

## THE EFFECT OF DISCOVERY LEARNING MODEL ON WRITING DESCRIPTIVE TEXT

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### Abstract

This research aims to find out whether the Discovery Learning Model can effectively influence students' skills in writing descriptive texts. The population of this research is class X students of Petatal National Private High School for the 2024/2025 academic year. This research uses quantitative methods. Data collection techniques are carried out through writing tests. The results showed that the average pre-test score for the control group was 42.2, while for the experimental group it was 53.4. Furthermore, the average post-test score for the control group was 71.2 and for the experimental group was 80.3. Implementation of the Discovery Learning Model has proven to be effective in improving students' writing skills. Data were analysed using the t-test formula. The analysis results show that the t score is higher than the t-table ( $7.89 > 1.699$ ) at a significance level of 0.05 with 64 degrees of freedom. This means that the alternative hypothesis ( $H_a$ ) is accepted and the null hypothesis ( $H_o$ ) is rejected.

**Keyword:** Effect, Discovery Learning Model, Descriptive Text

### INTRODUCTION

English is a subject taught across all educational levels, focusing on the four essential language skills: listening, speaking, reading, and Writing, which are crucial for achieving proficiency in English (Zulfitri, 2023).

Writing is an important skill to develop, because communication plays a basic role in our lives. It is widely known that communication occurs in two main forms: written and spoken. The importance of writing is increasingly emphasized by Harmer (1991) (Sa'adah, 2020), Who outlines four reasons for teaching writing. First, some students find that reading written language is more beneficial than learning it through speech. Second, the writing process aids students in selecting words and structuring sentences, resulting in well-crafted texts. The third reason concerns the diversity of students' learning styles; writing enables them to reflect on their learning and produce language thoughtfully. Lastly, it is crucial for students to learn how to compose various types of writing, including essays, descriptive texts, and letters. This research aims to emphasize the significance of writing, as it addresses a core skill in English language education (Widayanto, 2021).

In Mundziroh (2013), Mulyati suggests that writing is a process of conveying ideas through discourse (Yathip & Liang-Itsara, 2024). On the other hand, Dalman (2018) defines writing as a form of communication between individuals through

written messages using various tools or media. Writing skills are one of four important components in mastering Indonesian, which is very important for human interaction. Writing functions as a means to express thoughts and ideas to achieve certain goals. Based on the 2013 curriculum, students are taught to write descriptive essays, narrative stories, inspirational stories and other types of essays. (PURWATI, 2023).

Students need to have good writing skills in English to face the modern world, especially if they are looking for a job after graduating from high school or university that requires strong writing skills. Today, many organizations require cover letters in English as part of their recruitment process. In business transactions, it is important for entrepreneurs to have good writing skills. They may use business letters to communicate with colleagues at a distance, and these letters should be written in a formal style. (Bernieke Damanik, Bobby Pramjit Singh Dhillon, Masta Magdalena, & Henni Natalina Sijabat, 2023). Additionally, the ability to write descriptive texts is also essential in this context, as many companies present their products through well-written descriptions (Rahmawati, Masykuri, & Sarwanto, 2021).

Given that writing is essential yet difficult to master, teachers should adopt effective teaching strategies to assist students in crafting descriptive texts more easily. This research employs the Discovery Learning Model to enhance students' writing skills in this area (Rainaldy Juliansyah, Lail, & Zamzam, 2023). According to Susan (2009), the Discovery Learning Model prioritizes the learning process over the final outcome. In this approach, the focus is student-cantered, with students taking the initiative to solve problems themselves (Mahmud & Lasiyati, 2021).

After observing one of the teachers at SMA Swasta Nasional Petatal, it became clear that many tenth-grade students struggle with writing descriptive texts. Despite having received instruction in various writing skills, they face challenges in organizing their ideas and constructing clear, coherent sentences. Some students hesitate when selecting appropriate words and often find it difficult to describe objects or experiences in detail. This is evident in their writing, which tends to lack richness and specificity. Additionally, students appear to need more time to think and formulate their ideas before putting them into writing. Therefore, implementing the Discovery Learning Model is highly relevant, as this approach can encourage students to engage more actively in the writing process, allowing them to explore and enhance their abilities in writing descriptive texts.

## **METHOD**

This research uses an experimental method with a quantitative approach. The research sample consisted of two groups, namely the Experimental Group and the Control Group. There are two variables in this research, namely the question and answer relationship technique as the independent variable and reading comprehension of the recount text as the dependent variable. This research design focuses on providing treatment and the results obtained. Data was collected through pre-test and post-test to measure the effectiveness of the question and answer relationship in teaching reading. The sampling technique used was simple random sampling. The sample for this research was class X-A students as the control group

and X-B as the experimental group. The design of this study is **Table 1. Two Groups Pre-test Post-test**

Group	Types	Experiment	Types
Control Class Group	Pre-test	X	Post-test
Experimental Class Group	Pre-test	Y	Post-test

**Note:**

X : Using Conventional way

Y : Using Discovery Learning Model

The data collection process in this research will be carried out through several systematic and planned stages. The first step involves fulfilling various important formal administrative requirements before data collection can begin. One of the key procedures is obtaining official permission from the school principal, which serves as approval to carry out research activities within the school environment. This permission is very important to ensure that the data collection process complies with relevant regulations and has full support from the school. After permission is given, the next step is to conduct direct observations in the classroom. This observation aims to examine various aspects related to the learning process and student activities, ensuring that the data collected is relevant and in line with the research objectives. Therefore, this stage is very important to obtain accurate and comprehensive data Pre-test.

The pre-test, conducted before the treatment, aimed to assess students' prior ability in crafting descriptive language. The researcher employed an essay test for the pre-test, which consisted of a writing test about descriptive text that was presented to the students.

1. Treatment

The researcher administered a pre-test and provided therapy using the discovery learning method, empowering students to become problem solvers and historians. Instructional materials were not provided at the beginning of the teaching-learning process.

- The researcher initiated the session by posing questions to the students, encouraging them to adopt a problem-solving approach.
- Subsequently, the researcher instructed students to identify as many relevant problem agendas connected to the subject as possible.
- The researcher provided changes to pupils to get as much information as possible.
- The data was processed, and information obtained from the students through interviews and observations was analysed.
- Subsequently, all students conducted thorough investigations to ascertain the validity of the hypothesis, which was determined by alternative findings.
- The researcher instructed the pupils to draw conclusions.

**2. Post-test (Y2)**

In the post-test, the researcher administered a writing assessment to evaluate the students' proficiency in composing descriptive texts following the treatment. The students were instructed to write a descriptive text about Lake Toba.

In scoring the test, it is determined that the cumulative score ranging from 0-100 by counting the correct answer and by applying the formula as follows:

$$S = \frac{F}{N} \times 100$$

Where:

S= Individual Score

F= Number of Correct Answer

N= Number of Items

(Nurul Hidayah, Pahrudin, & Anjar, 2024)

**RESULTS AND DISCUSSION**

The result of the students' test can be seen on the following table score.

**Table 3. The Sore of Pre-test and Post-test in Control Group**

No	Student's Initial	Pre-Test	Post-Test	X <sup>2</sup>	Y <sup>2</sup>	XY
1	ATS	25	75	625	5625	1875
2	AN	50	80	2500	6400	4000
3	AP	45	65	2025	4225	2925
4	ARR	40	65	1600	4225	2600
5	AA	50	80	2500	6400	4000
6	CS	40	60	1600	3600	2400
7	DIR	20	80	400	6400	1600
8	FP	55	80	3025	6400	4400
9	FN	55	60	3025	3600	3300
10	FO	25	60	625	3600	1500
11	FE	25	65	625	4225	1625
12	FH	25	80	625	6400	2000
13	HARS	25	75	625	5625	1875
14	HS	70	80	4900	6400	5600
15	HA	55	80	3025	6400	4400
16	IA	40	70	1600	4900	2800
17	IS	40	65	1600	4225	2600

18	JH	50	65	2500	4225	3250
19	JDP	50	70	2500	4900	3500
20	KWA	50	80	2500	6400	4000
21	KA	45	65	2025	4225	2925
22	MFP	25	80	625	6400	2000
23	MI	50	70	2500	4900	3500
24	MRA	65	65	4225	4225	4225
25	MR	55	70	3025	4900	3850
26	MRAR	55	65	3025	4225	3575
27	NAA	50	65	2500	4225	3250
28	NR	25	80	625	6400	2000
29	NNK	20	75	400	5625	1500
30	NH	50	80	2500	6400	4000
31	NIY	20	75	400	5625	1500
32	NK	50	60	2500	3600	3000
33	PDS	50	65	2500	4225	3250
<b>TOTAL</b>		<b><math>\Sigma X = 1395</math></b>	<b><math>\Sigma Y = 2350</math></b>	<b><math>\Sigma X^2 = 65275</math></b>	<b><math>\Sigma Y^2 = 169150</math></b>	<b><math>\Sigma XY = 98825</math></b>

From the data above, it showed that the highest and the lowest score in pre-test was:

1. Score 70 are 1 Students.
2. Score 65 are 1 Students.
3. Score 55 are 7 Students.
4. Score 50 are 10 Students.
5. Score 45 are 2 Students.
6. Score 40 are 4 Students.
7. Score 25 are 7 Students.
8. Score 20 are 3 Students.

From the data above, it showed that the highest and lowest score in post-test was:

1. Score 80 are 7 Students.
2. Score 75 are 4 Students.
3. Score 70 are 4 Students.
4. Score 65 are 100 Students.
5. Score 60 are 4 Students.

From the data above, it showed that student's score in pre-test was lower than post-test in the control class. The mean of student's score in pre-test was 42, 27 and after giving the material by conventional learning the mean of student's score in post-test was being 71, 21, it increased 28, 94%.

**Table 4. The Sore of Pre-test and Post-test in Experimental Group**

No	Student's Initial	Pre-Test	Post-Test	$X^2$	$Y^2$	XY
1	AF	65	80	4225	6400	5200
2	ALP	70	95	4900	9025	6650
3	A	50	70	2500	4900	3500
4	ADS	55	70	3025	4900	3850
5	ARM	65	75	4225	5625	4875
6	BA	40	80	1600	6400	3200
7	DD	55	70	3025	4900	3850
8	DS	40	80	1600	6400	3200
9	D	50	75	2500	5625	3750
10	DLN	75	95	5625	9025	7125
11	DT	40	70	1600	4900	2800
12	FR	50	70	2500	4900	3500
13	FAP	45	80	2025	6400	3600
14	FR	65	80	4225	6400	5200
15	FSN	40	90	1600	8100	3600
16	IS	70	90	4900	8100	6300
17	IF	45	80	2025	6400	3600
18	IA	55	80	3025	6400	4400
19	JA	50	70	2500	4900	3500
20	KA	50	70	2500	4900	3500
21	KA	65	90	4225	8100	5850
22	LA	55	75	3025	5625	4125
23	LS	45	80	2025	6400	3600
24	M	60	90	3600	8100	5400
25	MFH	40	80	1600	6400	3200

26	NB	40	70	1600	4900	2800
27	NA	40	70	1600	4900	2800
28	NAS	55	90	3025	8100	4950
29	NSB	75	95	5625	9025	7125
30	NH	75	95	5625	9025	7125
31	NS	40	70	1600	4900	2800
32	PP	60	90	3600	8100	5400
33	RDP	40	70	1600	4900	2800
<b>TOTAL</b>		$\Sigma X = 1765$	$\Sigma Y = 2635$	$\Sigma X^2 = 98875$	$\Sigma Y^2 = 213075$	$\Sigma XY = 143175$

From the data above, it shown that the highest and the lowest score in Pre-test was:

1. Score 75 are 3 Students.
2. Score 70 are 2 Students.
3. Score 65 are 4 Students.
4. Score 60 are 2 Students.
5. Score 55 are 5 Students.
6. Score 50 are 7 Students.
7. Score 45 are 1 Students.
8. Score 40 are 9 Students.

From the data above, it shown that the highest and the lowest score in Post-test was:

1. Score 95 are 4 Students.
2. Score 90 are 6 Students.
3. Score 80 are 9 Students.
4. Score 75 are 3 Students.
5. Score 70 are 11 Students.

From the data above, it showed that student's score in pre-test was lower than post-test in the experiment class. The mean of student's score in pre-test was 53,48 and after giving the material by conventional learning the mean of student's score in post-test was being 79,84, it increased 26,3%.

## CONCLUSION

This research uses quantitative methods with random sampling techniques to determine the sample, namely class X students of SMA Swasta Nasional Petatal in 2024/2025 Academic Year. The data in this study was collected in three stages, namely pre-test, treatment and post-test. The instrument used is a ability in writing descriptive text, which is designed to measure the extent to which students understand Descriptive Texts. Discovery Learning Model was help students to

practice the students' ability in writing descriptive text, one of the reasons was because this learning model reveals the students to acquire new information before solve it, so the students become more active in learning.

Based on the data analysis presented in the previous chapter, the results show that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. This proves that the application of the Discovery Learning Model has a significant influence in improving students' abilities in writing descriptive texts. Thus, students' background knowledge becomes an important factor that supports the development of their writing skills.

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