Challenges include determining the initial idea, lack of imagination, and obstacles in writing. To produce quality essays, students need strong thinking ability, imagination, and writing skills. Teachers and homeroom teachers also recognise that students' ability to create mind maps and develop them into essays is below average. This is

attributed to the use of conventional teaching methods without incorporating appropriate or up-to-date approaches, models, or techniques. The lack of methods that promote higher-order thinking skills results in low student motivation and participation, leading to passive learning. The teacher's role in the success of learning cannot be ignored, as they play a direct role in the learning process.

When faced with a less diverse learning environment, students often experience boredom and a sense of saturation (Paasonen, 2021). They yearn for educational experiences that challenge and ignite their curiosity. Each day in class, they sense a void, like an unsolved puzzle. While the presented material may hold significance, the monotony of its delivery at times prevents them from delving into their thoughts. They seek more than mere passive listening; they long to engage, to truly experience the essence of learning that ignites their enthusiasm. The aspiration to actively participate in the learning process is not always easy to achieve when restricted by methods that do not fully support the cultivation of their potential and intelligence.

The use of higher-order thinking-based Learning could be a promising solution, allowing students to surpass traditional learning boundaries. This method encourages students not only to memorise facts, but also to analyse, evaluate, and gain a deeper understanding of the material being studied (Damaianti et al., 2020; Saido et al., 2018). In such a learning environment, students are urged to think critically, solve complex problems, and develop skills that are beneficial not only in the classroom but also in their daily lives. By enabling students to take an active role in the learning process, higher-thinking Based Learning can offer a more meaningful and challenging learning experience. This not only aids in the development of writing skills, but also establishes a strong foundation for enhancing imagination, thinking power, and critical thinking skills necessary for their future (Sukmawati & Rakhmawati, 2023).

Several studies have confirmed the effectiveness of higher-order thinking Ability-Based Learning in enhancing learning quality (Budiarta et al., 2018; Harianja & Anwar, 2021; Kurnia et al., 2022; Untari et al., 2018; Wahyuni et al., 2021). These studies demonstrate that the use of this method not only enhances concept comprehension, but also broadens students' capacity to connect information, analyse different perspectives, and foster creative and innovative thinking. Some research indicates that students who participated in higher-order thinking Skills-Based Learning exhibited improved writing skills, were able to structure their ideas coherently, and felt more confident in expressing their thoughts (Mailani, 2018). These findings lay a solid foundation for an educational approach that prioritises the development of higher-order thinking skills in order to enhance the quality of teaching and learning. With this empirical evidence, the adoption of more progressive and relevant learning strategies in the realm of educational advancement becomes increasingly imperative.

The uniqueness of this study is its comprehensive approach, which not only helps students master the subject matter but also encourages them to enhance

their understanding through active engagement in critical thinking. This study introduces innovation by integrating various elements, including in-depth analysis, synthesis of information, critical evaluation, and the development of deep understanding. In comparison to previous research that may have focused more on knowledge transfer, this learning method emphasises students' active and dynamic thinking process. Therefore, this study not only enhances students' comprehension of the material but also shifts the learning paradigm from passive to proactive and in-depth, preparing students to further explore concepts and apply knowledge in various real-life situations. This novelty reinforces the importance of learning methods that not only teach what to think but also how to think effectively.

This study examines how implementing higher-order thinking Ability-Based Learning enhances students' descriptive text-writing skills. Focusing on developing higher-order thinking skills, the study investigates how this learning approach can impact students' capacity to produce more detailed and organised descriptive texts. By promoting critical thinking, information evaluation, and deeper understanding, the study aims to reveal the potential of this learning method in improving students' descriptive text-writing skills.

Method

This research utilised a quasi-nonequivalent control group experimental design to divide junior high school students into two balanced groups. The experimental group, consisting of 35 students, implemented higher-order thinking Ability Based Learning, while the control group of the same size did not use similar methods. The study population comprised all seventh-grade students of SMP YP PGRI 2 Makassar, totalling 70 individuals, who were then utilised as the entire sample. Data collection involved observation, testing, and documentation techniques, with data analysis performed using Descriptive Statistics and Inferential Statistics via the SPSS application. The research hypotheses included H₀, stating that there was no effect of higher-order thinking Ability-Based Learning on students' ability to write description text in Indonesian language learning, and H₁, stating that there was an effect of the learning method. By delving into the effects of Higher Order Thinking Ability-Based Learning on students' Descriptive Text Writing Skills, this study has the potential to significantly contribute to the understanding of effective learning methods.

Results

Descriptive Statistics

This study examines the impact of integrating higher-order thinking skills-based learning on enhancing students' descriptive text writing abilities. Seventy junior high school students participated, divided into two groups: 35 in the experimental group and 35 in the control group. Students' descriptive text writing

skills were assessed in two sessions: pretest and posttest. The results of the pretest and posttest are presented in Table 1.

Table 1. Descriptive Statistics of Pretest Data

Class	N	Min	Max	Sum	Mean	Std. Error of Mean	Std. Deviation
Experiment Pretest	35	65	80	2575	73.57	.763	4.513
Experiment Posttest	35	75	100	3090	88.29	1.307	7.733
Control Pretest	35	65	84	2563	73.23	.832	4.923
Control Posttest	35	75	80	2647	75.63	.522	3.088
Valid N (listwise)	35						

In Table 1, the average pretest score for the experimental class was 73.57, and for the control class, it was 73.23, both based on a sample of 35 students. The standard error for the experimental class was 0.763, and the standard deviation was 4.513 for the experimental class and 4.923 for the control class. The minimum pretest score for both classes was 65, and the maximum was 80 for the experimental class and 84 for the control class. The total pretest score for the experimental class was 2575, and for the control class, it was 2563. Moving on to the posttest, Table 1 indicates that the average score for the experimental class was 88.29, and for the control class, it was 75.63, still based on a sample of 35 students. The standard error for the experimental class was 1.307, and for the control class, it was 0.522. In the experimental class posttest, the minimum score was 75, and the maximum was 100. For the control class posttest, the minimum score was 71, and the maximum was 80. The total posttest score for the experimental class was 3090, and for the control class, it was 2647.

A comparison of the pretest and posttest scores of both groups revealed a significant improvement in student performance following the intervention. The experimental group demonstrated a higher average improvement compared to the control group, indicating the effectiveness of the intervention in enhancing their post-test results.

Normality test results

Prior to performing the independent sample t-test in hypothesis testing, the initial step involves conducting a data normality test and data homogeneity test. The normality test is used to determine if the data utilised in the study follows a normal distribution. On the other hand, the homogeneity test is conducted to ensure that the variance of each data group is similar. By carrying out these two tests, researchers can verify that the necessary assumptions for conducting an independent sample t-test are satisfied, thereby ensuring the reliability and accuracy of the results of the statistical analysis. This process is a crucial step in validating the use of the independent sample t-test for testing significant differences between two distinct data groups. The results of the normality test are

presented in Table 2.

Table 2. Normality test results

	Class	Kolmogorov-Smirnova ^a			Shapiro-Wilk		
		Statistics	Df	Itself.	Statistic	Df	Itself.
Result	Experiment Pretest	35	65	80	2575	73.57	.763
	Experiment Posttest	35	75	100	3090	88.29	1.307
	Control Pretest	35	65	84	2563	73.23	.832
	Control Posttest	35	75	80	2647	75.63	.522

*.This is the lower bound of the true significance.

a. Lilliefors Significance Correction

The results of the normality test using the Kolmogorov-Smirnov method show that the significance value for the pretest and posttest in the experimental class is $\alpha=0.2$, which means $\alpha=0.2 > 0.05$. Likewise, the significance value for the pretest and posttest in the control class also got $\alpha=0.2$, with $\alpha=0.2 > 0.05$. From these results, it can be concluded that the data used in this study can be categorised as normally distributed data. Success in fulfilling this normal distribution assumption is important because it validates the use of certain statistical tests that require normally distributed data so that the results of the analysis can be relied upon in objectively and accurately testing differences between the two data groups.

Homogeneity test results

The homogeneity test was conducted to evaluate whether the variance of the data between the experimental and control classes was homogeneous or heterogeneous. The homogeneity test process in this study used SPSS software with an error level of $\alpha = 0.05$. The rules for evaluating the results of the homogeneity test are based on the resulting α value: If the value of $\alpha > 0.05$, it can be concluded that the data shows a homogeneous nature, meaning that the variance between the two groups of data is relatively similar. However, if the α value is < 0.05 , this indicates a significant difference in the variance between the two groups of data, which means that the data is heterogeneous. This evaluation is essential to ensure that the two groups of data have relatively similar variances before performing statistical tests that require the assumption of homogeneity of variance, such as the t-test, to compare the two groups fairly and accurately. The results of the homogeneity test can be seen in Table 3.

Table 3. Homogeneity test results

		Levene Statistic	df1	df2	Sig.
Result	Based on Mean	.409	1	68	.525

Based on Median	.317	1	68	.575
Based on Median and with adjusted df	.317	1	67.062	.575
Based on trimmed mean	.414	1	68	.522

In Table 3, the significance value (Sig) Based on the Mean shows a value of $\alpha = 0.525$, more significant than the error level set, which is 0.05. Thus, the conclusion can be drawn is that the variance between the experimental and control classes shows similarity or homogeneity. These results confirm that the difference in variance between the two data groups is not statistically significant. This means that the data from both groups have relatively similar variations, fulfilling the assumption of homogeneity of variance required to perform specific statistical analyses, such as the t-test, more accurately and reliably. This is important because the assumption of homogeneity of variance is necessary to ensure that the results of the statistical analysis used provide more precise and objective conclusions regarding the comparison between the two groups of data.

Hypothesis test results

Based on the results of the normality test and homogeneity test of the data on students' descriptive text writing skills in the control class and experimental class, it was found that both groups showed a normal and homogeneous distribution of data. This condition is essential because these assumptions must be met before conducting statistical tests requiring normal distribution and variance homogeneity. The hypothesis was then tested using the Independent Samples Test t-test. If the Significance value (Sig.) is less than 0.05, then H0 is accepted, while H1 is rejected. Conversely, if the Sig. If the value is more significant than 0.05, then H0 is rejected, and H1 is accepted. Analysis of the hypothesis test results can be found in Table 4, which describes the decision regarding the acceptance or rejection of the previously formulated research hypothesis.

Table 4. Independent Samples Test

		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
Result	Equal variances assumed	31.346	.000	9.313	68	.000	13.057	1.402	10.259	15.855

Equal variances not assumed	9.313	44.013	.000	13.057	1.402	10.231	15.883
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Table 4 shows that the significance value $\alpha=0.00$, which is smaller than the set error rate of 0.05. Based on the decision-making criteria in hypothesis testing, it can be concluded that H0 is rejected and H1 is accepted. This conclusion indicates that there is a significant difference between the average students' descriptive text writing skills between the experimental class and the control class. This result indicates that the intervention or learning method applied to the experimental class significantly improves students' descriptive text writing skills compared to the method applied to the control class. This information provides a deeper understanding of a particular learning method's effectiveness in improving students' descriptive text-writing skills.

Discussion

Descriptive text writing skills for students play an important role in developing their communication skills. By mastering this skill, students can expand their vocabulary, exercise their imagination, and improve their ability to convey ideas and experiences clearly. Writing descriptive text allows students to learn to construct sentences more regularly, use a variety of language structures, and pay attention to essential details in presenting an object, place, or experience. This ability not only helps students in language lessons, but also supports the development of analytical skills, and observations, and enhances creativity in conveying ideas. Thus, descriptive text writing skills become an essential foundation in shaping effective and intelligent communicators for students in the future.

The research was conducted at SMP YG PGRI 2 Makassar on seventh-grade students involving 70 students, divided into 35 experimental students and 35 control students. This study examined the skill of writing description text in Indonesian language learning. The pretest results showed low scores in the experimental (54.3%) and control (54.2%) classes. Before the treatment, the ability to write description text of the experimental class was low. The experimental learning method adopted higher-order thinking skills, while the control class used the lecture and question-and-answer method. Students' activities increased, especially in the experimental class during the treatment. The posttest results showed an increase in experimental class scores to 100% achieving the criteria for achieving learning objectives (KKTP), while the control reached 65.7%. This indicates a significant improvement in description writing ability after the treatment. Higher-order thinking skills-based learning improved students' description text writing skills. The learning process that involves repetition of material from the teacher, student discussion, presentation of concept maps, and

additional review of material helps students' understanding.

Several relevant studies have corroborated the findings on the effect of higher-order thinking skills learning on students' description text writing skills. Sarasawati's study shows that high-level thinking skills-based learning can improve students' ability to examine information critically and creatively and solve problems. Several relevant studies have corroborated the findings on the effect of higher-order thinking skills learning on students' description text writing skills. Sarasawati's study shows that high-level thinking skills-based learning can improve students' ability to examine information critically and creatively and solve problems (Saraswati & Agustika, 2020), which is in line with the findings of previous research. Likewise, Lestar's research confirms that learning that encourages students to not only remember but also manipulate information and ideas, significantly improves their ability to write description texts (Lestari, 2018). These similar research results provide a strong foundation and support the findings revealed in previous studies, which show that learning approaches that encourage higher-order thinking skills play an essential role in improving students' description text writing skills (Mirnawati & Firman, 2019; Pardede et al., 2020; Yuniarti, 2021). These studies confirm that learning that focuses on the analytical, critical and creative aspects of thinking skills significantly improves students' description text writing skills. These findings underline the importance of broadening the approach to learning in the classroom beyond simply conveying information and encouraging students to process, analyse and apply their knowledge in deeper and more meaningful ways. The consistency of findings from these studies strengthens the validity and relevance of the findings presented in the previous research and confirms that learning approaches that promote higher-order thinking skills play a vital role in improving students' descriptive writing, which is in line with the findings of previous research. Likewise, Lestar's research confirms that learning that encourages students to not only remember but also manipulate information and ideas, significantly improves their ability to write description texts (Lestari, 2018). These similar research results provide a strong foundation and support the findings revealed in previous studies, which show that learning approaches that encourage higher-order thinking skills play an essential role in improving students' description text writing skills (Mirnawati & Firman, 2019; Pardede et al., 2020; Yuniarti, 2021). These studies confirm that learning that focuses on the analytical, critical and creative aspects of thinking skills significantly improves students' description text writing skills. These findings underline the importance of broadening the approach to learning in the classroom beyond simply conveying information and encouraging students to process, analyse and apply their knowledge in deeper and more meaningful ways. The consistency of findings from these studies strengthens the validity and relevance of the findings presented in the previous research and confirms that learning approaches that promote higher-order thinking skills play a vital role in improving students' descriptive writing.

There are several theories that support the findings on the effect of higher-order thinking skills learning on students' description text writing skills. One of them is the Constructivism Learning Theory proposed by Piaget. This theory emphasises that students construct their own knowledge through active mental processes, rather than simply receiving information from outside (Piaget, 1964). By introducing learning that encourages higher-order thinking skills, such as analysis, synthesis and evaluation, Piaget believed that students would be better able to understand and apply knowledge, including in writing description texts. In addition, Vygotsky's Collaborative Learning Theory also provides support by emphasising the importance of social interaction in learning. Through collaboration with teachers and peers in understanding, interpreting, and presenting materials, students will be better able to develop descriptive writing skills more deeply and contextually (Vygotsky, 2019). By linking the research findings with these theoretical underpinnings, it can be confirmed that learning approaches that prioritise higher-order thinking skills have a strong correlation in enriching students' description text writing skills.

In addition, Vygotsky's Proximal Zone Theory also provides a strong foundation. This theory highlights the importance of the zone of actual development where students can perform tasks with assistance, as well as the zone of potential actual development where students can perform tasks with minimal assistance (Bruner, 1984). In the context of learning higher-order thinking skills, teachers can help students expand their zone of actual development by providing appropriate guidance, stimulus and assistance. By utilising the potential zone of actual development, students can develop their description text writing ability gradually, along with guidance from teachers and planned interactions with peers. Thus, this theory supports the finding that learning that emphasises higher-order thinking skills can expand students' ability to write descriptive texts, along with the development of their cognitive potential.

With the foundations of these theories, it can be concluded that the application of learning that integrates the principles of constructivism, collaborative learning, and actual development zones in the context of higher-order thinking skills provides a strong foundation for improving students' description text-writing skills. The integration between these theories and the research findings illustrates the importance of using learning approaches that not only introduce information, but also build understanding, analytical skills, and knowledge application in the context of writing description texts. Thus, the research findings linking higher-order thinking skills learning and descriptive text writing skills are proven to be in line with the theoretical underpinnings of learning.

The advantages of higher-order thinking skills such as critical analysis, creativity, and problem-solving provide deeper understanding. However, barriers occur if the teacher is not familiar with the method, there are too many students in the class, or there is a lack of student engagement in group learning. Statistical

analysis showed significant differences between the learning outcomes of the experimental and control classes. This experimental research confirms the positive effect of learning higher-order thinking skills on description text writing skills at SMP YP PGRI 2 Makassar.

Conclusion

The results of this study show that higher-order thinking skills-based learning has a significant positive impact. Students who participated in higher-order thinking skills-based learning experienced a significant improvement in their descriptive text-writing skills. This is in line with the findings of several previous studies, which confirmed that this approach is able to improve students' ability to analyse information critically and creatively and solve problems. The posttest results showed that students in the experimental group achieved significant improvement to reach 100% of the learning objective achievement criteria, while the control group only got 65.7%. This confirms that a learning approach that promotes higher-order thinking skills is important in improving the quality of students' description text writing.

This finding is also supported by learning theories such as constructivism, collaborative learning, and actual development zones, which show that learning approaches that prioritise higher-order thinking skills enrich students' description text writing skills. However, there are also barriers in implementing this method, such as teachers needing less skill in implementing it or if there are too many students in the class, which can reduce the effectiveness of the learning.

This study illustrates that implementing higher-order thinking skills-based learning greatly influences improving students' description text writing skills. The findings support the importance of integrating learning methods that encourage critical analysis, creativity, and problem-solving in improving students' ability to write description texts.

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