CHAPTER IV

RESULT AND DISCUSSION

A. Description of Data

In this chapter the writer would like to present the description of data obtained. As the writer exlained in the previous chapter that the population in this research were 360 students' of second grade in SMP Negeri 2 Balaraja and the sample were 40 students of VIII A as experimental class and 40 students of VIII B as control class.

In this research, the writer did an analyze of quantitative data. Data obtained by giving tests in the experimental and control. The test divided two types are pre-test and post-test. Pre-Test is given to students before treatment. On the test, students should pronounce in front of the class according the instruction or questions by the writer.

The writer identified some result to find out the effect of phonemic chart to improve students' pronunciation. They are the score of students before treatment, the score students after treatment and the differences between pre-test and post-test score of students. The writer discribes the data in experimental and control class as below:

1. **Experimental Cla**

The researcher describes the result of pre-test in the experimental class by the table as follow.

Table 4.1
The students' score of pre-test at the experimental class

NO	Respondent	Criteria			Score
		So.	Str.	Int.	
1	ABD	1,2	1,3	1,2	1,2
2	AM	1,4	1,4	1,4	1,4
3	AS	1,2	1,3	1,2	1,2
4	AHI	1,3	1,3	1,3	1,3
5	AR	1,1	1,2	1,2	1,2
6	ASM	1,3	1,3	1,3	1,3
7	AAB	1,3	1,3	1,3	1,3
8	APA	1,2	1,2	1,2	1,2
9	BDP	1,3	1,3	1,3	1,3
10	CN	1,4	1,5	1,5	1,5
11	DD	1,2	1,2	1,1	1,2
12	DP	1,2	1,3	1,4	1,3
13	DAP	1,2	1,2	1,2	1,2
14	DO	1,2	1,3	1,3	1,3
15	DA	1,3	1,2	1,2	1,2
16	EUN	1,2	1,2	1,2	1,2
17	ET	1,3	1,3	1,3	1,3
18	FF	1,2	1,2	1,2	1,2
19	HS	1,3	1,3	1,3	1,3
20	IA	1,3	1,4	1,4	1,4
21	JJAS	1,3	1,3	1,3	1,3
22	KRA	1,2	1,3	1,3	1,3
23	KEL	1,2	1,3	1,3	1,3
24	MFF	1,2	1,3	1,3	1,3

25	MAA	1,2	1,2	1,2	1,2
26	MFA	1,3	1,3	1,3	1,3
27	MAZ	1,1	1,2	1,2	1,2
28	MIF	1,1	1,2	1,2	1,2
29	MKHA	1,2	1,2	1,2	1,2
30	NDA	1,3	1,3	1,3	1,3
31	NR	1,2	1,2	1,2	1,2
32	NF	1,3	1,3	1,3	1,3
33	RA	1,3	1,6	1,4	1,4
34	RCS	1,3	1,3	1,2	1,3
35	RF	1,3	1,3	1,3	1,3
36	SGN	1,2	1,3	1,3	1,3
37	SNF	1,3	1,3	1,3	1,3
38	SH	1,2	1,4	1,3	1,3
39	VAA	1,2	1,3	1,3	1,3
40	WM	1,3	1,3	1,3	1,3
N = 40	TOTAL				X = 51,1
	AVERAGE				M = 1,3

Note.
So. : Sound
Str. : Stress
Int. : Intonation

Mean of Pre-test:

$$X = \frac{\sum x}{N} = \frac{51,1}{40} = 1,3 \quad \text{(the mean of pre-test}$$

experimental class is 1,3)

While the result of post test in experimental class got better score.

The result of post test in experimental class described by table below:

Table 4.2
The students' score of post-test at the experimental class

NO	Respondent	Criteria			Score
		So.	Str.	Int.	
1	ABD	1,6	1,6	1,6	1,6
2	AM	1,6	1,8	1,7	1,7
3	AS	1,7	1,7	1,7	1,7
4	AHI	1,8	1,8	1,8	1,8
5	AR	1,7	1,7	1,7	1,7
6	ASM	1,7	1,8	1,7	1,7
7	AAB	1,8	1,8	1,8	1,8
8	APA	1,7	1,8	1,8	1,8
9	BDP	1,8	1,8	1,8	1,8
10	CN	2,5	2,1	2,2	2,3
11	DD	1,8	1,9	1,9	1,9
12	DP	1,6	1,7	1,7	1,7
13	DAP	1,7	1,8	1,7	1,7
14	DO	2	2,3	2,2	2,2
15	DA	1,8	1,9	1,9	1,9
16	EUN	1,6	1,6	1,6	1,6
17	ET	1,8	1,7	1,7	1,7
18	FF	1,9	1,9	1,9	1,9
19	HS	1,5	1,6	1,6	1,6
20	IA	1,6	1,7	1,7	1,7

21	JJAS	1,6	1,7	1,7	1,7
22	KRA	1,5	1,5	1,6	1,5
23	KEL	1,6	1,6	1,6	1,6
24	MFF	1,8	1,8	1,8	1,8
25	MAA	1,9	1,9	1,9	1,9
26	MFA	2	2	2	2
27	MAZ	1,9	1,9	1,9	1,9
28	MIF	1,5	1,6	1,6	1,6
29	MKHA	2	2,1	2	2
30	NDA	2	1,9	2	2
31	NR	1,8	1,8	1,8	1,8
32	NF	1,4	1,4	1,5	1,4
33	RA	1,6	1,7	1,7	1,7
34	RCS	1,9	1,9	1,9	1,9
35	RF	1,9	1,9	1,9	1,9
36	SGN	1,9	1,9	1,9	1,9
37	SNF	1,5	1,6	1,5	1,5
38	SH	1,4	1,3	1,4	1,4
39	VAA	1,6	1,6	1,6	1,6
40	WM	1,6	1,7	1,7	1,7
N = 40	TOTAL				X = 70,6
	AVERAGE				M = 1,8

Note.
So. : Sound
Str. : Stress
Int. : Intonation

Mean of Post-test:

$$X = \frac{\sum x}{N} = \frac{70,6}{40} = 1,8 \quad \text{(the mean of post-test}$$

experimental class is 1,8)

Table 4.3
The differencee score between pre-test and post-test at
experimental class

NO	Respondent	Pre-test	Post-Test
1	ABD	1,2	1,6
2	AM	1,4	1,7
3	AS	1,2	1,7
4	AHI	1,3	1,8
5	AR	1,2	1,7
6	ASM	1,3	1,7
7	AAB	1,3	1,8
8	APA	1,2	1,8
9	BDP	1,3	1,8
10	CN	1,5	2,3
11	DD	1,2	1,9
12	DP	1,3	1,7
13	DAP	1,2	1,7
14	DO	1,3	2,2
15	DA	1,2	1,9
16	EUN	1,2	1,6
17	ET	1,3	1,7
18	FF	1,2	1,9
19	HS	1,3	1,6
20	IA	1,4	1,7
21	JJAS	1,3	1,7
22	KRA	1,3	1,5

23	KEL	1,3	1,6
24	MFF	1,3	1,8
25	MAA	1,2	1,9
26	MFA	1,3	2
27	MAZ	1,2	1,9
28	MIF	1,2	1,6
29	MKHA	1,2	2
30	NDA	1,3	2
31	NR	1,2	1,8
32	NF	1,3	1,4
33	RA	1,4	1,7
34	RCS	1,3	1,9
35	RF	1,3	1,9
36	SGN	1,3	1,9
37	SNF	1,3	1,5
38	SH	1,3	1,4
39	VAA	1,3	1,6
40	WM	1,3	1,7
N = 40	TOTAL	X = 51,1	X = 70,6
	AVERAGE	M = 1,3	M = 1,8

From the table 4.1 above showed that the result of students'pre-test score at the experimental class. The data showed the maximum score was 1,5 and the minimum score was 1,2. There was one student who got maximum score and there were fourteen students who got minimum score. The average score of pre-test in experimental class was 1,3.

From the table 4.2 above showed that the result of students' post-test score at the experimental class. The data showed the maximum score was 2,3 and the minimum score was 1,4. There was one student who got maximum score and one student who got minimum score. The average score of post test in experimental class was 1,8

From the table 4.3 showed the difference result of pre-test and post-test at the experimental class. It got the significant improement after giving treatment using phonemic chart applicationa,it was seen from the average of the post test better than pre-test $1,2 < 1,8$.

2. **Control Class**

The writer describes the result of pre-test in the control class by the table as follow:

Table 4.4
The students' score of pre-test at the control class

NO	Respondent	Criteria			Score
		So.	Str.	Int.	
1	APJ	1,3	1,3	1,2	1,3
2	AARS	1,2	1,3	1,2	1,2
3	AA	1,2	1,1	1,2	1,2
4	AS	0,9	1,1	1,1	1

5	BDA	1,2	1,3	1,2	1,2
6	CSP	1,2	1,3	1,2	1,2
7	CVM	1,2	1,3	1,2	1,2
8	DSA	1	1,2	1,1	1,1
9	DF	1,2	1,3	1,2	1,2
10	DCA	1,1	1,2	1,1	1,1
11	DY	1,1	1,2	1,1	1,1
12	ES	1,3	1,4	1,3	1,3
13	EO	1,2	1,3	1,3	1,3
14	FMP	1,2	1,2	1,2	1,2
15	GA	1,2	1,3	1,2	1,2
16	HS	1,2	1,2	1,2	1,2
17	HM	1,2	1,2	1,1	1,2
18	IIM	1,2	1,3	1,2	1,2
19	IEW	1,2	1,2	1,2	1,2
20	INP	1,2	1,3	1,2	1,2
21	JLT	1,4	1,5	1,4	1,4
22	KAW	1,2	1,2	1,2	1,2
23	KH	1,3	1,3	1,3	1,3
24	LMS	1,3	1,2	1,2	1,2
25	MR	1,1	1,1	0,9	1,1
26	MA	1,2	1,2	1,1	1,2
27	MA	1,1	1,2	1	1,1
28	MIU	1,3	1,3	1,2	1,3
29	MIDP	1,2	1,3	1,2	1,2
30	MNF	1,3	1,1	1,2	1,2
31	NK	1,2	1,2	1,2	1,2
32	NF	1,2	1,2	1,2	1,2
33	NW	1,2	1,2	1,2	1,2
34	NY	1,1	1,1	1,1	1,1
35	RP	1,2	1,2	1,2	1,2
36	RE	1,2	1,2	1,2	1,2
37	RAN	1,1	1,1	1,1	1,1
38	RH	1,2	1,2	1,1	1,2

39	SMM	1,2	1,3	1,2	1,2
40	WS	1,2	1,2	1,2	1,2
N = 40	TOTAL				X = 47,8
	AVERAGE				M = 1,2

Note.

So. : Sound

Str. : Stress

Int. : Intonation

Mean of Pre-test:

$$X = \frac{\Sigma X}{N} = \frac{47,8}{40} = 1,2$$ (the mean of pre-test control class is

1,2)

While the result of post test in experimental class got

better score.

The result of post test in control class described by table

below:

Table 4.5
The students' score of post-test at the control class

NO	Respondent	Criteria			Score
		So.	Str.	Int.	
1	APJ	1,4	1,5	1,5	1,5
2	AARS	1,5	1,6	1,5	1,5
3	AA	1,4	1,5	1,5	1,5
4	AS	1,7	1,7	1,7	1,7
5	BDA	1,3	1,4	1,4	1,4
6	CSP	1,4	1,5	1,5	1,5
7	CVM	1,4	1,5	1,5	1,5
8	DSA	1,6	1,6	1,6	1,6
9	DF	1,6	1,7	1,7	1,7
10	DCA	1,9	2	1,9	1,9
11	DY	1,5	1,6	1,5	1,5
12	ES	1,7	1,7	1,7	1,7
13	EO	1,7	1,8	1,8	1,8
14	FMP	1,4	1,4	1,4	1,4
15	GA	1,5	1,6	1,5	1,5
16	HS	1,4	1,5	1,5	1,5
17	HM	1,4	1,5	1,4	1,4
18	IIM	1,7	1,8	1,8	1,8
19	IEW	1.9	2	1,9	1,9
20	INP	1,8	1,9	2	1,9
21	JLT	1,9	2	2	2
22	KAW	1,8	1,8	1,8	1,8
23	KH	1,5	1,6	1,5	1,5
24	LMS	1,5	1,5	1,5	1,5
25	MR	1,9	1,9	1,9	1,9
26	MA	1,5	1,4	1,4	1,4
27	MA	1,5	1,5	1,4	1,5
28	MIU	1,8	1,8	1,8	1,8

29	MIDP	1,7	1,8	1,7	1,7
30	MNF	1,9	1,9	1,8	1,9
31	NK	1,8	1,8	1,8	1,8
32	NF	1,5	1,6	1,5	1,5
33	NW	1,7	1,7	1,7	1,7
34	NY	1,9	1,8	1,8	1,8
35	RP	1,5	1,6	1,6	1,6
36	RE	1,4	1,5	1,4	1,4
37	RAN	1,7	1,8	1,8	1,8
38	RH	1,5	1,8	1,8	1,7
39	SMM	1,3	1,4	1,4	1,4
40	WS	1,3	1,4	1,4	1,4
N = 40	TOTAL				X = 65,3
	AVERAGE				M = 1,6

Note.
So. : Sound
Str. : Stress
Int. : Intonation

$$X = \frac{\sum x}{N} = \frac{65,3}{40} = 1,6 \text{ (the mean of post-test control class is}$$

1,6)

Table 4.6
The differencee score between pre-test and post-test at
control class

NO	Respondent	Pre-test	Post-Test
1	APJ	1,3	1,5
2	AARS	1,2	1,5
3	AA	1,2	1,5
4	AS	1	1,7
5	BDA	1,2	1,4
6	CSP	1,2	1,5
7	CVM	1,2	1,5
8	DSA	1,1	1,6
9	DF	1,2	1,7
10	DCA	1,1	1,9
11	DY	1,1	1,5
12	ES	1,3	1,7
13	EO	1,3	1,8
14	FMP	1,2	1,4
15	GA	1,2	1,5
16	HS	1,2	1,5
17	HM	1,2	1,4
18	IIM	1,2	1,8
19	IEW	1,2	1,9
20	INP	1,2	1,9
21	JLT	1,4	2
22	KAW	1,2	1,8
23	KH	1,3	1,5
24	LMS	1,2	1,5
25	MR	1,1	1,9
26	MA	1,2	1,4
27	MA	1,1	1,5
28	MIU	1,3	1,8

29	MIDP	1,2	1,7
30	MNF	1,2	1,9
31	NK	1,2	1,8
32	NF	1,2	1,5
33	NW	1,2	1,7
34	NY	1,1	1,8
35	RP	1,2	1,6
36	RE	1,2	1,4
37	RAN	1,1	1,8
38	RH	1,2	1,7
39	SMM	1,2	1,4
40	WS	1,2	1,4
N = 40	TOTAL	X = 47,8	X = 65,3
	AVERAGE	M = 1,2	M = 1,6

From the table 4.4 above, showed that the result of students' pre-test score at the control class. The data showed the maximum score was 1,4 and the mininum score was 1,0 . There was one student who got maximum score and there was one students who got minimum score. The average score of pre-test in control class was 1,2.

From the table 4.5 above showed that the result of students' post-test score at the control class. The data showed the maximum score was 2,0 and the minimum score was 1,4. There was one student who got maximum and there was seven students who got minimum score was 1,4. The average score of pre-test in control class was 1,6.

From the table 4.6 above showed the difference result of pre-test and post-test at the control class got the significant improvement after giving treatment without using phonemic chart application. It was seen from the average of the post test better than pre-test $1,2 < 1,6$.
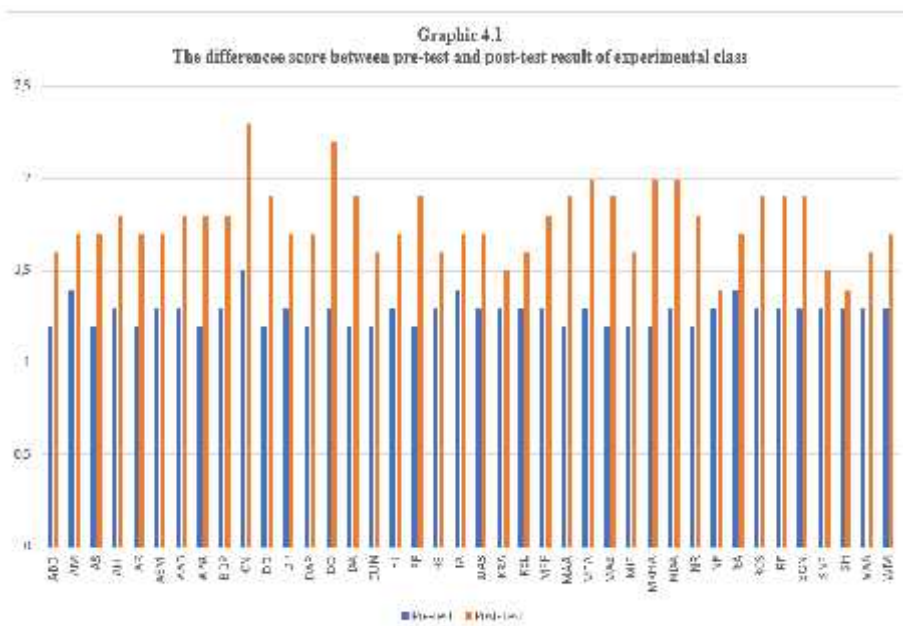
B. Data Analysis

1. Experimental Class

The writer analysis the data by comparing students' score in pre-test and post-test in the experimental class. The students' improvement score caused the writer used phonemic chart application in teaching pronunciation. If seen from the students' improvement score, it means that used phonemic chart application was success to improve students' pronunciation.the writer describes the students' improvement score of pre-test and post test at the experimental class by the table below:

Table 4.7
The differencee score between pre-test and post-test result of experimental class

NO	Respondent	Pre-test (X)	Post-Test (X)	Difference (X - X)
1	ABD	1,2	1,6	0,4
2	AM	1,4	1,7	0,3
3	AS	1,2	1,7	0,5
4	AHI	1,3	1,8	0,5
5	AR	1,2	1,7	0,5
6	ASM	1,3	1,7	0,4
7	AAB	1,3	1,8	0,5
8	APA	1,2	1,8	0,6
9	BDP	1,3	1,8	0,5
10	CN	1,5	2,3	0,8
11	DD	1,2	1,9	0,7
12	DP	1,3	1,7	0,4
13	DAP	1,2	1,7	0,5
14	DO	1,3	2,2	0,9
15	DA	1,2	1,9	0,7
16	EUN	1,2	1,6	0,4
17	ET	1,3	1,7	0,4
18	FF	1,2	1,9	0,7
19	HS	1,3	1,6	0,3
20	IA	1,4	1,7	0,3
21	JJAS	1,3	1,7	0,4
22	KRA	1,3	1,5	0,2
23	KEL	1,3	1,6	0,3
24	MFF	1,3	1,8	0,5
25	MAA	1,2	1,9	0,7
26	MFA	1,3	2	0,7
27	MAZ	1,2	1,9	0,7

28	MIF	1,2	1,6	0,4
29	MKHA	1,2	2	0,8
30	NDA	1,3	2	0,7
31	NR	1,2	1,8	0,6
32	NF	1,3	1,4	0,1
33	RA	1,4	1,7	0,3
34	RCS	1,3	1,9	0,6
35	RF	1,3	1,9	0,6
36	SGN	1,3	1,9	0,6
37	SNF	1,3	1,5	0,2
38	SH	1,3	1,4	0,1
39	VAA	1,3	1,6	0,3
40	WM	1,3	1,7	0,4
N = 40	TOTAL	X = 51,1	X = 70,6	= 19,5
	AVERAGE	M = 1,3	M = 1,8	

Table 4.7 above showed difference score between pre-test and post-test at the experimental class. The difference score was the result from the post-test scores reduced pre-test score. There was significant difference score between pre-test and post-test at the experimental class by the higgest score was 0,9 and the lowest was 0,1 . The graphic describes the table as follow:

Graphic 4.1
The differences score between pre-test and post-test result of experimental class

From graphic 4.1 above showed the result of the students' pre-test and post-test score on he criteria in pronunciation at the experimental class. Data showed that the maximum score in pre-test was 1,5 and the minimum score was 1,2. While in post-test the maximum score was 2,3 and the minimum score was 1,4.
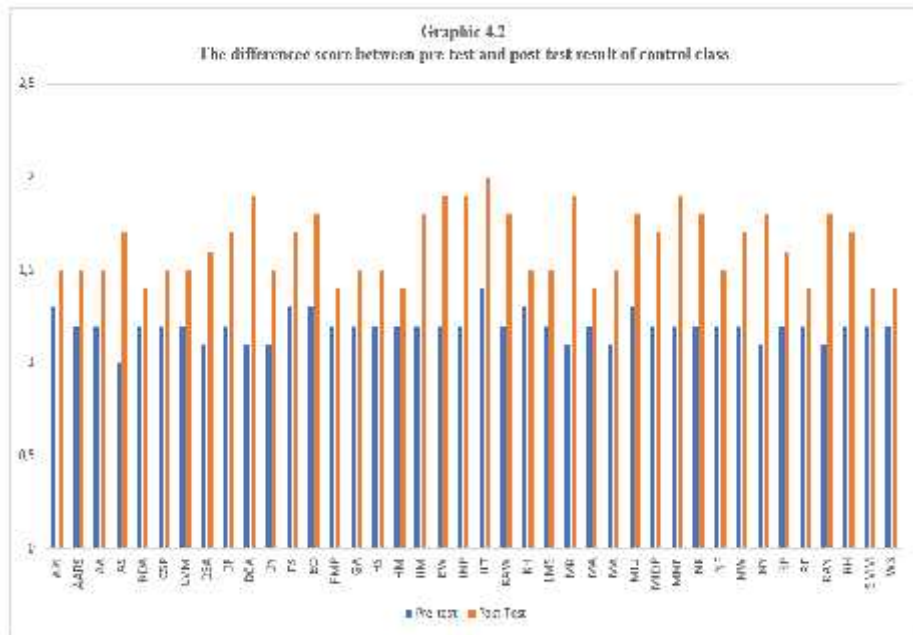
2. **Control Class**

The writer analysis the data by comparing students' score in pre-test and post-test at the control class. This result describes by the table below:

Table 4.8
The differencee score between pre-test and post-test result of
control class

NO	Respondent	Pre-test (X)	Post-Test (X)	Difference (X - X)
1	APJ	1,3	1,5	0,2
2	AARS	1,2	1,5	0,3
3	AA	1,2	1,5	0,3
4	AS	1	1,7	0,7
5	BDA	1,2	1,4	0,2
6	CSP	1,2	1,5	0,3
7	CVM	1,2	1,5	0,3
8	DSA	1,1	1,6	0,5
9	DF	1,2	1,7	0,5
10	DCA	1,1	1,9	0,8
11	DY	1,1	1,5	0,4
12	ES	1,3	1,7	0,4
13	EO	1,3	1,8	0,5
14	FMP	1,2	1,4	0,2
15	GA	1,2	1,5	0,3
16	HS	1,2	1,5	0,3
17	HM	1,2	1,4	0,2
18	IIM	1,2	1,8	0,6
19	IEW	1,2	1,9	0,7
20	INP	1,2	1,9	0,7
21	JLT	1,4	2	0,6
22	KAW	1,2	1,8	0,6
23	KH	1,3	1,5	0,2
24	LMS	1,2	1,5	0,3
25	MR	1,1	1,9	0,8
26	MA	1,2	1,4	0,2
27	MA	1,1	1,5	0,4

28	MIU	1,3	1,8	0,5
29	MIDP	1,2	1,7	0,5
30	MNF	1,2	1,9	0,7
31	NK	1,2	1,8	0,6
32	NF	1,2	1,5	0,3
33	NW	1,2	1,7	0,5
34	NY	1,1	1,8	0,7
35	RP	1,2	1,6	0,4
36	RE	1,2	1,4	0,2
37	RAN	1,1	1,8	0,7
38	RH	1,2	1,7	0,5
39	SMM	1,2	1,4	0,2
40	WS	1,2	1,4	0,2
N = 40	TOTAL	X = 47,8	X = 65,3	= 17,5
	AVERAGE	M = 1,2	M = 1,6	

Table 4.8 above showed that the difference score between pre-test and post test at the control class. The difference score was the result from the post-test scores reduced pre-test score. There was significant difference score class by the highest score was 0,8 and the lowest was 0,2. The graphic describes the table as follow:

Graphic 4.2
The differences score between pre test and post test result of control class

From graphic 4.2 above showed the results of the students' pre-test and post-test scores on the criteria in speaking at the control class. Data showed that the maximum score in pre-test was 1,4 and the minimum score was 1,0. While in post-test the maximum score was 2,0 and the minimum score was 1,4. After getting the data from score of two classes, then the writer analyzed it by using t-test. The formula as follow:

$$t_0 = \frac{M_1 - M_2}{\sqrt{\left(\dfrac{\Sigma x_1^2 + \Sigma x_2^2}{N_1 + N_2 - 2}\right)\left(\dfrac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

Notes:

t_0 = t observation

M_1 = Mean score of the experiment class

M_2 = Mean score of the control class

Σx_1^2 = The sum of the square deviation score in experiment class

Σx_2^2 = The sum of the square deviation score in control class

N_1 = Number of students of experiment class

N_2 = Number of students of control class

2 = Constant number

df = Degree of Freedom (df = $N_1 + N_2 - 2$)

Table 4.8
The differencee score between pre-test and post-test result of control class

No.	X_1	X_2	x_1	x_2	x_1^2	x_2^2
1	1,6	1,5	-0,2	-0,1	0,04	0,01
2	1,7	1,5	-0,1	-0,1	0,01	0,01
3	1,7	1,5	-0,1	-0,1	0,01	0,01
4	1,8	1,7	0	0,1	0	0,01
5	1,7	1,4	-0,1	-0,2	0,01	0,04
6	1,7	1,5	-0,1	-0,1	0,01	0,01
7	1,8	1,5	0	-0,1	0	0,01
8	1,8	1,6	0	0	0	0
9	1,8	1,7	0	0,1	0	0,01

10	2,3	1,9	0,5	0,3	0,25	0,09
11	1,9	1,5	0,1	-0,1	0,01	0,01
12	1,7	1,7	-0,1	0,1	0,01	0,01
13	1,7	1,8	-0,1	0,2	0,01	0,04
14	2,2	1,4	0,4	-0,2	0,16	0,04
15	1,9	1,5	0,1	-0,1	0,01	0,01
16	1,6	1,5	-0,2	-0,1	0,04	0,01
17	1,7	1,4	-0,1	-0,2	0,01	0,04
18	1,9	1,8	0,1	0,2	0,01	0,04
19	1,6	1,9	-0,2	0,3	0,04	0,09
20	1,7	1,9	-0,1	0,3	0,01	0,09
21	1,7	2	-0,1	0,4	0,01	0,16
22	1,5	1,8	-0,3	0,2	0,09	0,04
23	1,6	1,5	-0,2	-0,1	0,04	0,01
24	1,8	1,5	0	-0,1	0	0,01
25	1,9	1,9	0,1	0,3	0,01	0,09
26	2	1,4	0,2	-0,2	0,04	0,04
27	1,9	1,5	0,1	-0,1	0,01	0,01
28	1,6	1,8	-0,2	0,2	0,04	0,04
29	2	1,7	0,2	0,1	0,04	0,01
30	2	1,9	0,2	0,3	0,04	0,09
31	1,8	1,8	0	0,2	0	0,04
32	1,4	1,5	-0,4	-0,1	0,16	0,01
33	1,7	1,7	-0,1	0,1	0,01	0,01
34	1,9	1,8	0,1	0,2	0,01	0,04
35	1,9	1,6	0,1	0	0,01	0
36	1,9	1,4	0,1	-0,2	0,01	0,04
37	1,5	1,8	-0,3	0,2	0,09	0,04
38	1,4	1,7	-0,4	0,1	0,16	0,01
39	1,6	1,4	-0,2	-0,2	0,04	0,04
40	1,7	1,4	-0,1	-0,2	0,01	0,04
	70,6	65,3	-1,4	1,3	1,46	1,35

Note :

X_1 = Score Pre-test (Experiment Class)

X_2 = Score Post-test (Control Class)

x_1 = X_1 - M_1 (Mean X_1)

x_2 = X_2 - M_2 (Mean X_2)

x_1^2 = The squared Value of x_1

x_2^2 = The squared Value of x_2

From the table above, the researcher got the data $X_1 = 70,6$, $X_2 =$ 65,3, $x_1^2 = 1,46$ $x_2^2 = 1,35$ where as $N_1 = 40$ and $N_2 = 40$. After that the writer calculated them based on the t-test formula, the steps as follow:

1. Determine mean of variable X_1 and X_2

    Variable X_1 $M_1 = \dfrac{\Sigma x_1}{N_1} = \dfrac{70,6}{40} = 1,8$

    Variable X_2 $M_2 = \dfrac{\Sigma x_1}{N_2} = \dfrac{65,3}{40} = 1,6$

2. Determine t-test

    $x_1^2 = 1,46$

    $x_2^2 = 1,35$

$$\text{df} \quad = N_1 + N_2 - 2 = 40 + 40 - 2 = 78$$

$$t_0 = \cfrac{M_1 - M_2}{\sqrt{\left(\dfrac{\Sigma x_1^2 + \Sigma x_2^2}{N_1 + N_2 - 2}\right)\left(\dfrac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

$$= \cfrac{1,8 - 1,6}{\sqrt{\left(\dfrac{1,46 + 1,35}{40 + 40 - 2}\right)\left(\dfrac{40 + 40}{40 \cdot 40}\right)}} = \cfrac{0,2}{\sqrt{\left(\dfrac{2,81}{78}\right)\left(\dfrac{80}{1600}\right)}}$$

$$= \cfrac{0,2}{\sqrt{(0,0360 \times 0,05)}} = \cfrac{0,2}{\sqrt{0,0018}}$$

$$= \cfrac{0,2}{0,042}$$

$$= 4,76$$

So after the writer calculates this data based on the formula t-test, the obtained t_o or $t_{observation}$ was 4,76.

C. Hypothesis Testing

The data obtained from experimental class and control class were calculated with the assumption as follow:

If $t_0 > t_t$: the alternative hypothesis was accepted. It means there was significant effect of using phonemic chart to improve students' pronunciation than without using phonemic chart.

If $t_0 < t_t$: null hypothesis was rejected. It means there was no significant effect of using phonemic chart to improve students' pronunciation than without it.

From the result of calculation above, it is obtained that the value of t_0

(t $_{observation}$) was 4,76, the degree of freedom (df) = 78 In the degree significance 5% = 1,66 in degree of significance 1% = 2,37. After that the writer compared the data with t_t (t table) both in degree significance 5% and 1%. Therefore $t_0 : t_t = 4,76 > 1,66$ in degree of significance 5% and $t_0 : t_t = 4,76 > 2,37$ in degree significance 1%.

The statistic hypothesis states that if t_0 is higher than t_t, it shows that H (alternative hypthesis) of the result is accepted and H_0 (null hyphothesis) is rejected. It menas that there was an effect of phonemic chart to imrpove students' pronunciation.

D. **Interpretation Data**

From the result of the research that the mean of pre-test score obtained by students of SMP Negeri 2 Balaraja in the class VIII A (experimental class) 1,3, was bigger than class VIII B

(control class) 1,2. The highest score of pre-test in VIII A (experimental class) was 1,5 and in the class VIII B (control class) was 1,4 The lowest score of pre-test in class VIII A (experimental class) was 1,2 and in the class VIII B (control class) was 1,0. It means that the distribution of score in experimental score was smaller than control class.

The mean of post-test score in experimental class was 1,8 was greater than in control class was 1,6. The highest score in experimental class was 2,3 and in control class was 2,0. It means that the distribution of score post-test in experimental class was greater than class control.

Based on the data obtained from the research of experimental class and control class among the average score, t observation and comparison with t table. The writer summarize that the students taught by using phonemic chart to improve pronunciation ability than the students taught without using phonemic chart.

The students who taught by using phonemic chart were easly to pronounce the words, and many activities by using phonemic chart that can make them more active in learning english especially in English pronunciation.