

## CHAPTER IV

## RESULTS AND DISCUSSION

This chapter presents the result of research which is intended to answer the problem of the study that was mentioned in the first chapter. It covers data presentation, data analysis and discussion.

### A. Data Presentation

## 1. Geographical Location

SMPN I Plemahan Kediri is located in Bogokidul village, Plemahan sub district, Kediri residence; at north side of Kediri city  $\pm$  20 km from Kediri City. While borders of SMPN I Plemahan are:

- a. North side : Plemahan public square
- b. South side : Area of SMPN I Plemahan
- c. East side : Rice field
- d. West side : Bogo – Kediri highway

## 2. The Objective's condition of SMPN 1 Plemahan

- a. The history of SMP I Plemahan Kediri

SMPN I Plemahan Kediri was established on 1<sup>st</sup> April 1979. Its name was repeatedly changed according to development. At the first time, its name was SMP Persiapan Negeri Plemahan and it was voluntary school. In 1970, there was instruction from education department that prohibited voluntary school to use the name of SMP Persiapan, so it is

In addition, the numbers of students of SMPN I Plemahan for last 4 year according to the documentation of existing data in this school were as follow:

Academic year	Total of new students' candidate	Class VII		Class VIII		Class IX		Total (class VII + VIII + IX)	
		Total of students	Total of classroom	Total of students	Total of classroom	Total of students	Total of classroom	Students	Classroom
2005/2006	367	261	6	257	6	267	6	785	18
2006/2007	370	264	6	262	6	257	6	783	18
2007/2008	370	267	7	262	6	262	6	791	19
2008/2009	378	234	9	266	7	258	7	758	23
2009/2010	380	289	9	231	8	264	7	784	24

**b. The Headmaster and education staffs of SMPN 1 Plemahan**

No	Name	Profession	Age	Education
1.	SUPRAPTO, S.Pd, M.Pd	Headmaster	51	S2
2.	Drs. MARGONO	Vice Headmaster	50	S1
3.	MARFU'AH, S.Pd	Vice Headmaster	44	S1

**Table 4.3 Qualification of Education, status, sex, and numbers**

No.	Degrees of Education	Number and status of teachers				Total
		Permanent teacher/PNS		Non permanent teacher/assistant teacher		
		M	F	M	F	
1.	S3/S2	1	1	-	-	2
2.	S1	14	22	3	3	42
3.	D-4	-	-	-	-	-
4.	D3	-	3	-	-	3
5.	D2	-	-	-	-	-
6.	D1	-	-	1	-	1
7.	≤ senior high school/equal with senior high school	-	-	-	-	-
Total		15	26	4	3	48

**Table 4.4 The numbers of teachers with teaching task according to background of education (expertise)**

[illegible]





Miranda Adelia	Retno Widyastuti
Muhammad Septian Wijaya	Sabtian Galuh Arganata
Puji Lutfianti	Samuel Andreas Kristianto
Rahayu Vika Wulandari	Savira Aulia
Yevi Setiyaningtyas	Sheila Adi Kurnia
Doni Ardhiyanto	Ayik Dyah Sasena
Heru Purnomo	Badrus Tsani Abdul Mu'in
Putri Kurnia Sari	Danang Guritno
Reni Setiana	Dian Ipnu Syai
Riska Sofiana Agustin	Astiti Hariadi
Rizky Eka Puspita	Fitria Windiar Fela Yati
Syska Prastya Nugraha	Isnu Wardana
Taufik Hidayatul Arif	Wiece Trisna Handita Sera

For knowing the students' achievement, the researcher used written test for four times. The results of research were:

1. First research, the researcher did the research on May 6, 2011. In the first meeting, the students of 8D and 8E class did listening test based on the material received by the students from the teacher. For the first written test, it could be seen in the appendix 1. After students collected their test, the researcher took the result of students' score in the first meeting and the result of the first test as follow.

Table 4.6 Result of first test

No	Name of students who sat at the front row	Scores	Name of students who sat at the back row	Scores
1	Aji Bagus Asmoro	77	Azza Nasrullah	83
2	Ayub Afrizal	83	Deby Yulianggara	77
3	Kuncara Widha Krisna	77	Natalia Fransisca	77
4	Miranda Adelia	83	Retno Widyastuti	67
5	Muhammad Septian Wijaya	77	Sabtian Galuh Arganata	67
6	Puji Lutfianti	83	Samuel Andreas Kristianto	83
7	Rahayu Vika Wulandari	73	Savira Aulia	77
8	Yevi Setiyaningtyas	83	Sheila Adi Kurnia	77
9	Doni Ardhiyanto	77	Ayik Dyah Sasena	57
10	Heru Purnomo	83	Badrus Tsani Abdul Mu'in	63
11	Putri Kurnia Sari	80	Danang Guritno	70
12	Reni Setiana	73	Dian Ipnu Syai	80
13	Riska Sofiana Agustin	73	Astiti Hariadi	57
14	Rizky Eka Puspita	90	Fitria Windiar Fela Yati	57
15	Syska Prastya Nugraha	77	Isnu Wardana	67
16	Taufik Hidayatul Arif	70	Wiece Trisna Handita Sera	57

2. Second research, in the following day on May 7, 2001, the researcher did the second research in 8D and 8E class. The students did speaking test by pair

dialogue with their partner, then the teacher gave score for their speaking performance. For speaking test which is given by teacher in second meeting, it could be seen in the appendix 2. The result of students' score in the second meeting was as follows.

**Table 4.7 Result of second test**

No	Name of students who sat at the front row	Scores	Name of students who sat at the back row	Scores
1	Aji Bagus Asmoro	84	Azza Nasrullah	76
2	Ayub Afrizal	76	Deby Yulianggara	84
3	Kuncara Widha Krisna	88	Natalia Fransisca	80
4	Miranda Adelia	84	Retno Widyastuti	80
5	Muhammad Septian Wijaya	84	Sabtian Galuh Arganata	80
6	Puji Lutfianti	92	Samuel Andreas Kristianto	76
7	Rahayu Vika Wulandari	80	Savira Aulia	80
8	Yevi Setiyaningtyas	80	Sheila Adi Kurnia	80
9	Doni Ardhiyanto	80	Ayik Dyah Sasena	80
10	Heru Purnomo	80	Badrus Tsani Abdul Mu'in	76
11	Putri Kurnia Sari	84	Danang Guritno	84
12	Reni Setiana	84	Dian Ipnu Syai	76
13	Riska Sofiana Agustin	84	Estiti Hariadi	80
14	Rizky Eka Puspita	88	Fitria Windiar Fela Yati	84



15	Syska Prastyana Nugraha	76	Isnu Wardana	76
16	Taufik Hidayatul Arif	80	Wiece Trisna Handita Sera	80

3. In the third research on May 9, 2011. The researcher did research in 8D and 8E class and reading test was the test in third meeting. After the students read the reading text, then they answered the questions. To know the items of third written test, it could be seen in appendix 3. The result of students' score in the third meeting as below.

### Table 4.8 Result of third test

No	Name of students who sat at the front row	Scores	Name of students who sat at the back row	Scores
1	Aji Bagus Asmoro	75	Azza Nasrullah	75
2	Ayub Afrizal	75	Deby Yulianggara	76
3	Kuncara Widha Krisna	86	Natalia Fransisca	76
4	Miranda Adelia	86	Retno Widyastuti	75
5	Muhammad Septian Wijaya	92	Sabtian Galuh Arganata	75
6	Puji Lutfianti	94	Samuel Andreas Kristianto	75
7	Rahayu Vika Wulandari	84	Savira Aulia	75
8	Yevi Setiyaningtyas	76	Sheila Adi Kurnia	75
9	Doni Ardhiyanto	76	Ayik Dyah Sasena	92
10	Heru Purnomo	78	Badrus Tsani Abdul Mu'in	75

11	Putri Kurnia Sari	82	Danang Guritno	75
12	Reni Setiana	76	Dian Ipnu Syai	75
13	Riska Sofiana Agustin	76	Estiti Hariadi	75
14	Rizky Eka Puspita	86	Fitria Windiar Fela Yati	80
15	Syska Prastya Nugraha	80	Isnu Wardana	75
16	Taufik Hidayatul Arif	88	Wiece Trisna Handita Sera	75

4. In the last research on May 11, 2011 the researcher did the research in 8D and 8E class and they did the writing test. In this test, the teacher asked the students to write about the students' experience. After the students collected their test, then the teacher gave score for them. For the written test in fourth meeting, it could be seen appendix 4. The result of students' score in the fourth meeting as below.

**Table 4.9 Result of fourth test**

No	Name of students who sat at the front row	Scores	Name of students who sat at the back row	Scores
1	Aji Bagus Asmoro	80	Azza Nasrullah	72
2	Ayub Afrizal	80	Deby Yulianggara	68
3	Kuncara Widha Krisna	92	Natalia Fransisca	76
4	Miranda Adelia	88	Retno Widyastuti	84
5	Muhammad Septian Wijaya	88	Sabtian Galuh Arganata	72

6	Puji Lutfianti	88	Samuel Andreas Kristianto	70
7	Rahayu Vika Wulandari	84	Savira Aulia	76
8	Yevi Setiyaningtyas	72	Sheila Adi Kurnia	68
9	Doni Ardhiyanto	80	Ayik Dyah Sasena	84
10	Heru Purnomo	80	Badrus Tsani Abdul Mu'in	75
11	Putri Kurnia Sari	88	Danang Guritno	75
12	Reni Setiana	84	Dian Ipnu Syai	75
13	Riska Sofiana Agustin	76	Estiti Hariadi	76
14	Rizky Eka Puspita	88	Fitria Windiar Fela Yati	75
15	Syska Prastya Nugraha	75	Isnu Wardana	75
16	Taufik Hidayatul Arif	92	Wiece Frisna Handita Sera	76

After doing research for four times, the researcher got data from students' score and the test written by teacher as documentation. Then, the researcher collected the data and took the last result of data from four meetings. The following step determined Means from the students' score.

- a. The students who sat at the front row and the scores (X variable)

$$\text{X variable} = \frac{\sum \text{score of students who sat at the front row}}{4 \text{ Times research}}$$













$$SD_2 = \sqrt{\frac{\sum y^2}{N_1}}$$

$$SD_2 = \sqrt{\frac{63,73}{16}}$$

$$SD_2 = \sqrt{3,98}$$

$$SD_2 = 1,99$$

Standard deviation of students who sat at the back row was 1, 99. It means that standard deviation of students who sat at the back row was 1, 99, it was lower than standard deviation of students who sat at the front row that was 3, 69. To know whether there was great or low sampling of errors, it could be known the number of standard errors.

Standard Error of X variable was:

$$SE_{MI} = \frac{SD_1}{\sqrt{N_1 - 1}} = \frac{3,69}{\sqrt{16-1}} = \frac{3,69}{3,87} = 0,95$$

So, standard error of students who sat at the front row was 0, 95.

Then, finding standard Error of Y variable

$$SE_{M2} = \frac{SD_2}{\sqrt{N_2 - 1}} = \frac{1,99}{\sqrt{16-1}} = \frac{1,99}{\sqrt{15}} = \frac{1,99}{3,87} = 0,51$$

The result of standard error of students who sat at the back row was 0,51. After knowing standard error of students who sat in the front and the back row, the following step, the researcher determined the standard error of the differences between students who sat in the front and the back row.

**Standard Error of the differences between Mean of X and Y variable:**

$$SE_{M1-M2} = \sqrt{(SE_{M1})^2 + (SE_{M2})^2}$$

$$SE_{M1-M2} = \sqrt{(0,95)^2 + (0,51)^2}$$

$$SE_{M1-M2} = 1,07$$

As a result, standard error the differences between mean of students who sat in the front and the back row was 1, 07.

Then, the following step was determined t-value by the formula:

$$t_0 = \frac{M1 - M2}{SE_{M1 - M2}} = \frac{81,95 - 74,76}{1,07} = \frac{7,19}{1,07} = 6,71$$

Based on the  $t_0$  which has gotten, the last step was tested the truth or the error for these two hypothesis by comparing the calculated of  $t$  ( $t_0$ ) and  $t$  listed in the table value of " $t$ ", with the first set the degrees of freedom by the formula:

$$db \text{ or } df = (N1 + N2) - 2$$

As a result,  $db$  or  $df = 16 + 16 - 2 = 30$

- 1) The degrees of freedom in significance level of 5% = 2, 04.

Where  $t\text{-hitung} = 6,71$

t-tabel = 2,04

$$6,71 > 2,04$$

So,  $t\text{-hitung} > t\text{-tabel}$

As a result, in significant level of 5%,  $H_0$  was rejected; it means that there was a significant difference Mean between X variable and Y variable.

2) The degrees of freedom in significance level of 1% = 2,75

Where  $t\text{-hitung} = 6,71$

t-tabel = 2,75

$$6,71 > 2,75$$

So,  $t\text{-hitung} > t\text{-tabel}$

In significant level of 1%,  $H_0$  was also rejected; it means that there was a significant difference of Mean between X variable and Y variable. In conclusion, in significant level of 5% and 1%,  $H_0$  was rejected. It means that there were significant differences between students' score who sat in the front and the back row in English achievement at the grade eight of SMPN 1 Plemahan Kediri.

### C. Discussion

The data was from four times of written test. This test was conducted to know students' score who sat in the front and the back row. The result was analyzed using Means of each variable, finding standard deviation and error, standard error of the difference, the t-value. Then, the researcher interpreted the result based on  $t_0$ . It was used to test the hypothesis whether  $H_0$  was received, so there was no significant difference Mean between students who sat in the front

and the back row. In contrast, if  $H_1$  was received, there was a significant difference Mean between students who sat in the front and the back row.

The result showed that there were significant differences between students' score who sat in the front and the back row in English achievement at the grade eight of SMPN I Plemahan Kediri , it could be seen that the results of students' score who sat in the front row was better than the students' score who sat at the back row. Consequently, it proved that seating arrangement may influence the students' achievement especially in English subject.

At SMPN I Plemahan Kediri, the seating arrangement used traditional classroom where the students sat in four of desk group, so that there were students who sat in the front and the back row. Based on the resarcher' observation, the communications usually occur between teacher and students, but interaction between student and the other student was less.

In traditional seating arrangement, students who sat at the front row were more advantageous than those who sat at the back row. Students who sat at the front row got more attention and have good interaction with teacher. Besides, they could hear the explanation from the teacher clearly. On the other hand, students who sat at the back row were less attention and interaction with teacher, they often make a noise, moreover, they disobeyed the teacher's instruction or explanation. Therefore, the achievement of students who sat in the front row was higher than students who sat at the back row.

