CHAPTER IV RESULT AND DISCUSSION

A. Research Findings

In this chapter, the writer explained the result of the research. The writer attempt to submit the data as outcomes of research has hold in second Grade of SMKN 1 MALINGPING. The writer took 55 students as a subject this research. It is divided into two classes. They were 28 students from PJP 2 as the experimental class and 27 students from PJP 1 as the control class.

The data of this research were the score of the students' pre-test and post-test both experimental class and control class. The score of pre-test was taken before the treatment, while the score of post-test was taken after the treatment. In giving test, the students were asked to describe about their own home using media diorama. Then the test was evaluated by concerning the five components of

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speaking: accent, grammar, vocabulary, fluency and comprehension. Each component had its score.

No	Learning Actives	Date of Research
1.	Pre-test control class	29 th of April 2018
2.	Pre-test experiment class	1 st of May 2018
3.	Treatment of control class I	6 th of May 2018
4.	Treatment of experiment class II	8 th of May 2018
5.	Post-test of control class	13 th of May 2018
6.	Post-test of experiment class	15 th of May 2018

Table 4.1 The Research Schedule

1. The Students Pre-Test Score Control Class

The students' pre-test score of control class could be shown on table 1 as follows:

			Α	SPEC	Т	-		
NO.	NAME	Accent	Grammar	Vocabulary	Fluency	Comprehension	Amount	Category
1	ATA	2	6	16	10	12	58	С
2	An	2	18	8	6	12	34	D
3	AS	3	18	12	8	15	56	С
4	Ci	2	6	8	8	8	32	D
5	EK	2	6	8	8	12	36	D
6	ES	2	12	8	4	8	34	D
7	EP	2	12	8	6	12	40	D
8	FA	2	6	8	4	12	32	D
9	HM	2	6	4	6	12	30	D
10	Π	3	24	16	10	19	72	В
11	IL	2	12	8	6	12	40	D
12	JH	3	24	16	8	15	66	В
13	LJ	2	18	8	8	12	48	С
14	MI	2	6	8	8	8	32	D
15	MA	2	12	8	4	8	34	D
16	MA	2	12	8	6	12	40	D

Table 4.2 Students' Score of Pre-Test of control Class

17	MZ	2	6	8	6	8	30	D
18	MA	2	12	12	8	15	49	С
19	NZ	2	6	4	4	8	24	Ε
20	NH	3	18	12	6	15	54	С
21	NR	2	12	16	10	12	52	С
22	OS	2	8	12	8	8	38	D
23	PF	1	8	6	6	8	29	D
24	RK	2	8	8	8	18	44	С
25	RA	2	12	12	6	12	44	С
26	Ro	2	12	8	8	14	44	D
27	WW	2	24	12	10	12	60	С
	TOTAL						1152	

Determine mean of pre-test control class by formula

 $M_{1=\frac{\sum X_1}{N_1}}$

M1 : mean of pre-test

- : Total Score
- N1 : Number of sample
- $M_{1=\frac{\sum X_1}{N_1}}$

$$M_{1} = \frac{1152}{27} = 42.7$$

The table above shows us about the students' pretest score of control class based on criteria in speaking skill. The data shows that the lowest score of pre-test is 24 and the highest score is 72 and the average score of pretest is 42.7.

2. The Students Post-Test Score Control Class

The students' post-test score of control class could be shown on table 4 as follows:

			1	ASPE	СТ			
NO.	NAME	Accent	Grammar	Vocabulary	Fluency	Comprehension	Amount	Category
1	ATA	2	18	16	10	15	61	С
2	An	2	12	8	6	12	40	D
3	AS	3	18	16	8	15	60	С
4	Ci	2	12	8	6	12	40	D
5	EK	2	12	12	8	12	46	С
6	ES	2	12	8	6	12	40	D
7	EF	2	12	8	8	15	45	С
8	FA	2	12	12	6	12	44	С
9	HM	2	12	8	6	12	40	D
10	Π	2	12	12	8	12	46	D
11	IL	2	18	12	8	12	52	С
12	JH	2	18	12	8	15	55	С
13	LJ	2	18	16	8	15	59	С
14	MI	3	24	20	10	19	76	B
15	MA	2	12	8	6	15	43	С
16	MA	3	24	16	10	19	72	В
17	MZ	2	6	8	6	12	34	D
18	MA	2	12	16	8	15	53	С
19	NZ	2	12	8	6	8	36	D
20	NH	3	18	12	8	15	56	С
21	NR	2	12	16	10	15	55	С
22	OS	2	12	16	8	12	40	D

Table 4.3 Students' Score of Post-Test of Control Class

23	PF	2	6	8	6	12	34	D
24	RK	2	8	12	8	19	49	D
25	RA	2	18	16	6	15	57	C
26	Ro	12	12	12	8	15	51	C
27	WW	2	24	16	10	15	67	B
	TOTAL						1351	

Determine mean of post-test control class by formula

 $M_{2=\frac{\sum X_2}{2}}$

M2 : Mean of post test

: Total Score

N2 : Number of sample

$$M_{2=\frac{\sum X_2}{N_2}}$$

$$M_{2=}\frac{1351}{27}$$

 $M_2 = 50.03$

The table above shows us about the students' post-test score of control class based on criteria in speaking skill. The data shows that the lowest score of post-test is 76 and the highest score is 34 and the average score of post -test is 50.03.

3. The Students Pre-Test Score of Experimental Class

The students' pre-test score of experimental class could be shown on table 1 as follows:

			Α	SPEC	Г			
NO.	NAME	Accent	Grammar	Vocabulary	Fluency	Comprehension	Amount	Category
1	As	2	12	12	6	12	44	С
2	AP	1	6	8	6	12	33	D
3	DH	2	12	12	8	12	46	С
4	Eh	2	12	8	8	12	42	D
5	EN	2	6	12	8	8	36	D
6	Em	2	12	8	8	12	42	D
7	FN	2	12	8	6	12	40	D
8	FR	2	12	12	6	8	40	D
9	Hi	2	6	8	4	8	28	D
10	Hh	1	6	8	6	12	33	D
11	JW	2	12	8	8	12	42	D

Table 4.4 Students' Score of Pre-Test of Experimental Class

12	MR	2	12	12	6	16	48	С
13	MS	2	12	12	8	12	46	С
14	MH	2	12	12	8	12	46	С
15	MH	2	12	12	8	12	46	С
16	NH	2	12	8	6	12	40	D
17	NY	2	12	12	8	12	46	С
18	NN	2	12	8	8	12	42	D
19	NDS	2	6	12	6	12	38	D
20	RY	2	12	12	8	15	49	С
21	PS	2	16	12	8	15	53	С
22	RA	2	12	12	8	15	49	С
23	REA	2	12	8	8	12	42	D
24	RFN	2	12	8	8	12	42	D
25	RH	3	24	16	10	15	68	B
26	SJ	3	30	20	10	19	82	В
27	SP	2	16	12	8	12	50	D
28	SU	2	18	16	8	15	59	D
		TOT	'AL				1272	

Determine mean of pre-test experimental class by formula

$$M_{1=\frac{\sum X_1}{N_1}}$$

M1 : Mean of pre-test

- : Total Score
- N1 : Number of sample

$$M_{1=\frac{\sum X_1}{N_1}}$$
$$M_{I=\frac{1272}{28}}$$

 $M_{1} = 45.42$

The table above shows us about the students' pretest score of experimental class based on criteria in speaking skill. The data shows that the lowest score of pre-test is 28 and the highest score is 82 and the average score of pre-test is 45.42

4. The students post-test score experimental class

The students' post-test score of experimental class could be shown on table 1 as follows:

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			ASP	ЕСТ				
NO.	NAME	Accent	Grammar	Vocabulary	Fluency	Comprehension	Amount	Category
1	As	2	18	16	8	19	63	В
2	AP	2	18	12	8	15	55	С
3	DH	2	18	16	8	19	63	В
4	Eh	2	18	16	8	15	59	С
5	EN	2	16	12	8	15	53	С
6	Em	2	18	12	8	12	52	С
7	FN	2	18	16	8	15	59	С
8	FR	2	18	16	8	12	56	С
9	Hi	2	12	16	8	12	50	С
10	Hh	2	16	16	10	15	59	С
11	JW	2	18	16	8	15	59	С
12	MR	2	18	16	10	19	65	В
13	MS	2	18	16	10	19	65	В
14	MH	2	18	16	10	15	61	С
15	MH	2	24	12	10	15	63	В
16	NH	2	18	16	8	19	63	В
17	NY	2	18	12	10	19	61	С
18	NN	2	18	16	8	19	63	В
19	NDS	2	18	16	10	15	61	С
20	RY	2	18	16	10	19	65	В
21	PS	2	18	20	8	15	63	В

Table 4.5 Students' Score of Post-Test of Experimental Class

22	RA	2	18	16	10	19	65	В		
23	REA	2	18	16	10	15	61	С		
24	RFN	2	24	12	10	15	63	B		
25	RH	3	24	24	10	19	80	В		
26	SJ	2	20	16	8	19	65	В		
27	SP	2	18	20	10	15	65	В		
28	SU	3	30	20	10	23	86	Α		
	TOTAL									

Determine mean of pre-test experimental class by formula

 $M_{2} = \frac{\sum X_{2}}{2}$ M2 : Mean of post test $\sum : \text{Total Score}$ N2 : Number of sample $M_{2} = \frac{\sum X_{2}}{N_{2}}$

$$M_{2=} \frac{1743}{28}$$

 $M_2 = 62.25$

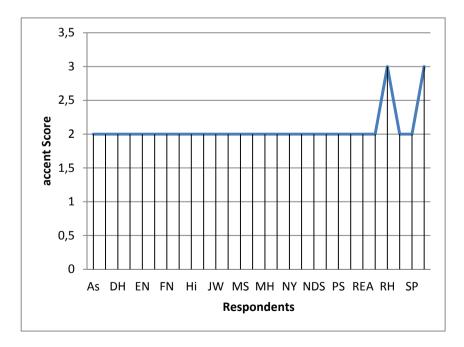
The table above shows us about the students' posttest score of experimental class based on criteria in speaking skill. The data shows that the lowest score of post-test is 50 and the highest score is 86 and the average score of post -test is 62.25.

B. Data Description

This data description took from the aspect of students' speaking in experiment class after the researcher gave the treatment.

Graphic 4.1

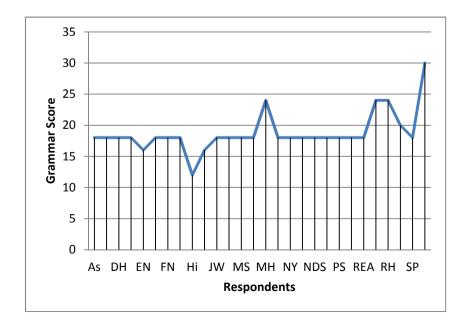
The Aspect of Students' Accent Speaking Post-Test Experiment Class



Based on the graphic linear of students' speaking accent above, it can be seen the highest score was 3 and most of the students got 2. It means after the researcher gave the treatment to the students in experiment class. The students still have the difficulties in accent because they still applied their mother tongue such as they translated the sentence word by word such as "his goo look" it should be "he is good looking".

Graphic 4.2

The Aspect Of Students' Grammar In Speaking Post-



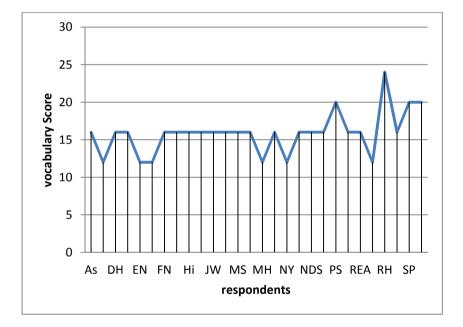
Test Experiment Class.

After the researcher gave the treatment to experiment class, there were improvements in students' grammar. It can be seen from the graphic above the higher score was 30 it means the students few errors, with no patterns of failure and the lowest score was 12 it means the students still constant errors showing control of very few major patterns and frequently preventing communication. But most of students got score 18 it means most of the students' have frequent errors showing some major patterns uncontrolled and causing occasional irritation and misunderstanding in grammar and most of the students have difficulties in tenses and subject and verb.

Graphic 4.3

The Aspect of Students' vocabulary In Speaking Post-Test

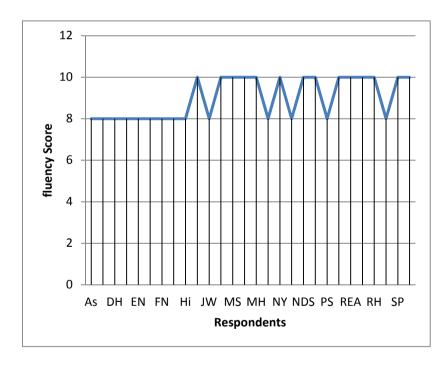
Experiment Class.



In vocabulary the students in experiment class have improvement after the treatment, before the treatment the students' very lack in vocabulary. The highest score in the graphic above was 24 it means that student has vocabulary apparently as accurate and extensive as that of an educated native speaker and the lowest score was 12 it means the student choice of word sometimes inaccurate, limitations of vocabulary prevent discussion of some common professional and social topic such as "Taidy" it should be "Tidy".

Graphic 4.4

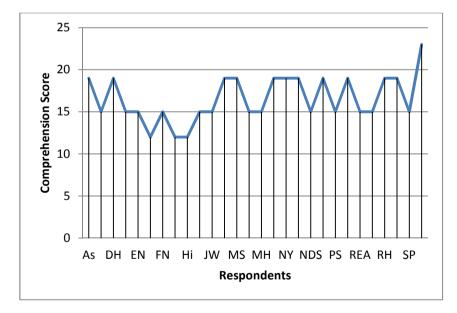
The Aspect of Students' Fluency In Speaking Post-



Researcher want to always motivate the students for always confidence to speak English. So that, from the graphic above it can be seen the students got good sore in fluency, there were 14 students who got 10 it means the students Speech was effortless and smooth, but predictably nonnative in speak and evenness.

Graphic 4.5

The Aspect of Students' Comprehension In Speaking Post-Test Experiment Class



The researcher gave the explanation about the material (descriptive text) and the treatment to the students in experiment

class using media diorama, the majority of the students have good improvement. It can be seen from the graphic above most of the students got 19, it means understand everything in normal educated conversation, except for very colloquial or low frequency items or exceptionally rapid or slurred speech and the highest score was 23.

C. Data Analysis

Based on data above, the writer arranges the students' pretest and post-test from lower to higher as follows

Table 4.6

Single Arrangement of Students Pre-Test Control Class

24	29	30	30	32	32	32	34	34	34	36	38	40	40
40	42	44	44	48	49	52	54	56	58	60	66	72	

Table 4.7

Single Arrangement of Students Post-Test Control Class

34	34	36	40	40	40	40	40	43	44	45	46	46	49
51	52	53	55	55	56	57	59	60	61	63	72	76	

Table 4.8

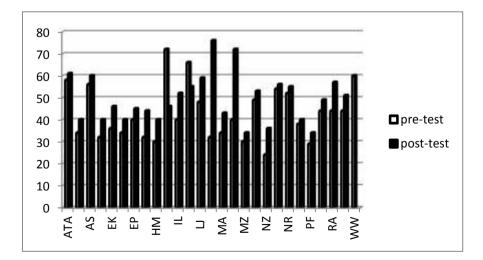
Students' score pre-test and post-test control class

Score description	Pre-test	Post-test
Highest score	24	34
Lowest score	72	76
Mean score	42.7	50.03

Based on the table above, the highest score of students pre-test was 72 while in post-test was 76. The lowest score of students in pre-test was 24 while in post-test was 34. Mean of students score in pre-test was 42.7 while the mean score of posttest was 50.03.

Graphic 4.6

Pre- Test and Post Test Score In Control Class



Based on graphic above, it showed that the result of control class did not have the significant improvement, It is seem from average score of post-test that is score of pre-test 50,03> 42,7. This class also realized can effect improvement but lower than experimental class.

Table 4.9

Single arrangement of students pre-test experiment class

28	33	33	36	38	40	40	40	42	42	42	42	42	42
44	46	46	46	46	46	46	48	49	50	53	59	68	82

Table 4.7

Single arrangement of students post-test experiment class

50	52	53	55	56	59	59	59	59	61	61	61	61	63
63	63	63	63	63	63	63	65	65	65	65	65	80	86

From the single arrangement that showed the score of experiment class there was different. The data showed that media diorama activities were proved students development in students speaking skill. From the detail description showed on table below:

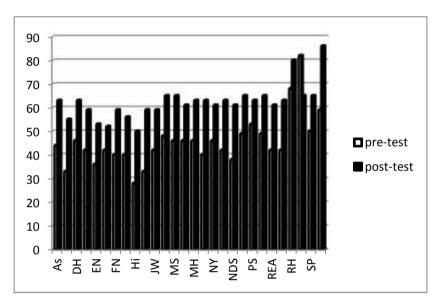
Table 4.8

Students' score pre-test and post-test experiment class

Score description	Pre-test	Post-test
Highest score	82	86
Lowest score	28	50
Mean score	45.32	62.17

Based on the table above, the highest score of students pre-test was 82 while in post-test was 86. The lowest score of students in pre-test was 28 while in post-test was 50. Mean of students score in pre-test was 45.42 while mean score of post- test was 62.25





Class

Based on graphic above, it showed that the result of experimental class got the significant improvement after giving treatment. It is seemed from average score of post-test is better than the pre-test.

After getting the data from pre-test and post-test score of two classes, the writer analyzed it by using t-test formula with the degree of significant 5% and 1%, the writer used step as follows:

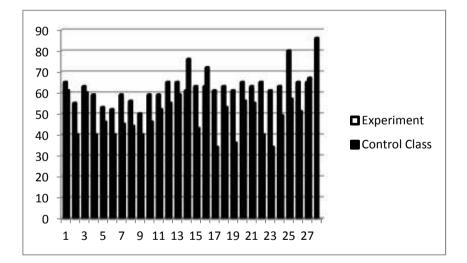
NO	SCO	ORE	X1	X2	V12	V 2 ²
NO	X1	X2	(X1-M1)	(X2-M2)	X1²	X2²
1	65	61	2.68	10.97	4225	3721
2	55	40	-7.32	-10.03	3025	1600
3	63	60	0.68	9.97	3969	3600
4	59	40	-3.32	-10.03	3481	1600
5	53	46	-9.32	-4.03	2809	2116
6	52	40	-10.32	1.96	2704	1600
7	59	45	-3.32	8.97	3481	2025
8	56	44	-6.32	-6.03	3136	1936
9	50	40	-12.3	-10.03	2500	1600
10	59	46	-3.32	4.03	3481	2116
11	59	52	-3.32	1.97	3481	2704
12	65	55	2.68	4.97	4225	3025
13	65	59	2.68	8.97	4225	3481
14	61	76	-1.32	25.97	3721	5776
15	63	43	0.68	-7.03	3969	1849
16	63	72	0.68	21.98	3969	5184
17	61	34	-1.32	-16.03	3721	1156
18	63	53	0.68	2.97	3969	2809
19	61	36	-1.32	-14.03	3721	1296
20	65	56	2.68	5.97	4225	3136
21	63	55	0.68	4.97	3969	3025
22	65	40	2.68	-10.03	4225	1600
23	61	34	-1.32	-16.03	3721	1156
24	63	49	0.68	-1.03	3969	2401
25	80	57	17.68	6.97	6400	3249
26	65	51	2.68	0.97	4225	2601
27	65	67	2.68	16.97	4225	4489
28	86		23.68		7396	
Σ	1745	1351			110167	70851
AVERAGE	62.32143	50.03704				

 Table 4.9 The Score of Distribution Frequency

Note:

- X1 = Score Post-Test (Experimental Class)
- X2 = Score Post-Test (Control Class)
- $X_1 = X1-M_1 (Mean X1)$
- $X_2 = X2-M_2 \text{ (Mean X2)}$
- X_1^2 = The squared value of X_1
- X_2^2 = The squared value of X_2

Graphic 4.8



The Score of Distribution Frequency

Based on the graphic above the experimental class= 1741 that higher than control class= 1347 had different value. The experimental class was higher than the control class.

From the table above, the writer got the data X1=1745, X2=1351, X_1^2 = 1001.67, and X_2^2 = 7085.1, whereas N₁=28 and N₂=27.

After getting the data from pre-test and post-test, the writer analyzed it by using statistic calculation of t-test formula with the degree of significance 5% and 1% the formula as follow:

1. Determine mean of variable X1 and X2

Variab	le X1	Variabl	Variable X2			
$M_1 =$	X1	$M_2 =$	X2			
	$\overline{N_1}$		N ₂			
$M_1 =$	1745	$M_2 =$	1351			
	28		27			
	=62.32		= 50,04			

2. Determine t-test

$$t = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right)\left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

t	62.32 - 50,04
ι –	$\overline{\sqrt{\left(\frac{1001.67+7085.1}{28+27-2}\right)\left(\frac{28+27}{28.27}\right)}}$
	12,28
	$\sqrt{(152,58)(0.073)}$
	$=\frac{12.28}{\sqrt{(11,100)}}$
	$=\frac{12.28}{3,33}$
	=3,69

Note :

M_1	= The average score of experimental class				
	(Mean X1)				
M_2	= The average score of control class (Mean X2)				
X_{1}^{2}	=Sum of the squared deviation score of				
	experimental class				
X_2^2	= Sum of the squared deviation score of control				
	class				
N_1	= The number of student of experimental class				
N_2	= The number of student of control class				
2	= Constant number				

3. Degree of Freedom

df =
$$(N1+N2)-2$$

= $(28+27)-2$
= 53

There is no degree of freedom for 53, so the writer uses the closer df from 53. In degree of significance 5% from 53 $t_t =$ 1.67 and in degree of significance 1% from 53 $t_t =$ 2.39.

Based on the result statistic calculation, it is obtained that the score of t_o is = 3.69> t_t = 1.67 in degree of significance 5%. The score of t_o = 3,69 > t_t = 2.39 in degree of significance 1%. To prove the hypothesis, the data obtained from the experimental class is calculated by using t-test formula with assumption as follow:

- If t_{observation}> t_{table}: The alternative hypothesis is accepted. It means there is a significant effectiveness of media diorma activity to improve students speaking skill.
- If $t_{observation} < t_{table}$: The alternative hypothesis is rejected. It means there is no significant effectiveness of

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media diorama activity to improve students speaking skill.

D. Interpretation of Data

From the result of pre-test and post-test in experimental class, the writer can be concluded that from the lowest score in pre-test is 28 and the highest in pre-test score was 82. After the writer conducted treatment of media diorama activity to improve students speaking skill and also conducted post-test. The lowest score in post-test of experiment class was 50 and the highest score in posttest was 86.

Before decided the result of hypothesis, the writer proposed interpretation towards with procedure as follow:

- a. If t_{observation}> t_{table} : The alternative hypothesis is accepted. It means there is a significant effectiveness of media diorama activity to improve students speaking skill.
- b. If $t_{observation} < t_{table}$: The alternative hypothesis is rejected. It means there is no significant effectiveness of

media diorama activity to improve students speaking skill

According to the data, the value of $t_{observation}$ is bigger than $tt_{able.} t_{observation} = 3.69 > t_{table} = 1.67$ (5%) or $t_{observation} = 3.69 > t_{table}$ = 2,39 (1%), so H_o is rejected and H_a is accepted.

From the result above, the writer give conclusion that it means there is a significant effectiveness of using media diorama activities to improve students speaking skill. It can be seen that the student got better score by media diorama. This could be seen after comparing the score of pre-test (before by media diorama activities) and post-test (after by media diorama activities).

Based on the data obtained from control and experimental class among the average scores, and t observation, the writer summarizes that teaching speaking through media diorama activities has significant effectiveness toward students' speaking because the purpose of this technique was to explore the students' ability in speaking English based on their intelligences.

Table 4.10

The Pre-Test and Post Test Students' Average of the Experimental and Control Class

Class	The Average of Pre-	The Average of
	Test	Post-Test
Experimental	45.32	62.17
Control	42.59	49.89

From the table above the result of the research shows that the experimental class (the students who are taught using by media diorama activities) has the mean value (62.17), meanwhile the control class (the students who are not taught using by media diorama activities) has the mean value (49.89). It can be said that the achievement score of experimental class is higher than control class. The following was the table of pre-test and post-test students' average score.