CHAPTER IV

FINDING OF THE RESEARCH

This chapter discusses two main issues i.e. the data description that describes the required data of the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System, and the hypothesis testing which extends the result of the calculation whether the hypothesis is accepted or rejected.

4.1 The Writing Ability of Narrative Text of the Tenth Grade Students of SMA 1 Mejobo Kudus in Academic Year 2013/2014 before Being Taught by Using Multi-Level Grouping System

This research is aimed at finding out whether or not there is any significant difference between the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System. Making reference to the objective of the research, the research must be carry on some procedures i.e. giving pre-test, treatment and post-test. The pre-test is intentionally conducted to obtain the data of the writing ability of the students before being taught by multi-level grouping system. The step is the first step that should be done since the data will become a reference toward the next procedures.

In this case, I use test as the instrument to obtain the precise data of the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo

Kudus in academic year 2013/2014 before being taught by using Multi-Level Grouping System. The test is in form of writing test where the students are asked to compose a narrative text based on some situations given. I focus on narrative text because I have to make adjustment with the syllabus. Based on standard competence and basic of competence on the syllabus, narrative is one of the materials that will be learnt by the students this semester. Since a research should be in line and help to realize school improvement, I direct this research to have the same idea. That is why helping students to deal with their school materials, in this case narrative, becomes my research's priority.

The pre-test was held on 3rd April 2014. It was Thursday when I did the pre-test to the X-3 which consists of 38 students. The test was such writing test that the students have to compose narrative texts. Later, I measure their content, organization, grammar, vocabulary and mechanism. Each category has an authority to give score up to 20. The total score, thus, would be 100 if the students get maximum score for each category. Here is the result:

Table 4.1.a   The Writing Ability of Narrative Text of the Tenth Grade Students of SMA 1 Mejobo Kudus in Academic Year 2013/2014 Before Being Taught by Using Multi-Level Grouping System

No	Sample Code	Score	No	Sample Code	Score
1	01	45	20	20	85
2	02	50	21	21	85
3	03	65	22	22	65
4	04	45	23	23	60
5	05	60	24	24	70
6	06	40	25	25	70
7	07	65	26	26	85
8	08	60	27	27	60
9	09	70	28	28	85
10	10	60	29	29	60
11	11	65	30	30	45
12	12	55	31	31	50
13	13	60	32	32	80

14	14	55
15	15	40
16	16	80
17	17	70
18	18	75
19	19	85

33	33	60
34	34	65
35	35	80
36	36	65
37	37	60
38	38	40

Based on Table 4.1.a the results of the experimental class are: the minimum score is 40, the maximum score is 85. Then, I make the score of writing above into the table of frequency as follows:

Table 4.1.b   The Frequency Distribution of the Writing Ability of Narrative Text of the Tenth Grade Students of SMA 1 Mejobo Kudus in Academic Year 2013/2014 before Being Taught by Using Multi-Level Grouping System

Scores Group	F	X	Fx	x'	Fx'	x'^{2}	Fx'^{2}
40-46	7	43	301	2	14	4	28
47-53	2	50	100	1	2	1	2
54-60	11	57	627	0	0	0	0
61-67	6	64	384	-1	-6	1	6
68-74	4	71	284	-2	-8	4	16
75-81	4	78	312	-3	-12	9	36
82-88	4	85	340	-4	-16	16	64
Total	38	448	2348	-7	-26	35	152

***Notes:**

f   : frequency

x   : middle of score

x'   : coding

Then, I present the polygon of the writing ability of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before being taught by using Multi-Level Grouping System. It can be seen in the following figure:
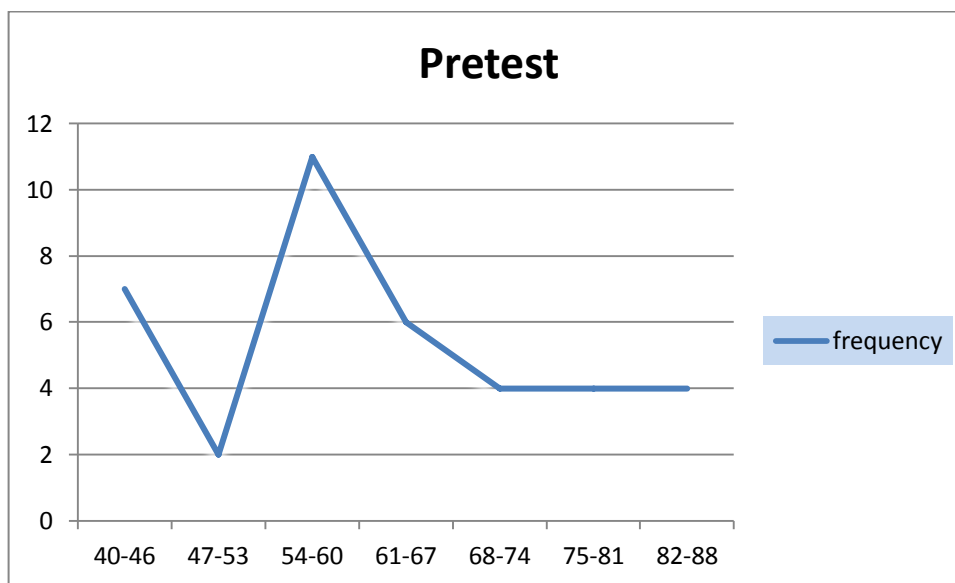
Figure 4.1The Polygon of Frequency Distribution of the Writing Ability of Narrative Text of the Tenth Grade Students of SMA 1 Mejobo Kudus in Academic Year 2013/2014 Before Being Taught by Using Multi-Level Grouping System

Based on the table frequency above, the average score (mean) of the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 taught by using Multi-Level Grouping System is 61.79. Meanwhile the standard deviation is 13.17. It indicates that the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 taught by using Multi-Level Grouping System is categorized "sufficient" while the calculation presented in the appendix.

4.2 The Writing Ability of Narrative Text of the Tenth Grade Students of SMA 1 Mejobo Kudus in Academic Year 2013/2014 After Being Taught by Using Multi-Level Grouping System

Considering the result of the pre-test, I am confident to run this research further. I realize that there is an emergency problem that I need to immediately solve. The method used by the teacher, however, becomes the prime concern of

mine. That is why I feel that it is necessary to use a new brand method to teach

writing in a way to give the students a new dimension of how to write an English

text, especially narrative text. After having pre-test, the students are taught by

using Multi-Level Grouping System for five meetings.

After getting treatments for five meeting i.e. 5th, 10th, 12th, 19th, and 24th

April 2014, I give them a test to measure how far the students could improve their

writing ability. The test has function to measure the writing ability of narrative

text of the tenth grade students of SMA 1 Mejobo Kudus in academic year

2013/2014 after being taught by using Multi-Level Grouping System. The post

test and the pre-test which is held officially are alike. The students are asked to

compose narrative text based on the situation given. The test itself is conducted on

Saturday, 26^{th}April 2014. All of the students came to the class in that time. Here is

the result:

**Table 4.2.a   The Score of Writing Test of Writing of Narrative Text of the
Tenth Grade Students of SMA 1 Mejobo Kudus in Academic
Year 2013/2014 After Being Taught by Using Multi-Level
Grouping System**

No	Sample Code	Score	No	Sample Code	Score
1	01	75	20	20	95
2	02	80	21	21	85
3	03	80	22	22	85
4	04	75	23	23	90
5	05	85	24	24	90
6	06	75	25	25	95
7	07	85	26	26	80
8	08	85	27	27	95
9	09	95	28	28	85
10	10	85	29	29	75
11	11	90	30	30	80
12	12	80	31	31	95
13	13	85	32	32	80
14	14	80	33	33	85
15	15	75	34	34	95
16	16	95	35	35	85

17	17	90	36	36	80
18	18	90	37	37	75
19	19	95	38	38	80

Based on Table 4.2.a the results of the experiment are: the minimum score is 75, the maximum score is 95. Then, I make the table of frequency as follows:

Table 4.2.b **The Frequency Distribution of the Writing Ability of Narrative Text of the Tenth Grade Students of SMA 1 Mejobo Kudus in Academic Year 2013/2014 After Being Taught by Using Multi-Level Grouping System**

Scores Group	F	x	Fx	x'	Fx'	x'^2	Fx'^2
75-77	6	76	456	3	18	9	54
78-80	9	79	711	2	18	4	36
81-83	0	82	0	1	0	1	0
84-86	10	85	850	0	0	0	0
87-89	0	88	0	-1	0	1	0
90-92	5	91	455	-2	-10	4	20
93-95	8	94	752	-3	-24	9	72
Total	38	595	3224	0	2	28	182

Notes:

f : frequency

x : middle of score

x' : coding

Then, I present the data distribution of the writing score of tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 after being taught by using Multi-Level Grouping System. It can be seen in the following figure:
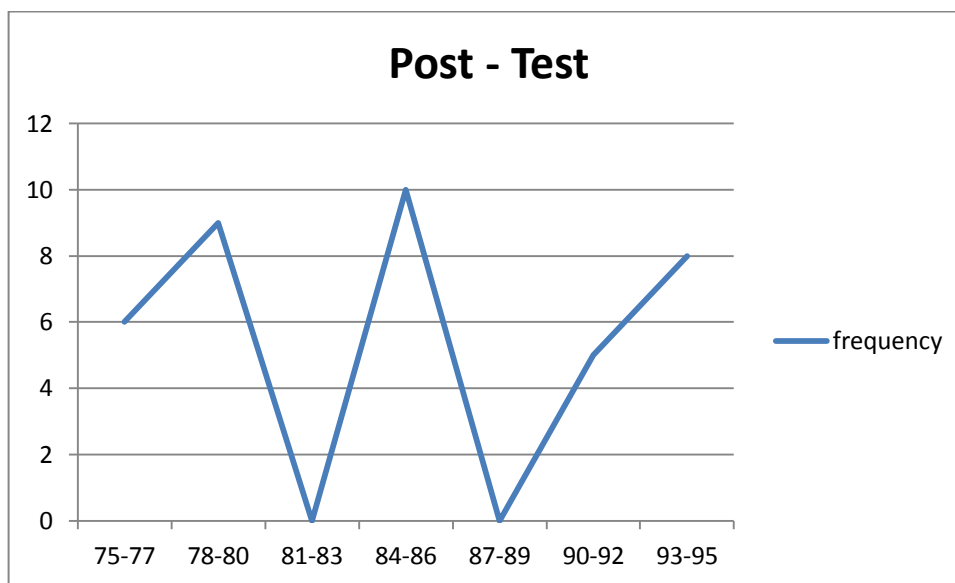
Figure 4.2The Polygon of Frequency Distribution of the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 After Being Taught by Using Multi-Level Grouping System

Based on the table frequency above, the average score (mean) of the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 after being taught by using MGS is 84.84. Meanwhile the standard deviation is 6.57. It indicates that the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 after being taught by using MGS is categorized "good". (See also appendix)

4.3 Hypothesis Testing

Hypothesis testing is intended to know whether or not there is the difference between the achievement of the writing of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System. To do so, the t-test method is extremely needed to

do the analysis. Here is the result of the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System. It can be seen in the following figure:

Table 4.3.aThe Result of the Writing Calculation of the Mean and Standard Deviation of the Tenth Grade Students of SMA 1 Mejobo Kudus in Academic Year 2013/2014 before and after Being Taught by Using Multi-Level Grouping System

No	Research result	N	Mean	SD
1	The writing ability of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 **before** being taught by using Multi-Level Grouping System	38	61.79	13.17
2	The writing ability of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 **after** being taught by using Multi-Level Grouping System	38	84.84	6.57

To determine whether there is a significant difference between the writing ability of narrative text of the seventh grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System, the hypothesis testing was done by the five following steps:

1. Making assumption and meeting test requirement.

   Model: cluster random sampling

                 Level of measurement is interval

                 Sampling distribution is normal.

2. Stating the null hypothesis

   Ho: $\mu_1 = \mu_2$

H$_0$:   "There is no significant difference between the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System."

3. Selecting the sampling distribution and establishing the critical region.

   Sampling distribution = t distribution

   α = .05, two tailed test

   df = N − 1

                        = 38 − 1

                        = 37

   t (critical)   = ± 2.04

4. Computing of the test statistic.

   The statistic t is calculated using the following formula:

$$ t = \frac{D}{\sqrt{\dfrac{D^2 - \dfrac{D^2}{N}}{N(N-1)}}} $$

   After calculating, I got the t(observation) is 19.23.

5. Making decision and interpreting of the results by compare the t (obtained) or t$_o$ with the t (critical) or t table (t$_t$) in the level of significance (α) .05 and df (N − 1) = 37.

   a) Accept H$_0$ and reject H$_1$ if t$_0$ does not fall in the critical region.

   b) Reject H$_0$ and accept H$_1$ if t$_0$ fall in the critical region.

Based on the statistic calculation result in appendix, t (obtained) is 19.23. In the level of significance (α) 0.05 and the degree of freedom (*df*) 37, t critical is ±2.04. This can be illustrated in the following figure:
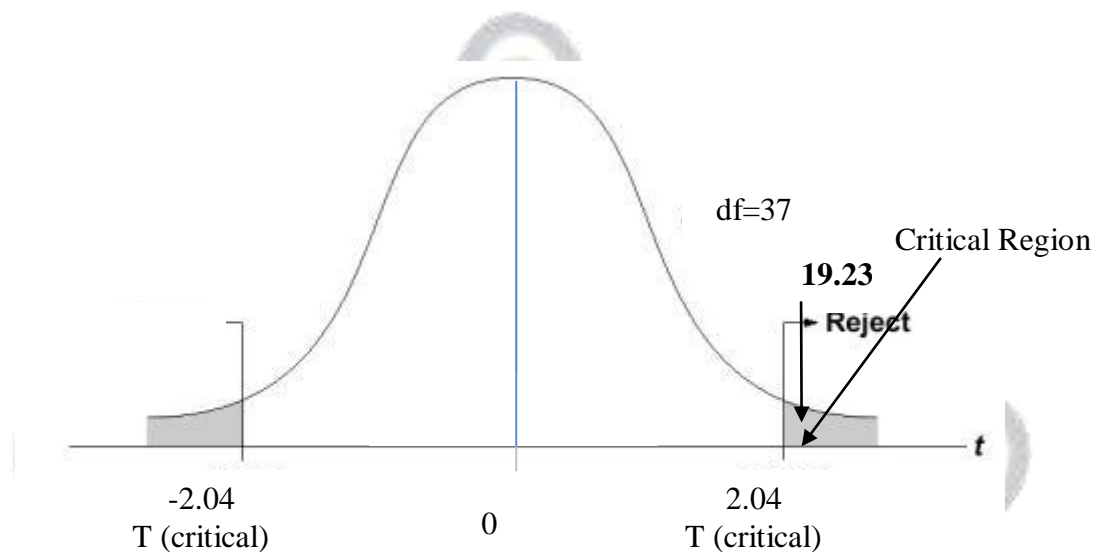

Figure 4.3 Sampling Distribution showing t (obtained) versus t (critical) α **=0.05 two tailed test,** *df***= 37**

Because t_0 falls in the critical region, the (Ho: $\mu_1 = \mu_2$), which states that, "There is no significant difference between the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System", is denied. Therefore, the research hypothesis (Ha: $\mu_1 \neq \mu_2$) is continued, in the word, "There is a significant difference between the writing ability of narrative text of the tenth grade students of SMA 1 Mejobo Kudus in academic year 2013/2014 before and after being taught by using Multi-Level Grouping System."