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 MTs Negeri 5 Serang. The writer took 55 students as a subject this research. It is divided into two classes. They were 28 students from VIII B as the experimental class and 27 students from VIII C 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. Then the test was evaluated by concerning the five components of speaking: accent, grammar, vocabulary, fluency and comprehension. Each component had its score.

Table 4.1 The Research Schedule

No	Learning Actives	Date of Research
1.	Pre-test control class	26th of February 2018
2.	Pre-test experiment class	27th of February 2018
3.	Treatment of control class I	28th of February 2018
4.	Treatment of control class II	2nd of March 2018
5.	Treatment of control class III	4th of March 2018
6.	Treatment of experiment class I	28th of February 2018
7.	Treatment of experiment class II	3rd of March 2018
8.	Treatment of experiment class III	4th of March 2018
9.	Post-test of control class	12th of March 2018
10.	Post-test of experiment class	13th of March 20t8

1. **The Students Pre-Test Score of Experimental Class**

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

Table 4.2

Students' Score of Pre-Test of Experimental Class

NO.	NAME	ASPECT					Amount	Category
		Accent	Grammar	Vocabulary	Fluency	Comprehension		
1	ARS	1	6	8	6	12	33	D
2	AA	2	12	12	6	12	44	C
3	AF	2	12	12	8	12	46	C
4	APD	2	12	8	8	12	42	D
5	A	2	6	12	8	8	36	D
6	BM	2	12	8	8	12	42	D
7	CP	2	12	8	6	12	40	D
8	DAS	2	12	12	6	8	40	D
9	DM	2	6	8	4	8	28	D
10	DS	1	6	8	6	12	33	D
11	DNH	2	12	8	8	12	42	D
12	DK	2	12	12	6	16	48	C
13	FW	2	12	12	8	12	46	C
14	F	2	12	12	8	12	46	C
15	HA	2	12	12	8	12	46	C
16	IH	2	12	8	6	12	40	D
17	MV	2	12	12	8	12	46	C
18	MMA	2	12	8	8	12	42	D
19	RM	2	6	12	6	12	38	D
20	RAB	2	12	12	8	15	49	C
21	RA	2	16	12	8	15	53	C
22	RB	2	12	12	8	12	46	C
23	RF	2	12	8	8	12	42	D
24	S	2	12	8	8	12	42	D

25	**SHS**	**3**	**24**	**16**	**10**	**15**	**68**	**B**
26	**SEQ**	**3**	**30**	**20**	**10**	**19**	**82**	**B**
27	**VS**	**2**	**16**	**12**	**8**	**12**	**50**	**D**
28	**SH**	**2**	**18**	**16**	**8**	**15**	**59**	**D**
TOTAL							**1269**	

Determine mean of pre-test experimental class by formula

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

M1 **: Mean of pre-test**

$\sum$ **: Total Score**

N1 **: Number of sample**

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

$$M_1 = \frac{1269}{28}$$

$M_1 = 45.32$

The table above shows us about the students' pre-test 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 45.32

1. The students post-test score experimental class

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

Table 4.3

Students' Score of Post-Test of Experimental Class

NO.	NAME	ASPECT					Amount	
		Accent	Grammar	Vocabulary	Fluency	Comprehension		
1	ARS	2	18	16	8	15	59	C
2	AA	2	18	12	8	15	55	C
3	AF	2	18	16	8	19	63	B
4	APD	2	18	16	8	19	63	B
5	A	2	16	12	8	15	53	C
6	BM	2	18	12	8	12	52	C
7	CP	2	18	16	8	15	59	C

8	**DAS**	**2**	**18**	**16**	**8**	**12**	**56**	**C**
9	**DM**	**2**	**12**	**16**	**8**	**12**	**50**	**C**
10	**DS**	**2**	**16**	**16**	**10**	**15**	**59**	**C**
11	**DNH**	**2**	**18**	**16**	**8**	**15**	**59**	**C**
12	**DK**	**2**	**18**	**16**	**10**	**19**	**65**	**B**
13	**FW**	**2**	**18**	**16**	**10**	**19**	**65**	**B**
14	**F**	**2**	**18**	**16**	**10**	**15**	**61**	**C**
15	**HA**	**2**	**24**	**12**	**10**	**15**	**63**	**B**
16	**IH**	**2**	**18**	**16**	**8**	**19**	**63**	**B**
17	**MV**	**2**	**18**	**12**	**10**	**19**	**61**	**C**
18	**MMA**	**2**	**18**	**16**	**8**	**19**	**63**	**B**
19	**RM**	**2**	**18**	**16**	**10**	**15**	**61**	**C**
20	**RAB**	**2**	**18**	**16**	**10**	**19**	**65**	**B**
21	**RA**	**2**	**18**	**20**	**8**	**15**	**63**	**B**
22	**RB**	**2**	**18**	**16**	**10**	**19**	**65**	**B**
23	**RF**	**2**	**18**	**16**	**10**	**15**	**61**	**C**
24	**S**	**2**	**24**	**12**	**10**	**15**	**63**	**B**
25	**SHS**	**3**	**24**	**24**	**10**	**19**	**80**	**B**
26	**SEQ**	**3**	**30**	**20**	**10**	**23**	**86**	**A**
27	**VS**	**2**	**18**	**20**	**10**	**15**	**65**	**B**
28	**SH**	**2**	**18**	**16**	**8**	**19**	**63**	**B**
TOTAL							**1741**	

Determine mean of pre-test experimental class by formula

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

M2 **: Mean of post test**

$\sum$ **: Total Score**

N2 **: Number of sample**

$$M_2 = \frac{\sum X_2}{N_2}$$

$$M_2 = \frac{\mathbf{1741}}{\mathbf{28}}$$

$M_2 =$ **62.17**

The table above shows us about the students' post-test 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 62.17.

2. The Students Pre-Test Score Control Class

The students' pre-test score of control class could be shown on table 3 as follows:

Table 4.4

Students' Score of Pre-Test of control Class

NO.	NAME	ASPECT					Amount	Category
		Accent	Grammar	Vocabulary	Fluency	Comprehension		
1	AMF	2	6	8	6	12	34	D
2	AA	2	18	16	10	12	58	C
3	ANB	3	18	12	8	15	56	C
4	AAB	2	6	8	8	8	32	D
5	AQ	2	6	8	8	12	36	D
6	AFD	2	12	8	4	8	34	D
7	AI	2	12	8	6	12	40	D
8	AN	2	6	8	4	12	32	D
9	BF	2	6	4	6	12	30	D
10	DI	2	6	8	8	8	32	D
11	DA	2	12	8	6	12	40	D
12	DPS	2	12	8	6	12	40	D
13	EN	2	18	8	8	12	48	C
14	FF	3	24	16	10	19	72	B
15	GR	2	12	8	4	8	34	D
16	HMF	3	24	16	8	15	66	B
17	HH	2	6	8	6	8	30	D
18	IN	2	12	12	8	15	49	C
19	MAR	2	6	4	4	8	24	E
20	MAH	3	18	12	6	15	54	C

21	**NT**	**2**	**12**	**16**	**10**	**12**	**52**	**C**
22	**RAW**	**2**	**8**	**12**	**8**	**8**	**38**	**D**
23	**SY**	**1**	**8**	**6**	**6**	**8**	**29**	**D**
24	**ST**	**2**	**8**	**8**	**8**	**18**	**44**	**C**
25	**VPR**	**2**	**12**	**12**	**6**	**12**	**44**	**C**
26	**WTN**	**2**	**12**	**8**	**8**	**12**	**42**	**D**
27	**YAP**	**2**	**24**	**12**	**10**	**12**	**60**	**C**
	TOTAL						**1150**	

Determine mean of pre-test control class by formula

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

M1 **: mean of pre-test**

$\sum$ **: Total Score**

N1 **: Number of sample**

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

$$\boldsymbol{M_1 = \frac{1150}{27}}$$

$M_1 =$ **42.5**

The table above shows us about the students' pre-test 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 pre-test is 42.59.

3. The Students Post-Test Score Control Class

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

Table 4.5

Students' Score of Post-Test of Control Class

NO.	NAME	ASPECT					Amount	Category
		Accent	Grammar	Vocabulary	Fluency	Comprehension		
1	AMF	2	12	8	6	12	40	D
2	AA	2	18	16	10	15	61	C
3	ANB	3	18	16	8	15	60	C

4	**AAB**	**2**	**12**	**8**	**6**	**12**	**40**	**D**
5	**AQ**	**2**	**12**	**12**	**8**	**12**	**46**	**C**
6	**AFD**	**2**	**12**	**8**	**6**	**12**	**40**	**D**
7	**AI**	**2**	**12**	**8**	**8**	**15**	**45**	**C**
8	**AN**	**2**	**12**	**12**	**6**	**12**	**44**	**C**
9	**BF**	**2**	**12**	**8**	**6**	**12**	**40**	**D**
10	**DI**	**2**	**12**	**12**	**8**	**12**	**46**	**D**
11	**DA**	**2**	**18**	**12**	**8**	**12**	**52**	**C**
12	**DPS**	**2**	**18**	**12**	**8**	**15**	**55**	**C**
13	**EN**	**2**	**18**	**16**	**8**	**15**	**59**	**C**
14	**FF**	**3**	**24**	**20**	**10**	**19**	**76**	**B**
15	**GR**	**2**	**12**	**8**	**6**	**15**	**43**	**C**
16	**HMF**	**3**	**24**	**16**	**10**	**19**	**72**	**B**
17	**HH**	**2**	**6**	**8**	**6**	**12**	**34**	**D**
18	**IN**	**2**	**12**	**16**	**8**	**15**	**53**	**C**
19	**MAR**	**2**	**12**	**8**	**6**	**8**	**36**	**D**
20	**MAH**	**3**	**18**	**12**	**8**	**15**	**56**	**C**
21	**NT**	**2**	**12**	**16**	**10**	**15**	**55**	**C**
22	**RAW**	**2**	**12**	**16**	**8**	**12**	**40**	**D**
23	**SY**	**2**	**6**	**8**	**6**	**12**	**34**	**D**
24	**ST**	**2**	**8**	**12**	**8**	**19**	**49**	**D**
25	**VPR**	**2**	**18**	**16**	**6**	**15**	**57**	**C**
26	**WTN**	**12**	**12**	**12**	**8**	**15**	**51**	**C**
27	**YAP**	**2**	**24**	**12**	**10**	**15**	**63**	**B**
	TOTAL						**1347**	

Determine mean of post-test control class by formula

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

M2 **: Mean of post test**

$\sum$ **: Total Score**

N2 **: Number of sample**

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

$$M_{2=}\frac{1347}{27}$$

$M_{2 =}$**49.89**

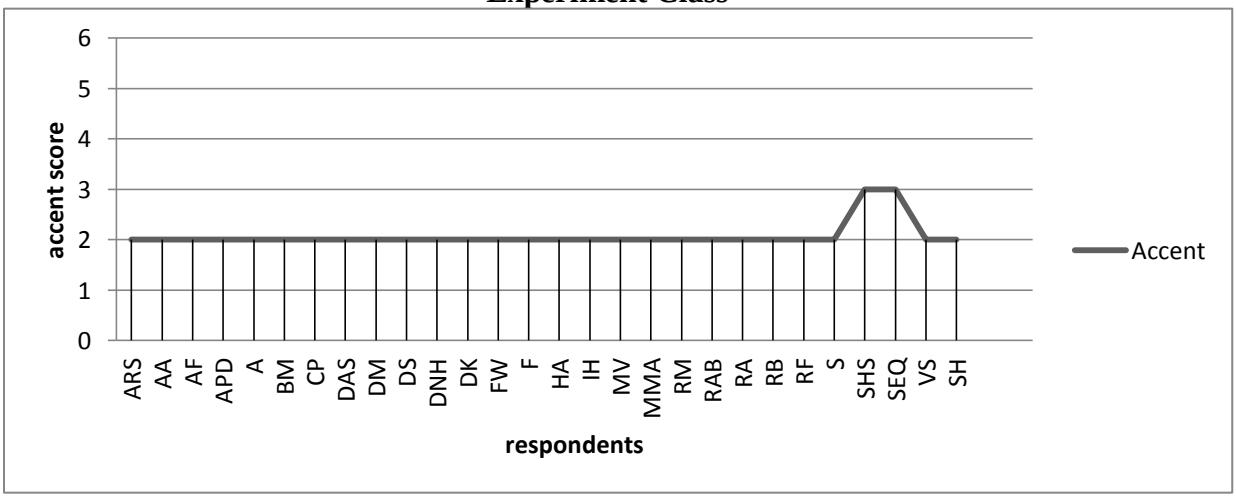
The table above shows us about the students' post-test score of control class based on criteria in speaking skill. The data shows that the lowest score of post-test is 76 and the highest score is 34 and the average score of post -test is 49.89.

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

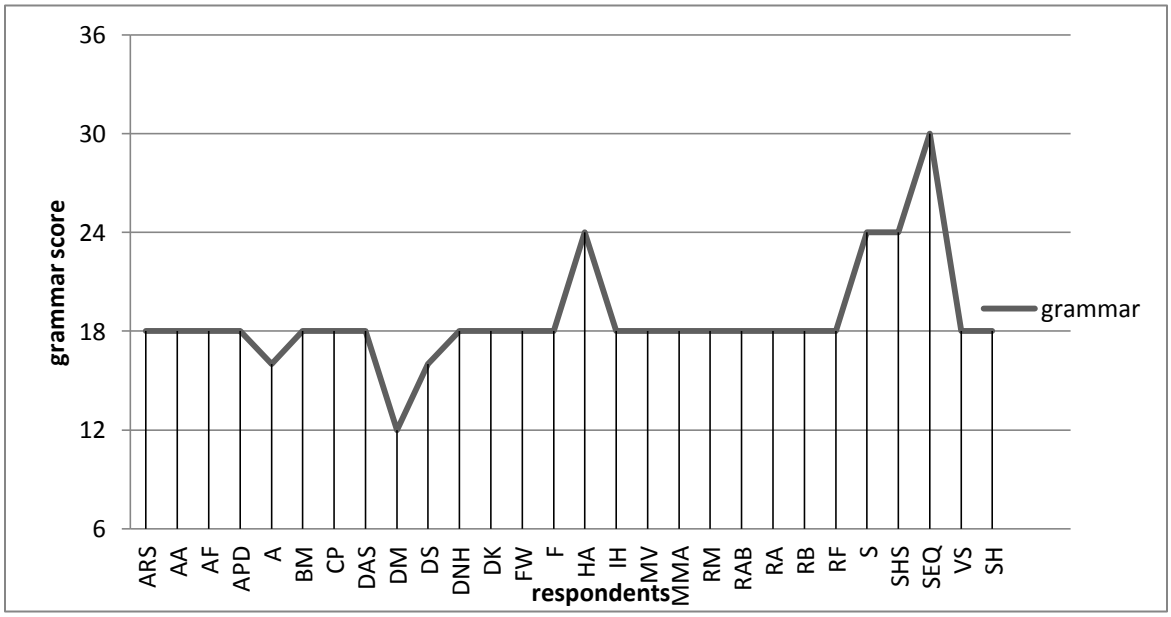


Based on the graphic linear of students' speaking accent above, it can be seen the highest score was 3 and most of the students got 2. It means after the researcher gave the treatment to the students in experiment class. The students still have the

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

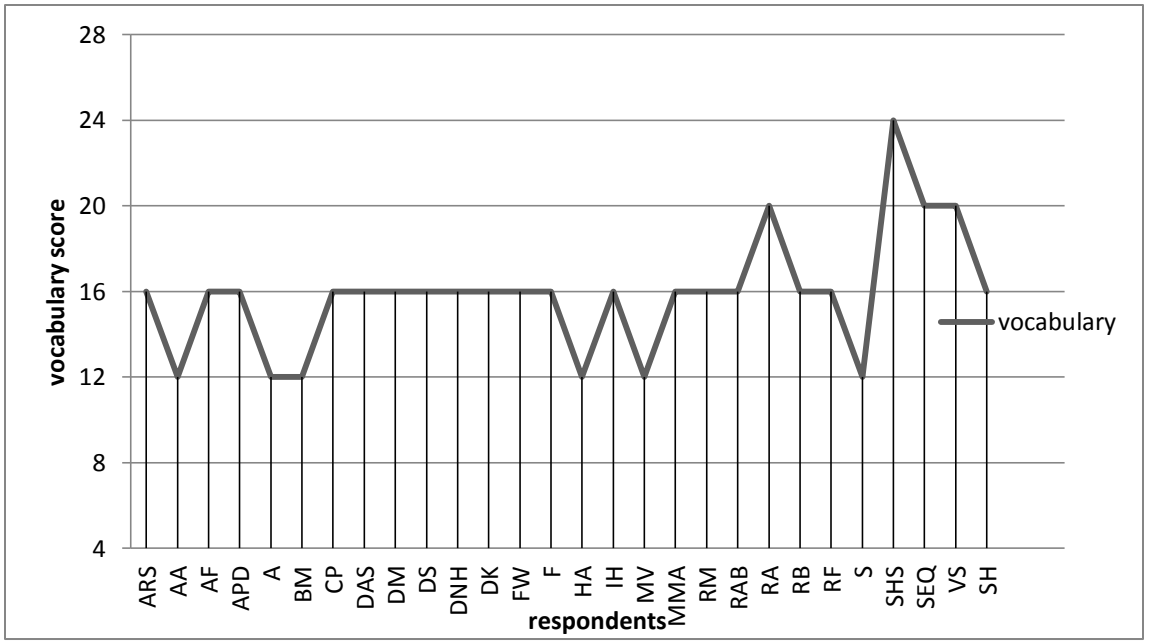


After the researcher gave the treatment to experiment class, there were improvements in students' grammar. It can be seen from the graphic above the higher score was 30 it means the students few errors, with no patterns of failure and the lowest

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 agreement for the example "he is tall in 175cm " , it must be " his height Is 175cm".

Graphic 4.3

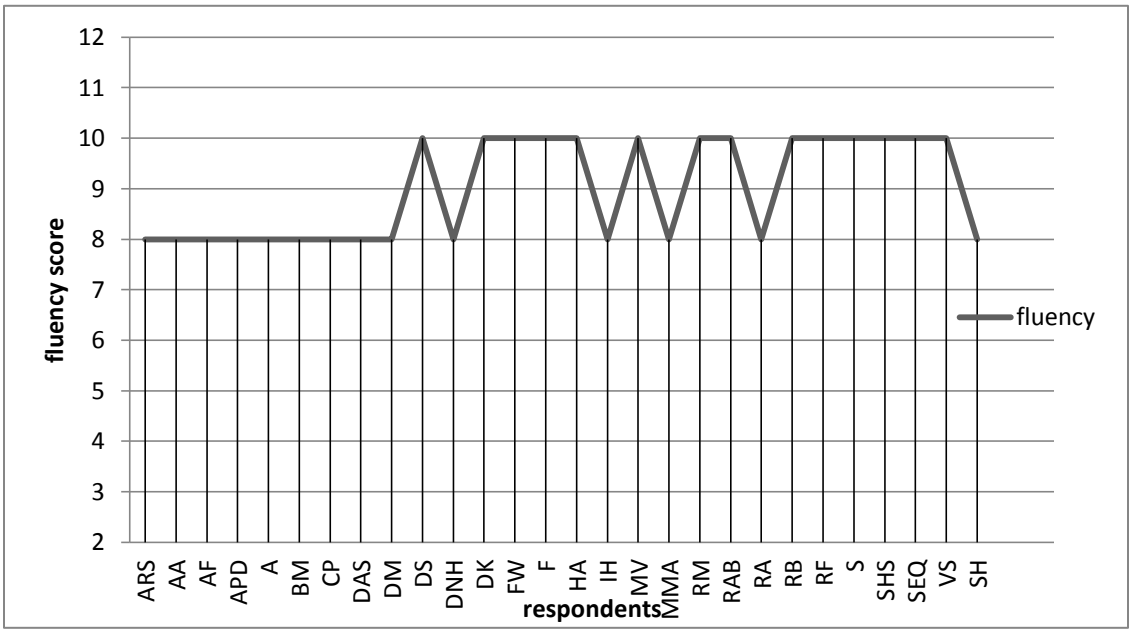
The Aspect of Students' vocabulary In Speaking Post-Test Experiment Class



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 " han some" it should be "handsome".

Graphic 4.4

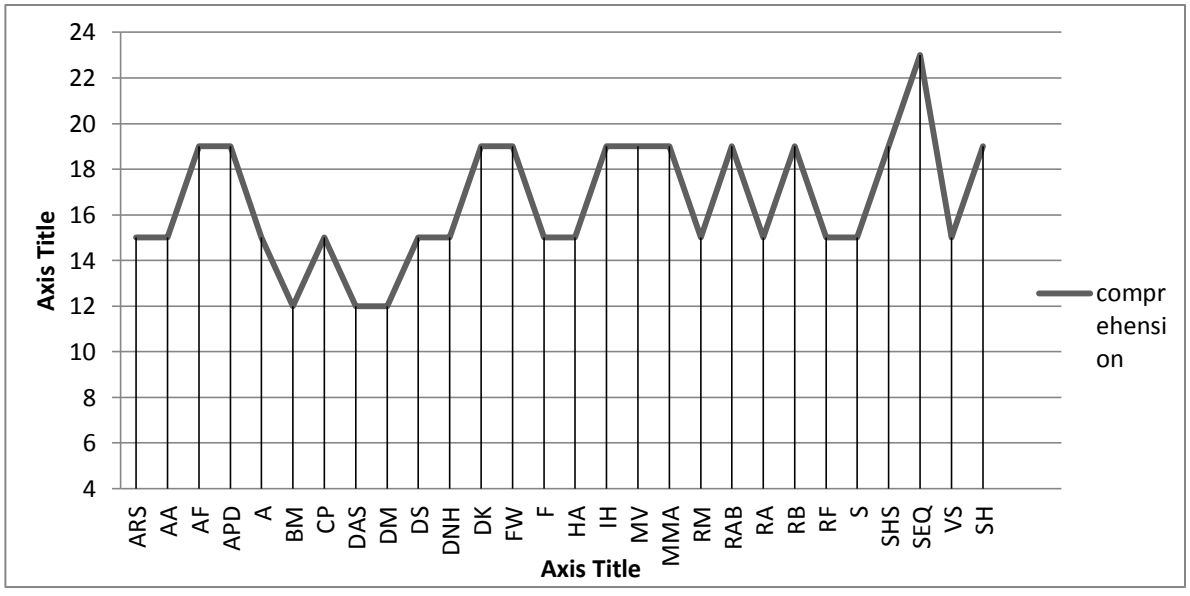
The Aspect of Students' Fluency In Speaking Post-Test Experiment Class



The students' fluency in speaking was increased before and after treatment because, when the researcher gave the treatment, the researcher motivated 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



After the researcher gave the explanation about the material (descriptive text) and the treatment to the students in experiment class, 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' pre-test and post-test from lower to higher as follows

Table 4.6

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 multiple intelligence activities were proved students development in students speaking skill. From the detail description showed on table below:

Table 4.8

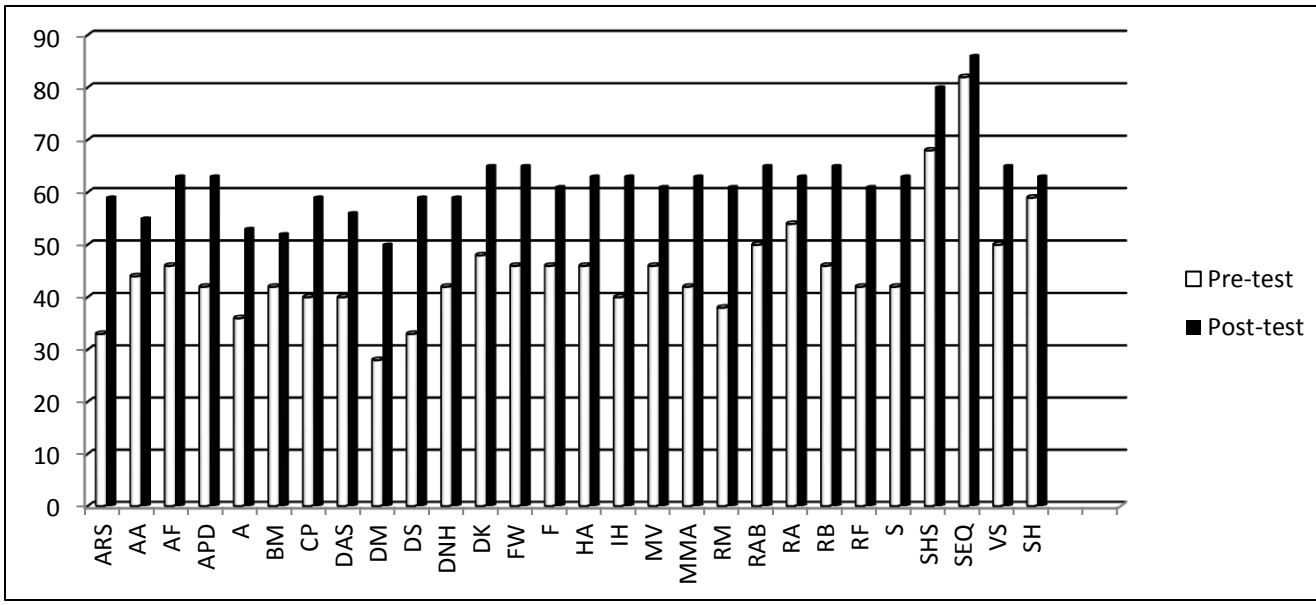
Students' score pre-test and post-test experiment class

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 45.32 while mean score of post- test was 62.17.

Graphic 4.6

Pre- Test and Post Test Score In Experimental 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.

Table 4.9

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	

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Table 4.10

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 4.11

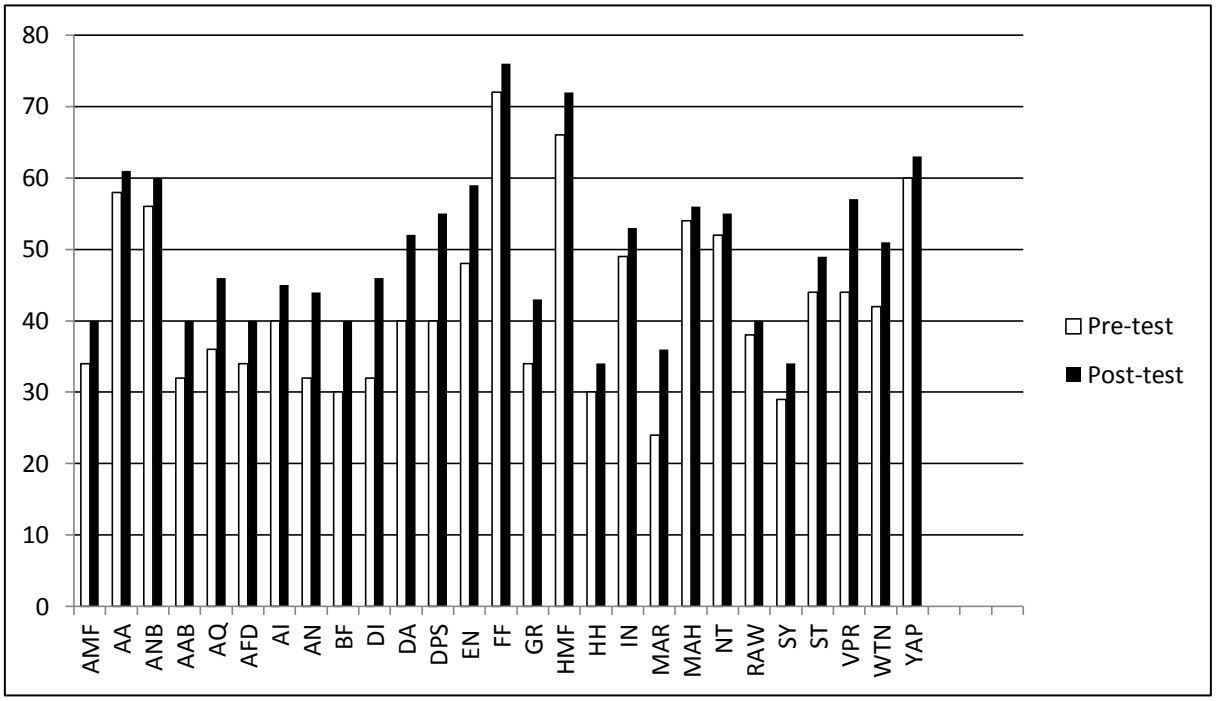
Students' score pre-test and post-test experiment class

Score description	Pre-test	Post-test
Highest score	24	34
Lowest score	72	76
Mean score	45.32	62.17

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 42.59 while the mean score of post-test was 49.89.

Graphic 4.7

The Score in Pre-test and Post-Test 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 49,89> 42,59. This class also realized can effect improvement but lower than experimental class.

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:

Table 4.12

The Score of Distribution Frequency

NO	SCORE		X_1	X_2	X_1^2	X_2^2
	X1	X2	$(X1-M_1)$	$(X2-M_2)$		
1	59	**40**	-3.17	-9.89	10.05	97.81
2	**55**	**61**	-7.17	11.11	51.41	123.43
3	**63**	**60**	0.83	10.11	0.69	102.21
4	**63**	**40**	0.83	-9.89	0.69	97.81
5	**53**	**46**	-9.17	-3.89	84.09	15.13
6	**52**	**40**	-10.17	-9.89	103.43	97.81
7	**59**	**45**	-3.17	-4.89	10.05	23.91
8	**56**	**44**	-6.17	-5.89	38.07	34.69
9	**50**	**40**	-12.17	-9.89	148.11	97.81
10	**59**	**46**	-3.17	-3.89	10.05	15.13

11	**59**	**52**	-3.17	2.11	10.05	4.45
12	**65**	**55**	2.83	5.11	8.01	26.11
13	**65**	**59**	2.83	9.11	8.01	82.99
14	**61**	**76**	-1.17	26.11	1.37	681.73
15	**63**	**43**	0.83	-6.89	0.69	47.47
16	**63**	**72**	0.83	22.11	0.69	488.85
17	**61**	**34**	-1.17	-15.89	1.37	252.49
18	**63**	**53**	0.83	3.11	0.69	9.67
19	**61**	**36**	-1.17	-13.89	1.37	192.93
20	**65**	**56**	2.83	6.11	8.01	37.33
21	**63**	**55**	0.83	5.11	0.69	26.11
22	**65**	**40**	2.83	-9.89	8.01	97.81
23	**61**	**34**	-1.17	-15.89	1.37	252.49
24	**63**	**49**	0.83	-0.89	0.69	0.79
25	**80**	**57**	17.83	7.11	317.91	50.55
26	**86**	**51**	23.83	1.11	567.87	1.23
27	**65**	**63**	2.83	13.11	8.01	171.87
28	**63**		0.83		0.69	
∑	1741	1347			1402.14	3130.67
AVERAGE	62.17	49.89				

Note:

X1 = Score Post-Test (Experimental Class)

X2 = Score Post-Test (Control Class)

X_1 = X1-M_1 (Mean X1)

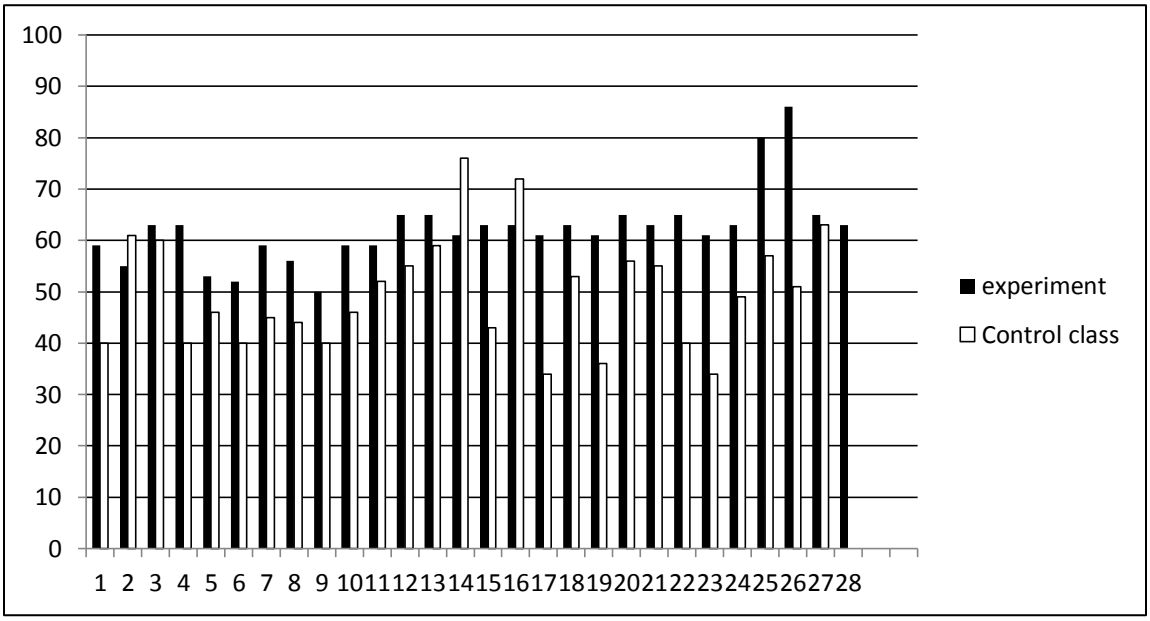
X_2 = X2-M_2 (Mean X2)

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 $\sum X1=1741$, $\sum X2=1347$, $\sum X_1^2= 1402.14$, and $\sum X_2^2= 3130.67$, whereas $N_1=28$ and $N_2=27$.

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 X1and X2

Variable X1	Variable X2
$M_1 = \frac{\sum X1}{N_1}$	$M_2 = \frac{\sum X2}{N_2}$
$M_1 = \frac{\sum 1741}{28}$	$M_2 = \frac{1347}{27}$
$= 62.17$	$= 49.89$

2. Determine t-test

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

$$t = \frac{62.17 - 49.89}{\sqrt{\left(\frac{1402.14 + 3130.67}{28 + 27 - 2}\right)\left(\frac{28 + 27}{28.27}\right)}}$$

$$= \frac{12.26}{\sqrt{(90.66)(0.07)}}$$

$$= \frac{12.26}{\sqrt{(6.3462)}}$$

$$= \frac{12.26}{2.52}$$

=4.86

Note :

M_1 = The average score of experimental class (Mean X1)

M_2 = The average score of control class (Mean X2)

$\sum X_1^2$ =Sum of the squared deviation score of experimental class

$\sum X_2^2$ = 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 = 4.86> t_t = 1.67 in degree of significance 5%. The score of t_o = 4.86 > 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

multiple intelligence activity to improve students speaking skill.

If $t_{observation} < t_{table}$: The alternative hypothesis is rejected. It means there is no significant effectiveness of multiple intelligence 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 multiple intelligence 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

multiple intelligence 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 multiple intelligence activity to improve students speaking skill

According to the data, the value of $t_{observation}$ is bigger than $tt_{able.}$ $t_{observation} = 4.86 > t_{table} = 1.67$ (5%) or $t_{observation} = 4.86 > t_{table} = 2{,}39$ (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 multiple intelligences activities to improve students speaking skill. It can be seen that the student got better score by multiple intelligences activities .This could be seen after comparing the score of pre-test (before by multiple intelligences activities) and post-test (after by multiple intelligences 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 multiple intelligences 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.

The result of the research shows that the experimental class (the students who are taught using by multiple intelligences activities) has the mean value (62.17), meanwhile the control class (the students who are not taught using by multiple intelligences 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.

Table 4.13
The Pre-Test and Post Test Students' Average of the Experimental and Control Class

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

Based on the result of pre-test and post-test, it could be concluded: by multiple intelligences activities was effective to

improve students' speaking skill at the second grade of MTs Negeri 5 Serang. It can be seen from the result of analysis by using t test formula.