

## The Effect Of Discovery Learning Toward Reading Comprehension Of The grade Eight Students At SMP Labschool UNTAD Palu

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### ABSTRACT

*The Effect of Discovery Learning on the Reading Comprehension Skills of Eighth-Grade Students at SMP Labschool UNTAD Palu. This study aims to examine the effect of the Discovery Learning model on the reading comprehension skills of eighth-grade students at SMP Labschool UNTAD Palu. A quasi-experimental design with a pretest-posttest control group was employed, involving two groups: an experimental group taught using Discovery Learning and a control group taught with conventional methods. The sample consisted of 36 students selected through purposive sampling. The results revealed that the experimental group showed a significant improvement in post-test scores, with an average of 76.00 compared to their pretest average of 59.00. In contrast, the control group exhibited only a slight increase from 50.18 to 60.00. Statistical analysis using an independent t-test confirmed a significant difference between the two groups ( $p < 0.05$ ), indicating that Discovery Learning effectively enhances students' reading comprehension.*

### ARTICLE HISTORY

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### KEYWORDS

Discovery Learning; Reading Comprehension; Quasi-Experimental Design; Eighth-Grade Students.

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### 1. Introduction

Despite its importance, many students encounter difficulties in reading. Based on observations at SMP LABSCHOOL UNTAD Palu, two major challenges have been identified. First, students struggle with vocabulary mastery. Although they recognize the importance of vocabulary, they rarely attempt to enrich it or use context clues to infer meanings of unfamiliar words. This often leads to decreased motivation and interest in reading. Second, students face challenges in understanding context and extracting information from texts, particularly when dealing with longer materials such as narratives or articles. These issues hinder their ability to comprehend texts effectively and to apply reading skills across subject areas.

Reading comprehension is a crucial skill for junior high school students, yet many still struggle to understand texts, especially recount texts. This issue hampers their academic success and overall literacy development (Prihandoko et al., 2021; Rahman, 2018; Ko et al., 2025). One contributing factor is the overuse of teacher-centered methods, which limit students' engagement and critical thinking (Tammasse et al., 2025; Sachiya et al., 2025; Youngsun et al., 2024). Reading is a fundamental skill in language learning, as it allows learners to understand and interpret written texts while connecting them to prior knowledge (Amelia J et al., 2024.; Yaumi et al., 2023; Junaid & Andini, 2025). Smith, Snow, Serry, and Hammond (2021) define reading as "the cognitive process of interpreting written symbols, such as letters and words, to derive meaning from text." Through reading, students not only acquire knowledge but also enhance their vocabulary, writing, and speaking skills, which in turn improve their ability to engage with learning materials and prepare them for future academic challenges.

Reading comprehension, in particular, plays a crucial role in education because it enables learners to grasp main ideas, details, and contextual meaning within texts. Abbasi (2022) emphasizes that reading comprehension encourages students to interact with the author, identify key messages, and extract essential information from a text. By strengthening these skills, students develop not only a deeper understanding of written materials but also critical thinking abilities that support academic achievement and lifelong learning.

Discovery learning, an inquiry-based model developed by Bruner, offers an alternative by encouraging students to explore, collaborate, and construct knowledge through active learning. Key steps in this model include stimulation, problem

identification, data collection, data processing, and generalization. This model is especially relevant in teaching recount texts, where students must identify events and draw meaning from context.

Within the framework of the Emancipated Curriculum, English Language Teaching (ELT) for Junior High School Grade VIII (Phase D) emphasizes the integration of six skills—listening, speaking, viewing, writing, and presenting—across various types of texts (Damayanti, 2022). Among these, reading is particularly significant as students in the eighth grade are at a transitional stage: shifting from “learning to read” toward “reading to learn.” At this stage, reading comprehension becomes essential in helping learners engage with knowledge across multiple disciplines.

Despite its importance, many students encounter difficulties in reading. Based on observations at SMP LABSCHOOL UNTAD Palu, two major challenges have been identified. First, students struggle with vocabulary mastery. Although they recognize the importance of vocabulary, they rarely attempt to enrich it or use context clues to infer meanings of unfamiliar words. This often leads to decreased motivation and interest in reading. Second, students face challenges in understanding context and extracting information from texts, particularly when dealing with longer materials such as narratives or articles. These issues hinder their ability to comprehend texts effectively and to apply reading skills across subject areas.

To address these challenges, this study proposes the implementation of the discovery learning model, a student-centered approach that encourages learners to actively explore, construct meaning, and collaborate with peers. By applying this model, students are expected to enhance their vocabulary acquisition, improve comprehension, and develop greater independence in reading. Therefore, this research, titled “*The Effect of Discovery Learning on the Reading Comprehension of Eighth-Grade Students at SMP LABSCHOOL UNTAD Palu,*” seeks to investigate the effectiveness of discovery learning in improving students’ reading comprehension skills.

Previous studies show positive impacts of Discovery Learning on speaking, writing, and reading skills. However, most use true or pre-experimental designs and lack focus on recount texts and inferential comprehension. This study fills that gap using a quasi-experimental design to investigate the effect of Discovery Learning on the reading comprehension of eighth-grade students at SMP Labschool UNTAD Palu. Guided by constructive theory, this study aims to examine how Discovery Learning improves students’ literal and inferential comprehension. The findings are expected to support more effective and student-centered reading instruction in junior high schools.

## **2. Methodology**

This study employed a quasi-experimental research design using a pre-test and post-test control group. The design was chosen to measure the effect of the Discovery Learning model on students’ reading comprehension by comparing learning outcomes between two groups under different instructional approaches.

The research was conducted with eighth-grade students at SMP Labschool UNTAD Palu. A total of 36 students participated in the study. The participants were selected through purposive sampling, taking into consideration their class level and English proficiency to ensure that the groups were comparable in terms of academic background and ability.

The students were divided into two groups:

1. Experimental group – This group received instruction using the Discovery Learning model. The teaching emphasized active student participation, exploration of text meaning, vocabulary discovery, and collaborative learning activities.

2. Control group – This group was taught using conventional methods, which primarily relied on teacher-centered instruction such as direct explanation, translation, and question–answer sessions.

Both groups were given a pre-test prior to the treatment to assess their initial reading comprehension levels and ensure baseline comparability. After the instructional treatments were implemented, a post-test was administered to both groups to measure the progress and differences in reading comprehension outcomes.

This design allowed the researcher to determine whether the Discovery Learning model had a significant impact on improving the reading comprehension of eighth-grade students compared to conventional teaching methods.

## **3. Result and Discussion**

The study aimed to examine the effect of Discovery Learning on the reading comprehension of eighth-grade at SMP Labschool UNTAD Palu. Two groups were involved; an experimental group taught using Discovery Learning and a control

group taught using conventional methods. The experimental group showed a significant improvement in reading comprehension scores, with a mean pre-test score of 59.00 and a post-test score of 76.00. Meanwhile, the control group increased only slightly, from 50.18 to 60.00.

A normality test confirmed that the data were normally distributed (Shapiro-Wilk sig > 0.05). A homogeneity t-test revealed a statistically significant difference between the post-test scores of the two groups ( $p < 0.05$ ), indicating that Discovery Learning significantly improved students' reading comprehension.

### 3.1 Pre-test results

Based on the descriptive statistical analysis, the experimental group obtained pre-test scores ranging from 40 to 72. The lowest score recorded was 40, while the highest score was 72, with a mean score of 59.00. These results indicate that before the implementation of the Discovery Learning model, students in the experimental group demonstrated a relatively low to moderate level of reading comprehension.

In comparison, the control group obtained pre-test scores ranging from 32 to 78. The lowest score was 32 and the highest score was 78. The mean score of the control group was slightly different from that of the experimental group, which shows that both groups started with varying but comparable levels of reading comprehension prior to the treatment.

### 3.2 Post-test results

After the treatment, the experimental group showed a noticeable improvement in their reading comprehension. The post-test scores ranged from 61 to 89, with a mean score of 76.00. This increase demonstrates that the Discovery Learning model had a positive effect on students' ability to comprehend texts, as reflected in the higher minimum, maximum, and mean scores compared to the pre-test results.

On the other hand, the control group also experienced some improvement, though less significant than the experimental group. The post-test scores ranged from 60 to 80, with the lowest score recorded at 60 and the highest at 80. The mean score of the control group was lower than that of the experimental group, suggesting that conventional teaching methods did not enhance students' reading comprehension as effectively as the Discovery Learning model.

**Table 1. Analysis of Average Scores from Pre-test and Post-test**

Descriptive Statistics				
	N	Minimum	Maximum	Mean
Pre-test Eksperiment	18	40	72	59,00
Post-test Eksperiment	18	61	89	76,00
Pre-Test Control	17	32	78	50,18
Post-Test Control	17	60	80	60,00
Valid N (listwise)	17			

In the experimental group (N = 18), the pre-test scores ranged from 40 to 72, with a mean score of 59.00. After the implementation of the Discovery Learning model, the post-test results showed a significant improvement, with scores ranging from 61 to 89 and a higher mean score of 76.00. This increase indicates that the Discovery Learning model had a positive effect on students' reading comprehension.

In contrast, the control group (N = 17) obtained pre-test scores ranging from 32 to 78, with a mean score of 50.18. In the post-test, the scores ranged from 60 to 60, resulting in a mean score of 60.00. Compared to the experimental group, the improvement in the control group was limited, showing only a slight increase in mean score and a very narrow score range. Overall, the data suggest that the Discovery Learning model was more effective in improving students' reading comprehension than conventional teaching methods, as reflected in the higher post-test scores of the experimental group.

### **3.3 Discussion**

After the test was given, the treatment was applied, and the data for the experimental group was calculated, the research hypothesis was proven correct, this was reinforced by the results of the reading comprehension of eighth grade students of SMP Labschool UNTAD Palu. The Discovery Learning was considered effective because of the significant improvement in reading comprehension between the pre-test and post-test scores. The experimental group showed there is not an increase from a pre-test score of 59,00 to a post-test score of 76,00, compared to the control group's increase from 50.18 to 60.00. This shows that the application of the Discovery learning not only improved students' comprehension but also encouraged them to engage more actively in the reading process, which is a key element of its effectiveness. The effectiveness of Discovery Learning is supported by several theories. According to Ginting (2017), "this model encourages students to discover knowledge independently, leading to deeper understanding and retention of concepts rather than more memorization."

The effectiveness of Discovery Learning is supported by several theories. According to Ginting (2017), "this model encourages students to discover knowledge independently, leading to deeper understanding and retention of concepts rather than mere memorization." Recent studies also reinforced this. Putri and Hasanah (2021) found that Discovery Learning significantly enhances students' critical thinking and engagement, especially in language learning contexts, as it allows learners to explore and make sense of reading materials actively.

Similarly, Maulidiyah and Nurhadi (2020) emphasized that Discovery Learning improves reading comprehension by helping students connect prior knowledge with new information through exploration and guided inquiry. In a study by Saputri and Marlina (2022), it was shown that students taught using Discovery Learning strategies demonstrated greater motivation and deeper textual understanding compared to those taught using traditional methods. Furthermore, research by Lestari and Ari

In conclusion, both theoretical perspectives and recent empirical studies consistently highlight the effectiveness of Discovery Learning in improving students' reading comprehension. Its learner-centered nature promotes deeper understanding, critical thinking, and active participation—factors that are essential for long-term academic success in reading and beyond.

### **4. Conclusion**

This study concludes that the Discovery Learning model significantly improves the reading comprehension of eighth-grade students at SMP Labschool UNTAD Palu. The experimental group showed higher post-test scores compared to the control group, indicating that active, student-centered learning through discovery enhances both literal and inferential comprehension. Discovery Learning is therefore an effective strategy for teaching reading, especially recount texts, in junior high school contexts. Moreover, this approach fosters students' critical thinking skills by encouraging them to construct meaning independently. The findings suggest that teachers should integrate Discovery Learning into reading instruction to promote deeper engagement and long-term retention of knowledge. Future research could explore the application of this model to other language skills, such as writing and speaking, to broaden its pedagogical impact.

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