

CHAPTER IV

RESULT AND DISCUSSION

A. Description of Data

In this chapter, the writer would like to present the description of the data. The sample of this research was the students of the eighth grade of MTs Daar Al Ilmi Cikukur Serang, as stated in previously, he divided them into two groups. The first was experimental class that consists of 41 students from class VIII B and D and the second was control class that consist of 38 students from VIII A and C.

The goal of this research is to know the effectiveness of prediction strategy in teaching reading narrative text in improving students' reading comprehension and to give the report of score of pre-test and post-test from both the experiment class and control class. The researcher analyze the data quantitatively. The result of pre-test showed that students of the eighth grade of MTs Daar Al Ilmi Cikukur Serang have poor ability in reading comprehension. The students have the difficulties in understanding a text and they have poor in understanding English text but after using prediction, the students' reading comprehension increase gradually, so that they were easy to do post-test. It can be seen from the result of post test and the students' progress in learning activities. In learning reading especially for experimental class the researcher utilized prediction strategy and employed the graphic organizer so the students were assisted to comprehend

English text because while the students were able to activate their background knowledge by connecting previous knowledge and recalling past experiences.

To know the effectiveness of prediction strategy toward students' reading comprehension, the researcher gave the test to students as sample both at the experimental class and control class. The test that used in this research divided in two types, they are pre-test and post-test. The pre-test is given before treatment and post test is given after treatment. Both the reading comprehension tests, pre-test and post-test which the researcher gave to the students were questions those are 20 (twenty) multiple choices and 5 (five) essays, the correct answer is given score 1 (one) and the incorrect answer is 0 (zero) in multiple choices and scoring based on integrity for essays.

The researcher described the students' result of pre-test and post-test in experimental class and control class by the table below:

Table 4.1
Data from Pre-test and Post-Test of Experimental Class

No	Name	Pre-Test	Post-Test	Gained
1	MDA	37	52	15
2	MAD	14	64	50
3	MDA	13	83	70
4	MAM	33	52	19
5	MFT	27	64	37
6	MRA	48	53	5
7	MRH	40	60	20
8	MDR	5	54	49
9	MDS	71	64	-7
10	MSA	16	64	48
11	MDZ	5	43	38
12	PDM	12	44	32
13	MRA	6	63	57
14	RFN	6	64	58
15	SMY	39	64	25
16	UZA	5	62	57

17	ZAL	55	93	38
18	ZAM	6	84	78
19	AAI	26	68	42
20	DIN	22	65	43
21	DCF	14	65	51
22	DZM	25	68	43
23	FSN	6	43	37
24	KKH	2	27	25
25	MAG	7	78	71
26	MRI	27	66	39
27	NEP	55	19	-36
28	NKH	13	17	4
29	NFH	27	70	43
30	RWJ	10	55	45
31	RFA	33	38	5
32	SHQ	5	67	62
33	SSL	15	26	11
34	SFA	28	76	48
35	SMD	18	23	5
36	SZI	27	52	25
37	TPI	34	58	24
38	WAS	44	23	-21
39	YCA	36	78	42
40	ZAR	20	45	25
41	ZKA	88	94	6
Total		1020	2348	1328
Average		24,88	57,27	

Determine mean score pre-test and post-test of experimental class, the writer follows the formula :

$$\begin{aligned}
 M_1 &= \frac{\sum X_1}{N_1} \\
 &= \frac{1020}{41} \\
 &= 24.87
 \end{aligned}$$

$$\begin{aligned}
 M_2 &= \frac{\sum X_2}{N_2} \\
 &= \frac{2348}{41} \\
 &= 57.26
 \end{aligned}$$

Determine mean with the formula :

$$\begin{aligned}
 M &= M_2 - M_1 \\
 &= 57.26 - 24.87 \\
 &= 32.39
 \end{aligned}$$

Note :

M	= Mean
M_1	= Mean of Pre-test
M_2	= Mean of Post-test
X1	= Students` score of Pre-test
X2	= Students` score of Post-test
N	= Number of Students

The table above showed the students' score of pre-test and post-test at the experimental class. The highest score of pre-test was 88, it was gotten by one student and the lowest score was 22, it was gotten by one student and the average of pre-test score 24.88. Then the highest score of post-test was 94, it was gotten by one student and the lowest score was 17, it was gotten by one student and the average score of post-test was 57.27. the students' result can show that the post-test is higher score after applied prediction. From the calculation of the determine mean the experimental class, the average between the pre-test and post-test increase amount 32.39.

Table 4.2
Data from Pre-Test and Post-Test of Control class

No	Name	Pre-Test	post-test	Gained
1	ADA	4	13	9
2	ABM	26	62	36
3	AFQ	14	19	15
4	ARR	12	14	2
5	AKH	26	37	11
6	BMF	44	74	30
7	EGS	10	13	3
8	ERZ	14	36	22
9	FAA	22	18	-4
10	FPR	45	14	-31
11	GAD	46	14	-32
12	HGA	16	16	0
13	IFF	15	50	35

14	IRS	29	42	13
15	FAF	18	37	19
16	AAT	44	49	5
17	IHF	13	59	46
18	ANZ	17	18	1
19	AIA	39	40	1
20	AAL	64	83	19
21	AGL	20	63	43
22	ANR	43	57	14
23	ANZ	24	42	18
24	AZM	60	70	10
25	DAZ	24	42	18
26	HNN	19	40	21
27	MDA	53	65	12
28	MKA	38	30	-8
29	NFS	50	61	11
30	NER	19	83	64
31	NPI	19	27	8
32	NMH	26	62	36
33	NIH	70	40	-30
34	RLA	25	48	23
35	RFH	7	42	35
36	SSA	15	57	42
37	UNA	23	61	38
38	WFI	3	57	54
Total		1056	1655	609
Average		27,79	43,55	

Determine mean score pre-test and post-test of control class, the writer

follows the formula :

$$\begin{aligned}
 M_1 &= \frac{\sum Y1}{N1} \\
 &= \frac{1056}{38} \\
 &= 27.78
 \end{aligned}$$

$$\begin{aligned}
 M_2 &= \frac{\sum Y2}{N2} \\
 &= \frac{1655}{38} \\
 &= 43.55
 \end{aligned}$$

Determine mean with the formula :

$$\begin{aligned}
 M &= M_2 - M_1 \\
 &= 43.55 - 27.78 \\
 &= 15.77
 \end{aligned}$$

Note :	M	= Mean
	M_1	= Mean of Pre-test
	M_2	= Mean of Post-test
	Y1	= Students` score of Pre-test
	Y2	= Students` score of Post-test
	N	= Number of Students

The table 4.2 showed that lowest score of pre-test 3, it was gotten by one student and the highest score of pre-test is 70, it was gotten by one student and the average score of pre-test was 27.79. Then, highest score of post-test was 83, it was gotten by two student and the lowest score of post-test 13, it was gotten by two student and the average score of post-test was 43.55. the students' score in control class was less because in this class not use prediction. After the calculation of the determine mean the control class, the average between pre-test and post-test increase amount 15.76.

After comparison between the score of pre-test and post test in experimental class and control class, the researcher calculates deviation and squared deviation. The result of the calculation by using the formula t-test can be seen at the analysis of the data.

B. Analyzing the Data

After the researcher got the data from pre-test and post-test score from experimental and control class. The researcher analyzed the data by t-test formula with the degree of significance 5% and the writer used steps of formula.

Table 4.3
The Score of Frequency Distribution

No	X	Y	X	Y	X ²	Y ²
1	52	13	-5.26	-30.55	27.66	933.30
2	64	62	6.74	18.48	45.42	341.51
3	83	19	25.34	-24.55	642.11	602.70
4	52	14	-5.26	-29.55	27.66	873.20
5	64	37	6.74	-6.55	45.42	42.90
6	53	74	-4.26	30.45	18.14	927.20
7	60	13	2.74	-30.55	7.50	933.30
8	54	36	-3.26	-7.65	10.62	58.52
9	64	18	6.74	-25.55	45.42	652.80
10	64	14	6.74	-29.55	45.42	873.20
11	43	14	-14.26	-29.55	203.34	873.20
12	44	16	-13.26	-27.55	175.82	759.00
13	63	50	5.74	6.45	32.94	41.60
14	64	42	6.74	-1.55	45.42	2.40
15	64	37	6.74	-6.55	45.42	42.90
16	62	49	4.74	5.45	22.46	29.70
17	93	59	35.74	15.45	1277.34	238.70
18	84	18	26.74	-25.55	715.02	652.80
19	68	40	10.74	-3.55	115.34	12.60
20	65	83	7.74	39.45	59.90	1556.30
21	65	63	7.74	19.45	59.90	378.30
22	68	57	10.74	13.45	115.34	180.90
23	43	42	-14.26	-1.55	203.34	2.40
24	27	70	-30.26	26.45	915.66	699.60
25	78	42	20.74	-1.55	430.14	2.40
26	66	40	8.74	-3.55	76.38	12.60
27	19	65	-38.26	21.45	1463.82	460.10
28	17	30	-40.26	-13.55	1620.86	183.60
29	70	61	12.74	17.45	162.30	304.50
30	55	83	-2.26	39.45	5.10	1556.30
31	38	27	-19.26	-16.55	370.94	273.90
32	67	62	9.74	18.45	94.86	340.40

33	26	40	-31.26	-3.55	977.18	12.60
34	76	48	18.74	4.45	351.18	19.80
35	23	42	-34.26	-1.55	1173.74	2.40
36	52	57	-5.26	13.45	27.66	180.90
37	58	61	0.74	17.45	0.54	304.50
38	23	57	-34.26	13.45	1173.74	180.90
39	78		20.74		430.14	
40	45		-12.26		150.30	
41	94		36.74		1349.82	
Σ	2348	1655	-0.06	0.12	14761,31	15543,93

Note :

X : Score of Post-test of the Experimental Class

Y : Score Post-test of the Control Class

x : Deviation of Experimental Class

y : Deviation of Control Class

x^2 : The Squared of Control Class

y^2 : The Squared Deviation of Control Class

a. Determining mean of variable X with formula:

$$\begin{aligned}
 M_x &= \frac{\Sigma X}{N_1} \\
 &= \frac{2348}{41} \\
 &= 57.26
 \end{aligned}$$

b. Determining mean of variable Y with formula:

$$\begin{aligned}
 M_y &= \frac{\Sigma Y}{N_2} \\
 &= \frac{1655}{38} \\
 &= 43.55
 \end{aligned}$$

c. Determining deviation standard of variable X with formula:

$$\begin{aligned}
 SD_x &= \sqrt{\frac{\sum x^2}{N_1}} \\
 &= \sqrt{\frac{14671.31}{41}} \\
 &= 357.83 \\
 &= 18.91
 \end{aligned}$$

d. Determining deviation standard of variable Y with formula:

$$\begin{aligned}
 SD_y &= \sqrt{\frac{\sum y^2}{N_1}} \\
 &= \sqrt{\frac{15543.93}{38}} \\
 &= \sqrt{409.05} \\
 &= 20.22
 \end{aligned}$$

e. Determining standard error of mean variable I with formula:

$$\begin{aligned}
 SE_{M_x} &= \frac{SD_1}{\sqrt{N_1 - 1}} \\
 &= \frac{18.91}{\sqrt{41 - 1}} \\
 &= \frac{18.91}{\sqrt{40}} \\
 &= \frac{18.91}{6.32} \\
 &= 2.99
 \end{aligned}$$

f. Determining standard error of mean variable II with formula:

$$\begin{aligned}
 SE_{M_y} &= \frac{SD_2}{\sqrt{N_2 - 1}} \\
 &= \frac{20.22}{\sqrt{38 - 1}} \\
 &= \frac{20.22}{\sqrt{37}} \\
 &= \frac{20.22}{6.08} \\
 &= 3.32
 \end{aligned}$$

g. Determining standard error of mean difference variable X and variable Y with formula:

$$\begin{aligned}
 SE_{M_1 - M_2} &= \sqrt{SE_{M_1}^2 + SE_{M_2}^2} \\
 &= \sqrt{2.99^2 + 3.32^2} \\
 &= \sqrt{8.94 + 11.02} \\
 &= \sqrt{19.96} \\
 &= 4.46
 \end{aligned}$$

h. Analyzing the result by using calculation of the t-test as follow:

$$\begin{aligned}
 t_o &= \frac{M_1 - M_2}{SE_{M_1 - M_2}} \\
 &= \frac{57.27 - 43.55}{4.46} \\
 &= \frac{13.72}{4.46} \\
 &= 3.07
 \end{aligned}$$

- i. Determining degrees of freedom (df) with formula:

$$\begin{aligned}
 df &= (N_1 + N_2) - 2 \\
 &= (41 + 38) - 2 \\
 &= 79 - 2 \\
 &= 77 \\
 3.07 & 1.99
 \end{aligned}$$

From the data, that mean of pre-test score obtained by students of VII B & D as experimental class = 24.88 and the pre-test score obtained by students of VIII A & C as control class = 27.79. the highest score in two classes was different that was VII B & D as experimental class got 88 and VIII A & C as control class got 70. And the lowest score of pre-test in both classes was 2 for experimental and 3 for control class.

Then, the means of post-test at the experimental score = 57.27 was greater than control class = 43.55 the highest score of post-test at experimental class got 94 and control class got 83, and the lowest post-test score of experimental class is 17, and the lowest post-test score of control class is 13.

According to the statistical calculation above, the value of t_o is 3.07 and the degree of freedom is 77 with 5% degree of significance used by the researcher. Based on the significance, it can be seen that on $df = 77$ in significance 5% the value of t_{table} 1.99 by comparing the result of the t_{table} and t_o in the degree of significance of 5%, $t_o > t_{table} = 3.07 > 1.99$. From the result of statistical calculation, it was obtained the t-observation t_o was 3.07; meanwhile, the t-table (t_{table}) of df 77

in significance 5% was 1,99. It means t-observation (t_o) was higher than t-table (t_{table}), so null hypothesis (H_o) rejected and alternative hypothesis (H_a) is accepted.

C. Interpretation of the Data

In this research, the researcher described the interpretation of the research findings and testing the hypothesis of research. The research was held to answer the question How is the students' reading comprehension on the narrative text of the eighth grade of Islamic Boarding School Daar Al Ilmi Cikulur? How is the effectiveness of predicting strategy in teaching reading narrative text of the eighth-grade students of Islamic Boarding School Daar Al Ilmi Cikulur? In order to answer the question the researcher formulated the Null Hypothesis (H_o) and the Alternative Hypothesis (H_a) as follow:

H_a (Alternative Hypothesis) : there is a significant difference of students' reading comprehension achievement between students who are taught using prediction strategy and students who are taught without using prediction strategy.

H_o (Null Hypothesis) : there is not significant difference of students reading comprehension achievement between students who are taught using prediction strategy and students who are taught without using prediction strategy.

The assumption of this hypothesis of this hypothesis as follow :

If $t_o > t_{table}$ the Null Hypothesis is rejected and Alternative Hypothesis is Accepted. It means there is a significant difference of students' reading

comprehension achievement between students who are taught using prediction strategy and students who are taught without using prediction strategy.

The researcher summarized that $t_o > t_{table}$ it means that the Null Hypothesis is rejected and Alternative Hypothesis is accepted. The researcher analyzed the result of calculation that H_o rejected and H_a is accepted. It can be seen from the calculation of t-test that shows that in the degree of significance of 5%, $t_o > t_{table} = 7.35 > 1.99$. From the result of statistical calculation, it was obtained the t-observation t_o was 3.07; meanwhile, the t-table (t_{table}) of df 77 in significance 5% was 1,99. It means t-observation (t_o) was higher than t-table (t_{table}), so null hypothesis (H_o) rejected and alternative hypothesis (H_a) is accepted.

Based on the data above, the study can be inferred that prediction strategy has effect on students' reading comprehension. Besides, the data also show that the increasing of learning reading skill caused by using prediction strategy to solve the problem that has thought in the statement of problem. The researcher use prediction strategy to build their background knowledge and also to give motivation in learning reading. As the researcher state that the problem of students in learning reading. So that, the researcher used prediction strategy to teach reading comprehension in order to build the connections from their own knowledge, prior knowledge and experience so when they read a text they interest to the text and comprehend a text easely.

Besides that, the researcher used prediction strategy and implement it by graphic organizer, because graphic organizer include both words and visual images

and facilitate the integration of long-term memory and new learning.¹ So the student will more interest and generally have more background and long-term knowledge.

In applying prediction strategy in narrative text would be used the media. The media which would be used is picture. The use of picture are more sufficient and practices than words, they are easier to recall and to remember than words, further more they expose real life situation although it happened a long time ago. Picture is used to help presenting information to the class. So, the picture is very important to use in narrative text by applying prediction strategy to make the students easier in predicting the picture correctly and the students can be attentive, energetic, understanding of the text well.

There are some advantages of teaching prediction strategy, they are:

1. Predicting helps students set a purpose for reading and anticipate what students will read.
2. Making a reviewing prediction helps students interact with the text.
3. Predictions help connect students prior knowledge with the information being learned.
4. Predictions help students' developmental models that they can use whenever they read.
5. Mental models help students remember what they have read.

¹ Katherine McKnight. *The Teacher's Big Book of Graphic Organizer*. (San Francisco: Jossey-Bas, 2010), 1.

6. By supporting student prediction with evidence from the text, they develop critical thinking skills and improve comprehension.²

² Musrafidin Simanullang & Elida Susi. "Improving Students' Reading Comprehension of Descriptive Text by Applying Prediction Strategy". *Tapanuli*, Vol. 1, No. 1, (August 2018), 185