

CHAPTER IV

RESULT AND DISCUSSION

A. Description of Data

Before analyzing the data, the researcher is going to give some explanation. In conducting this research took two group from two classes as the sample in the research. Each class consist of 29 and 30 students. The two classes named as experimental group and control group. Class VIII C is the experimental group and class VIII A is the control group of MTsN 1 Kota Serang – Banten.

The researcher collected some data by giving text, so, it concerned on the test result. The researcher collected the data from experimental group and control group. First, the researcher analyzed the experimental group' data and then analyzed the control group' data. The result of the pre-test and posttest in experimental and control group is presented as follows:

1. Experimental Class.

There were 29 students in pre-test and post-test of experimental class.

Below is the table of vocabulary test result of experimental class:

Table 4.1

The students' pre test and post test score of students' class VIII C.

No	NAME	SCORE	
		Pre test	Post test
1	AHN	52	80
2	ANN	24	40
3	DFR	20	48
4	FA	20	52
5	HND	24	32
6	ICE	24	24
7	KHA	36	48
8	MRO	36	44
9	MGH	28	44
10	MFH	20	40
11	MKA	28	48
12	MAP	28	48

13	MDF	20	36
14	MRH	20	24
15	NAA	24	40
16	NN	12	36
17	NAG	24	40
18	NZ	28	28
19	NMJ	24	52
20	NMN	24	32
21	NNK	28	28
22	P	24	24
23	RNS	28	56
24	RFI	16	32
25	RR	20	48
26	SHS	24	48
27	SAS	24	48
28	SMN	20	60

29	ZAP	24	56
N= 29	TOTAL	724	1236
	AVERAGE	24,9655	42,6206

The table 4.1 above shows the result of the students' pre test and post test scores in pronunciation before the researcher given them a treatment and after given them a treatment using spelling bee as a teaching media. The average score of experimental class pre test is 24,96 and post test 42,62. While the result of post test of the experimental class are better after the researcher give students the treatment.

Based on the explanation above, the reseacher get the result that there is a significance improvement after given treatment. It can be seen from the average score of pro test that $42,62 > 24,96$ of pre test. It means that using spelling bee game as teaching media to improve students pronunciation was success. It can described as follow.

2. Control Class

The writer describes that result of pre test of control class on the table bellows:

Table 4.2

The students' pre test and post test of students' class VIII A

No	NAME	SCORE	
		Pre test	Post test
1	ANS	16	24
2	AV	24	48
3	AR	40	40
4	DNA	28	32
5	ES	32	36
6	EPR	36	36
7	EDL	32	36
8	GMA	28	40
9	HD	32	64
10	KRS	28	32
11	KAM	24	48

12	KKS	20	32
13	LRK	16	24
14	MDZ	28	28
15	MRN	28	28
16	NM	32	32
17	RNH	24	36
18	RNF	28	40
19	RO	20	32
20	RA	24	52
21	RCI	24	24
22	RST	28	28
23	SMS	28	60
24	SFP	36	40
25	SA	32	64
26	SF	32	44

27	TAH	24	36
28	TAS	28	32
29	VM	28	60
N=29	TOTAL	800	1128
	AVERAGE	27,58620	38,8965

The table 4.2 above shows the result of the students' pre test and post test scores in pronunciation. The average score of control class pre test is 27,58 and post test is 38,89. While the result of post test of the control class are better after the researcher give students the treatment. It can described as follow.

Based on the explanation above, it shows that the result of control doesn't have the significance improvement after given treatment given treatment. It can be seen from the average score of post test that is $38,89 > 27,58$ of pre test. This class also experienced improvement but lower than experimental class.

B. Data Analysis

1. Experimental Class

The researcher write show the analysis data by comparing student's score in pre test and post test. It can be seen on the table bellows:

Table 4.3

The difference score between pre test and post test experiment class

NO	NAME	TEST		DEVIATIO N	SQUARRED DEVIATION
		X1 (Pre-test)	X2 (Post-test)	(X=X2-X1)	X ²
1	AHN	52	80	28	784
2	ANN	24	40	16	256
3	DFR	20	48	28	784
4	FA	20	52	32	1024
5	HND	24	32	8	64
6	ICE	24	24	0	0

7	KHA	36	48	12	144
8	MRO	36	44	8	64
9	MGH	28	44	16	256
10	MFH	20	40	20	400
11	MKA	28	48	20	400
12	MAP	28	48	20	400
13	MDF	20	36	16	256
14	MRH	20	24	4	16
15	NAA	24	40	16	256
16	NN	12	36	24	576
17	NAG	24	40	16	256
18	NZ	28	28	0	0
19	NMJ	24	52	28	784
20	NMN	24	32	8	64
21	NNK	28	28	0	0

22	P	24	24	0	0
23	RNS	28	56	28	784
24	RFI	16	32	19	361
25	RR	20	48	28	784
26	SHS	24	48	24	576
27	SAS	24	48	24	576
28	SMN	20	60	40	1600
29	ZAP	24	56	32	1024
TOTAL		724	1236	515	12489

The table 4.3 above shows that there are the differences between pre test and post test score of the experimental class. The difference score is the result of the post test score is subtracted by pre test score. So that, there are significant differences between pre test and post test score of the experimental class, the highest difference score is 32 and the lowest 0.

2. Control Class

The researcher write show the analysis data by comparing student's score in pre test and post test. It can be seen on the table bellows:

Table 4.4

The difference score between pre test and post test control class

NO	NAME	TEST		DEVIATIO N	SQUARRED DEVIATION
		X1 (Pre-test)	X2 (Post-test)	(X=X2-X1)	X ²
1	ANS	16	24	8	64
2	AV	24	48	24	576
3	AR	40	40	0	0
4	DNA	28	32	4	16
5	ES	32	36	4	16
6	EPR	36	36	0	0
7	EDL	32	36	4	16

8	GMA	28	40	12	144
9	HD	32	64	32	1024
10	KRS	28	32	4	16
11	KAM	24	48	24	576
12	KKS	20	32	12	144
13	LRK	16	24	8	64
14	MDZ	28	28	0	0
15	MRN	28	28	0	0
16	NM	32	32	0	0
17	RNH	24	36	12	144
18	RNF	28	40	12	144
19	RO	20	32	12	144
20	RA	24	52	28	184
21	RCI	24	24	0	0
22	RST	28	28	0	0

23	SMS	28	60	32	1024
24	SFP	36	40	4	16
25	SA	32	64	32	1024
26	SF	32	44	12	144
27	TAH	24	36	12	144
28	TAS	28	32	4	16
29	VM	28	60	32	1024
TOTAL		800	1128	328	6664

The table 4.4 above shows that there are differences between pre test and post test score of the control class. The different score is the result of the post test score is subtracted by pre test score. So that, there is no significant different between pre-test and post-test score of control class, highest 32 and lowest 0.

C. Statistical Hypothesis Testing

To test the hypothesis the data obtained from both pre-test and post-test are analyzed and calculated by using formula. From the above data is gotten, the writer t-test calculated using steps as follow:

1. Determine mean of score experimental class (MX), with formula:

$$\begin{aligned}MX &= \frac{\Sigma X}{N} \\ &= \frac{515}{29} \\ &= 17,75\end{aligned}$$

The result above showed about the average score (mean) at the experimental class. The researcher got the data from ΣX_1 , ΣX_2 , ΣX . The researcher calculated the data based on the formula above.

2. Determine mean score control class (MY), with formula:

$$\begin{aligned}MY &= \frac{\Sigma Y}{N} \\ &= \frac{328}{29} \\ &= 11,31\end{aligned}$$

The result above showed about the average score (mean) at the control class. The researcher got the data from ΣY_1 , ΣY_2 , ΣY . The researcher calculated the data based on the formula above.

3. Determine the total square of error in experimental class (X), with:

$$\begin{aligned}
 \Sigma X^2 &= \Sigma X^2 - \frac{(\Sigma X)^2}{N} \\
 &= 12489 - \frac{(515)^2}{29} \\
 &= 12489 - \frac{265225}{29} \\
 &= 12489 - 9145,68 \\
 &= 3343,32
 \end{aligned}$$

The result above showed about the quadrates score at the experimental class. The researcher got the data from ΣX_1 , ΣX_2 , ΣX . The researcher calculated the data based on the formula above.

4. Determine the total square of error in control class (Y), with:

$$\begin{aligned}
 \Sigma Y^2 &= \Sigma Y^2 - \frac{(\Sigma Y)^2}{N} \\
 &= 6664 - \frac{(328)^2}{29} \\
 &= 6664 - \frac{107584}{29} \\
 &= 6664 - 3709,79
 \end{aligned}$$

$$= 2954,21$$

The result above showed about the quadrates score at the control class. The researcher got the data from ΣY_1 , ΣY_2 , ΣY . The researcher calculated the data based on the formula above.

5. Calculation T-Test

$$t = \frac{MX - MY}{\sqrt{\left(\frac{\Sigma X^2 + \Sigma Y^2}{NX + NY - 2}\right)\left(\frac{1}{29} + \frac{1}{29}\right)}}$$

$$t = \frac{17,75 - 11,31}{\sqrt{\left(\frac{3343,32 + 2954,21}{29 + 29 - 2}\right)\left(\frac{1}{29} + \frac{1}{29}\right)}}$$

$$t = \frac{6,44}{\sqrt{\left(\frac{6297,53}{56}\right)\left(\frac{1}{29} + \frac{1}{29}\right)}}$$

$$t = \frac{6,44}{\sqrt{(112,45)(0,068)}}$$

$$t = \frac{6,44}{\sqrt{7,646}}$$

$$t = \frac{6,44}{2,765}$$

$$t = 2,329$$

The result above showed about the calculating t-test after the researcher got the data from \bar{M}_X , \bar{M}_Y , ΣX^2 , and ΣY^2 . The researcher calculated the data based on the formula above.

6. Determine the t_{table} , with significance 5% :

$$\begin{aligned} Df &= N_x + N_y - 2 \\ &= 29 + 29 - 2 \\ &= 56 \end{aligned}$$

Based on the calculation above is known that t_{table} with significant 5% = 1,68 $t_{observation} = 2,329 > t_{table} = 1,68$. It is conclude that rejected $H_0: t_o < t_t$: it means there is no significant of using spelling bee game in teaching pronunciation. and accepted $H_a: t_o > t_t$: it means there is significant of using spelling bee game in teaching pronunciation.

Comparing “t” has been tested in calculating ($t = 2,329$) and the degree of freedom (df) for 56, the writer used the closest “df” from $58 - 2 = 56$. So, the degree of freedom is 56. It can be known that $t_o > t_t$ 5% . It means $1,68 < 2,329$.

D. Interpretation of Data

The data shows that the teaching pronunciation at eighth grade of MTsN 1 Kota Serang before conducted by experiment to apply spelling bee game as teaching media between VIII C as an experimental class and VIII A as an control class is not different significantly. The mean of the pre-test scores obtained by VIII C students as experimental class was 27,58 and pre-test scores obtained by VIII A students as control class was 24,95. The highest score of both classes were same in class VIII C as experimental class got 52 and in the class VIII A as control class got 36. For the lowest score of both classes were same too in class VIII C got 12 and in the class VIII A got 16.

Besides the data also shows that the the teaching pronunciation at eighth grade of MtsN 1 Kota Serang before conducted by experiment to apply spelling bee game as teaching media between VIII C as an experimental class and VIII A as an control class is different significantly. The mean of post-test scores obtained by class VIII C as experimental class was 42,62 and post-test scores obtained by VIII A as control class was 38,89. The highest score in class VIII C as experimental class got 80 and in the class VIII A as control class got 64. For the lowest score of both classes were same too in class VIII C got 24 and in the class VIII A got 24. The distribution score of experimental class was $42,62 - 24 = 18,62$. While in the control class was $38,89 - 24 = 14,89$.

Hypothesis testing is used to know the significance of both variables, and tested as follow:

$$H_a = t_o > t_t$$

$$H_o = t_o < t_t$$

To prove the data hypothesis, the data obtained from an experimental class and control class are calculated by using t-test formula with the assumption below :

If $t_o > t_t$: the alternative hypothesis is accepted. It means there is a significant effect in using spelling bee game in teaching pronunciation at eighth grade students' of MtsN 1 Kota Serang.

If $t_o < t_t$: the alternative hypothesis is rejected. It means there is no significant effect in using spelling bee game in teaching pronunciation at eighth grade students' of MTsN 1 Kota Serang.

From the result conclusion above, the value of $t_o = 2,329$ the degree of freedom (df) = 56. The researcher use degree of significant 5% = 1,68. It's mean that H_a (Alternative Hypothesis) of the researcher is accepted and H_o (Null Hypothesis) of the researcher compres both degree of significance 5% $t_o > t_t$ $2,329 > 1,68$ means that the alternative hypothesis of this research is accepted. So, it can be conclude, there is a significant effect in using spelling bee game in teaching pronunciation at eighth grade students' of MTsN 1 Kota Serang.

This research is said to be successful because researchers used new media and methods in schools. so, students more easily and quickly understand the pronunciation and practice it. The results of the developmental research were seen from the Experimental class compared to the control class.

This study has the same results from the journal Rista Nuralita, with the title "Improving English Vocabulary Pronunciation Skill Using Flash Video. In this study explains that by using flash video there is an increase in pronunciation skills in students, with cycle 1 of 65.15% and cycle 75.86%, from the development of the cycle it is clear that there is an increase in vocabulary pronunciation using flash video media.¹

¹ Nuralita, Rista, "Improving English Vocabulary Pronunciation Using Flash Video". p 2251