

**THE EFFECT OF DISCOVERY LEARNING METHOD ON STUDENTS' ABILITY
IN WRITING DESCRIPTIVE TEXT**Ratna Juwita¹, Rahma Yunita Ansi²^{1,2}Pendidikan Bahasa Inggris, Universitas Asahan*Email:* rjuwitakim418@gmail.com**Abstract**

The research aim to find out the significant The Effect of Discovery Learning Method on Students' Ability in Writing Descriptive Text at Grade X SMA Swasta Alma'shum Sidodadi 2022/2023 Academic Year. This type of research was experimental research design. The population of this research is the students of grade X. The sample of this study was about 70 students. The research were X IPA 4 and IPA 3 which were taken by sample random sampling the X IPA 4 experimental group taught by discovery learning X IPA 3 as control group taught by conventional way. The study findings that the experimental group's writing ability score for descriptive text was higher than that of the control group. Where the mean of experimental students was 0,75 in pre-test. After giving treatment of Discovery Learning Method the mean score was being 0,80 in post-test. While the mean of control students' score was 0,58 in pre-test. After giving treatment by using conventional technique the mean score was being 0,53 in post-test. Based on calculation of the t- test is the score product moment degree of freedom (df) = $n-2 = 35-2 = 33$ the results obtained are $t_{hitung} > t_{table}$, namely $t_{hitung} = 3,645$ and $t_{table} = 1,692$, then $3,645 > 1,692$. The significance $0,00 < 0,05$. (H_0 is rejected and H_a is accepted).

Key words: Discovery Learning Method, Descriptive Text, Writing Ability**INTRODUCTION**

English is an international language used to communicate around the world. There are even several countries that have made English their official or main language. English as an international language has a long history. Since ancient Rome, it was necessary to have a language that many people could understand, so that people from different countries could understand when communicating. Now the language is referred to as a lingua franca. Lingua franca is the language used to communicate between people from various backgrounds. Initially, each region had a different lingua franca. Then it was mutually agreed that English would be the shared language. English is the oldest language in the world and appeared around. English has also experienced rapid development so that it has become an international language.

In English there are four skills that must be mastered including reading, writing, listening and speaking. All four are very important and Writing skills are the culmination of skills in all aspects of language, students are said to be skilled in writing if they are able to express their thoughts in written form with strings of words and sentences that are easy for others to understand. To measure the writing, students must first understand well their own writing.

The students do some mistakes to arrange sentence by sentence grammatically. The students also get some problems in writing descriptive text, they assumed that they can not master all about grammar and it makes them confused and difficult to understand. From the teacher, it can be seen by the method that the teacher used. The teachers explained then gave the students some exercises. So the students got the impact of the method which make them bored and have no interesting in learning about writing English for Descriptive Text.

Based on the explanation above, this research will be carried out to assess the impact of the method being used to teach students to write, particularly in descriptive text content. The title of this research is “The Effect of Discovery Learning Method on students’ ability in Writing Descriptive Text at Grade X SMA Swasta Alma’shum Sidodadi 2022/2023 Academic Year”

METHOD

This research was conducted in June 2023. Data collection was carried out by giving tests. In this study, the sample was divided into 35 students. The data aims to determine the effect of discovery learning method on students' ability in writing descriptive text. In this study the sample was divided into two groups, namely: the experimental class and the control class. Each group was given the same test.

This research was taken it was only for grade X IPA 4 as experimental class and X IPA 3 as control class of SMA Swasta Alma’shum Sidodadi with the number of students was 35 students for each class. This research was carried out into two treatments, they were pre-test and post-test. The data of the students' test can be seen in the following table the raw score.

The population is broad category that includes object/subjects with specific qualities and characteristics that can be studied and conclusion are drawn from. According Sugiyono (2003) Population is a generalized area consisting of objects/subjects that have certain quantities and characteristics set by the researcher to be studied and then conclusions drawn. The population of this study at grade X SMA Swasta Alma’shum Sidodadi in 2022/2023 Academic Year.

According to (Sugiyono, 2013) stated that “The sample is a subset of the population in terms of size and characteristics” This research was utilizes clumsier random sampling, in which the sample was used to determine when the object to be examined or the data source was very large.

This research applied use of simple random sampling According to (Sugiyono, 2013) Simple random sampling is a method of drawing from a population or universe in such a way that each member has an equal chance of being chosen or taken. When a technique and a sample are used at random. It is called simple (simple) because the sampling of members from a population is done at random, regardless of the strata in that population.

When members of a population are thought to be simple random sampling, this method is used. The sample that was used as the object of this research are some of the students grade X at SMA Swasta Alma’shum Sidodadi whose numbers have been determined based on the calculation of a formula.

Validity of the Test

Arikunto 2010 assessed that the validity of an instrument is measured by its degree of validity. If a test measure what it was intended to measure, it is considered legitimate.

The form:

$$r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{n \sum x^2 - (\sum x)^2 (n \sum y^2 - (\sum y)^2)}}$$

Where:

r_{xy} = The correlation between X variable and Y variable

N = Total Of the data

X = The mark in the pre-test

XY = Sum of multiplication

X^2 = Square of X

Y^2 = Square of Y

Reliability of the Test

According to sukardi (2007), is the ability to measure any test in a consistent manner. The following research use formula can be used to determine a research instrument's reliability. This research use formula will be used to determine what to use measure can be in when and in any time, the resuly being the same :

The Form:

$$r_{11} = \frac{2 \cdot r_{1/21/2}}{(1 + r_{1/21/2})}$$

Where:

r_{11} : The reliability

$r_{1/21/2}$: Coefisient Between the two test

The pre-test and –post-test writing of the student wiil scored of assensed using a scoring rubric that took into account each component of writing, content, organization, language use, and mechanics.

Technique of Collecting Data

Technique of collecting data will the technique or methods that could be used by research for collecting the data. Data collection could be interpreted as research activities in order to gather a number of field data needed to answer the research or test hypothesis. In this research it would be used pre-test, treatment, and post-test.

1. Pre-test

The pre-test would be conducted before treatment. The same pre-test was given to both experimental and control group in order to investigate the students writing ability. Both experimental and control group would be asked to write based on the text given

2. Treatment

The treatment was given to both the experimental and control group. The Discovery Learning Method will be used to teach the practical course, while the traditional method was used to teach the control class.

3. Post-Test

The post-test was used writing test. It would give after the treatment finish. The objective of this was to get the data about the result of treatment to be analyzed in order to know the effect on the students' ability in writing descriptive text at SMA Swasta Alma'shum Sidodadi.

Technique of Data Analysis

The data of the reasearch will gathered from the students' grades and quantitavely analyzed. Statistical analysis refers to quantutative analysis will done performed using a statistical formula. The purpose of this function is to determine the significant differences between students who are taught using the discovery learning method and those who are not. The degree of freedom (df) of the test is compared to the significance of the sum, the t-test, and the t-table; the t-test was as follows (Sugiyono, 2011:138)

$$t = \frac{Mx - My}{\sqrt{\left[\frac{\sum x^2 + \sum y^2}{Nx + Ny - 2} \right] + \left[\frac{1}{Nx} + \frac{1}{Ny} \right]}}$$

Where :

Mx : The mean of Experimental group

My : The mean of control group

X² : The Standard deviation of experimental score

Y² : The Standard deviation of control score

Nx : The total number samples of experimental group

Ny : The total number samples of control group

RESULT AND DISCUSSION

a. Result

This research was conducted in June 2023. Data collection was carried out by giving tests. In this study, the sample was divided into 35 students. The data aims to determine the effect of discovery learning method on students' ability in writing descriptive text. In this study the sample was divided into two groups, namely: the experimental class and the control class. Each group was given the same test.

This research was taken it was only for grade X IPA 4 as experimental class and X IPA 3 as control class of Sma Swasta Alma'shum Sidodadi with the number of students was 35 students for each class. This research was carried out into two treatments, they were pre-test and post-test. The data of the students' test can be seen in the following table the raw score.

Table 1 the Students' Writing Ability Score Pre Test and Post Test in Experimental Class

NO	Initial Students'		
	Name	Pre Test Experimental	Post Test Experimental
1	AD	44	65
2	AS	42	75
3	AAL	70	78
4	APR	50	74
5	DDS	58	60
6	DN	60	65
7	DAA	45	55
8	DAF	65	80
9	EE	60	65
10	FA	55	70
11	FD	85	92
12	GS	63	65
13	IK	60	88
14	IR	70	91
15	KA	50	83
16	KP	43	63
17	LE	50	74
18	MS	75	87
19	MEF	60	80
20	MLM	53	73
21	MAS	68	73
22	NK	70	75

23	NPA	83	87
24	NM	75	83
25	RR	53	63
26	RA	46	75
27	RFS	80	92
28	SB	35	56
29	SA	53	71
30	SAM	85	89
31	TAN	48	55
32	TAR	45	72
33	VAP	54	85
34	WR	37	50
35	WA	45	66

Table 2 Descriptive Statistics Students' Writing Skill Score in Experimental Class
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error
pretestexperiment	35	35	85	58.14	2.329
posttestexperiment	35	50	92	73.57	1.954
Valid N (listwise)	35				

Based on Table 4.1 and 4.2 above showed the quantity respondents (N) in the experimental class as many as 35 respondents. From these 35 respondents, after the research data is calculated, the score of the experimental is higher than the control group, 90% of students have the ability to write descriptive text. It was can be seen that the smallest (minimum) value for pretest is 35 and 50 for the minimum score for final test. And the largest (maximum) value in pretest is 85 and for posttest is 92. The mean of students' score in pre-test was 58.14 and 73.57 in posttest. The posttest scores are higher than the pretest value, indicating that using discovery learning method has a significant effect on Writing Ability of Class Experiment. This means that the discovery learning method influences students' understanding of writing Descriptive texts.

Table 3 The Students' Writing Skill Score Pre Test and Post Test in Control Class

NO	Initial Students'		
	Name	Pre Test Experimental	Post Test Experimental
1	AAL	40	59
2	AS	53	60
3	ABS	35	50
4	BA	43	45
5	CN	48	57
6	CMD	42	49
7	CU	56	60
8	FAN	45	50
9	FAL	32	40
10	FAD	55	62
11	FNZ	44	34
12	HAF	38	56
13	IAC	45	55
14	IA	70	55
15	KP	35	43
16	KMR	35	52
17	KS	65	65
18	KN	63	65
19	MTA	43	55
20	MS	55	61
21	MHK	55	58
22	MRSF	66	70
23	MTL	59	50

24	NM	50	61
25	NR	67	75
26	RP	40	40
27	RM	67	68
28	SAS	56	61
29	SA	70	89
30	SMR	57	57
31	SN	35	54
32	TP	63	70
33	VM	56	60
34	ZAN	68	70
35	ZT	54	66

Table 4 Descriptive Statistics Students' Writing Skill Score in Control Class

Descriptive Statistics						
	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Pretestcontrol	35	32	70	51,57	1,965	11.622
Posttestcontrol	35	34	89	57,77	1,827	10.811
Valid N (listwise)	35					

From table 4.3 and 4.4 above it can be seen that the number of respondents (N) in the control class is 35 respondents. Of these 35 respondents was can be seen that the smallest (minimum) value for control class pretest was 32 and 34 for the minimum score on the posttest. Biggest (maximum) score in pretest is 72 and for posttest is 89. The average value of 35 respondents for the pretest is 51.57 while the posttest about 57,77. This shows that student scores increased between pretest and posttest, though not significantly. Meanwhile in the control class all students still low scores very much students who has a score below the KKM, namely, FAL with a score of 32 on the pre-test and 40 on the post-test, because the KKM value is 75. With the conclusion discovery learning method is significant in students' understanding of writing descriptive text.

2. Discussion

The teacher was able to create teaching materials with the use of the discovery learning approach when assessing the writing abilities of the experimental group and control group. After applying the research data to the SPSS 20 program, the experimental group outperformed the control group in terms of scores, and the students were able to write descriptive.

Where the mean of experimental students was 0,75 in pre-test. After giving treatment of Peer Response strategy the mean score was being 0,80 in post-test. While the mean of control students' score was 0,58 in pre-test. After giving treatment by using conventional technique the mean score was being 0,53 in post-test. It implies that discovery learning method is effective to students' writing with descriptive text.

So it is shown in the research above SPSS version 20 program, the results obtained are $t_{hitung} > t_{table}$, namely $t_{hitung} = 3.645$ and $t_{table} = 1,692$, then $3,645 > 1,692$. The significance $0,00 < 0.05$. With Thus H_0 is rejected H_a is accepted)

CONCLUSION

Based on the data and data analysis presented in the previous chapter, it can be concluded that the Discovery Learning Method significantly influences the comprehension of writing descriptive texts. There is a significant difference between the achievement of students' reading comprehension before and after being taught using the Discovery Learning Method. The learning outcomes of students who were taught to understand writing descriptive texts using the Discovery Learning Method were higher than students who were taught to write descriptive texts without the Discovery learning Method. With thus (H_0) is rejected and (H_a) is accepted.