

CHAPTER IV

RESEARCH FINDINGS AND ANALYSIS

A. Description of the Result Research

The research had been conducted since January 28th 2010 to February 18th 2010. This research had been carried through seven steps. They involve try out test, pre test, past test, interview and observation.

To find out the difference between the students who had been taught by using storytelling and the students who had not been taught by using storytelling on simple past tense, especially in MTs Sumber Payung Bataal Barat ganding Sumenep Madura.

The researcher did an analysis of quantitative data. The data was obtained by giving test to the experimental and control class respectively after giving the different treatment.

The subjects of this research were divided into three classes. They are experimental class (VIII A), control class (VIII B) and try out class (VIII C) of MTs Sumber Payung Bataal Barat Ganding Sumenep Madura.

Before the test was given to the students, the researcher gave try out test to analyze validity, reliability, of the question's test, but the analysis is not statistic, because the question' test is not consist of any items question. After that, test was given before and after the students follow the learning process that was provided by the researcher, this test was given for control and experimental classes.

Before the activities were conducted, the researcher determined the materials and lesson plan of learning. Learning in the experiment class used storytelling, while the control class without used storytelling.

After the data were collected, the researcher analyzed it. The first analysis data is from the beginning of control class and experimental class that is taken from the pre test value. It is the normality test and homogeneity test. It is used to know that two groups are normal and have same variant. Another analysis data is from the ending of control class and experimental class. It is

used to prove the truth of hypothesis that has been planned. The description of the result as follow:

B. Hypothetical Test

The aim of hypothetical analysis is to process the data collected from pre-test and post-test. The goal of this analysis is to prove the hypothesis whether it is accepted or rejected.

Steps adopted in analyzing hypothetical test are for:

1. Searching the normality of initial data in the control class and the experimental class.

The normality test is used to know whether the data obtained is normally distributed or not. Test data of this research uses the formula of chi-square.

Table 4

The List of Pre-test Value of Control Class and Experimental Classes

Control Class			Experimental Class		
No	Code	Total Score	No	Code	Total Score
1	C-1	60	1	E-1	80
2	C-2	60	2	E-2	65
3	C-3	75	3	E-3	90
4	C-4	65	4	E-4	45
5	C-5	85	5	E-5	60
6	C-6	75	6	E-6	75
7	C-7	70	7	E-7	80
8	C-8	55	8	E-8	85
9	C-9	60	9	E-9	60
10	C-10	50	10	E-10	75
11	C-11	70	11	E-11	75
12	C-12	55	12	E-12	50
13	C-13	70	13	E-13	45
14	C-14	50	14	E-14	55
15	C-15	50	15	E-15	65
16	C-16	70	16	E-16	65
17	C-17	65	17	E-17	85
18	C-18	80	18	E-18	90
19	C-19	70	19	E-19	85
20	C-20	60	20	E-20	60
21	C-21	70	21	E-21	75

22	C-22	60	22	E-22	70
23	C-23	50	23	E-23	60
24	C-24	75	24	E-24	80
25	C-25	45	25	E-25	90
26	C-26	80	26	E-26	60
27	C-27	75	27	E-27	50
28	C-28	50	28	E-28	80
29	C-29	55	29	E-29	65

Table 5
Normality Test of Pre Test of Control Class

Class Interval	Limit Class	Z for the Limit Class	P(Z _i) Opportunities for Z	Size Classes for Z	O _i	E _i	$\frac{(O_i - E_i)^2}{E_i}$
	44.5	-1.79	0.4633				
45 – 51	51.5	-1.14	0.3729	0.0904	6	2.6	4.3537
52 – 58	58.5	-0.50	0.1915	0.1814	3	5.3	0.9714
59 – 65	65.5	0.14	0.0557	0.2472	7	7.2	0.0040
66 – 72	72.5	0.78	0.2823	0.2266	6	6.6	0.0497
73 – 79	79.5	1.43	0.4236	0.1413	4	4.1	0.0023
80 – 86	86.5	2.07	0.4808	0.0572	3	1.7	1.0844
Total					29	X ² =	6.4655

With $\alpha = 5\%$ and $df = 6-3=3$, from the chi-square distribution table, obtained $X_{table} = 7.82$. Because X^2_{count} is lower than X^2_{table} ($6.46 < 7.82$). So, the distribution list is normal.

Table 6
Normality Test of Pre-test of Experimental Class

Class Interval	Limit Class	Z for the Limit Class	P(Z _i) Opportunities for Z	Size Classes for Z	O _i	E _i	$\frac{(O_i - E_i)^2}{E_i}$
	44.5	-1.84	0.4671				
45 – 52				0.0727	4	2.1	1.6974
	52.5	-1.25	0.3944				
53 – 60				0.1458	6	4.2	0.7425
	60.5	-0.67	0.2486				
61 – 68				0.2167	4	6.3	0.8303
	68.5	-0.08	0.0319				
69 – 76				0.1596	5	4.6	0.0298
	76.5	0.50	0.1915				
77 – 84				0.1684	4	4.9	0.1599
	84.5	1.08	0.3599				
85 – 92				0.0926	6	2.7	4.0912
	92.5	1.67	0.4525				
Total					29	X ² = 7.5511	

With $\alpha = 5\%$ and $df = 6-3=3$, from the chi-square distribution table, obtained $X_{table} = 7.82$. Because X_{count}^2 is lower than X_{table}^2 ($7.55 < 7.82$). So, the distribution list is normal.

- Searching the homogeneity of initial data in the control class and the experimental class. Homogeneity test is used to find out whether the group is homogenous or not.

Hypothesis :

$$H_o : \sigma_1^2 = \sigma_2^2$$

$$H_A : \sigma_1^2 \neq \sigma_2^2$$

Test of hypothesis:

The formula is used:

$$F = \frac{\text{Biggest variant}}{\text{smallest variant}}$$

Table 7
Homogeneity of Pre-test of Control and Experimental Classes

Source Variant	Experimental Class	Control Class
Total	2020.00	1855.00
n	29	29
\bar{x}	69.66	63.97
Variant (s^2)	187.3768	118.5345
Standard deviation (s)	13.69	10.89

Based on the formula, it is obtained:

$$F = \frac{187.3768}{118.5345} = 1.581$$

With $\alpha = 5\%$ and $df = (29-1 = 28) : (29-1 = 28)$, obtained $F_{table} = 1.88$. Because F_{count} is lower than F_{table} ($1.581 < 1.88$). So, H_0 is accepted and the two groups have same variant / homogeneous.

3. Searching the average similarity of the initial data between the control and the experimental classes.

To test the average similarity, data is analyzed using t-test.

$$H_0: \mu_1 = \mu_2$$

$$H_a: \mu_1 \neq \mu_2$$

Description:

μ_1 : average of experimental class

μ_2 : average of control class

Table 8
The Average Similarity Test of Pre-Test of the Experimental and the Control Classes

Source variant	Experimental class	Control class
Total	2020	1855
N	29	29
\bar{X}	69.6552	63.9655

Variant (s^2)	187.3768	118.5345
Standard Deviation (s)	13.6886	10.8874

$$\begin{aligned}
S &= \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}} \\
&= \sqrt{\frac{(29 - 1)187.37 + (29 - 1)118.54}{29 + 29 - 2}} = \sqrt{\frac{(28)187.37 + (28)118.54}{58}} \\
&= \sqrt{\frac{5246.55 + 3318.96}{56}} \\
&= \sqrt{\frac{8565.52}{56}} = 12,36
\end{aligned}$$

So, the computation t-test:

$$\begin{aligned}
t &= \frac{\bar{x}_1 - \bar{x}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \\
&= \frac{69,65 - 63,97}{12,36 \sqrt{\frac{1}{29} + \frac{1}{29}}} = \frac{5.68}{12,36 \sqrt{0,068}} = \frac{5.68}{(12,36)(0,26)} = \frac{5.68}{3,25} = 1,752
\end{aligned}$$

With $\alpha = 5\%$ and $df = 29 + 29 - 2 = 56$, obtained $t_{table} = 2.003$.

Because t_{count} is lower than t_{table} ($1.752 < 2.003$). So, H_0 is accepted and there is no difference of the pre test average value from both groups.

4. Searching the normality data of post-test of the control and the experimental classes.

Table 9

Value of Post-Test of Control and Experimental Classes

Control Class			Experimental Class		
No	Code	Total Score	No	Code	Total Score
1	C-1	65	1	E-1	95
2	C-2	70	2	E-2	90
3	C-3	55	3	E-3	90

4	C-4	75	4	E-4	55
5	C-5	85	5	E-5	80
6	C-6	75	6	E-6	90
7	C-7	80	7	E-7	85
8	C-8	45	8	E-8	95
9	C-9	60	9	E-9	65
10	C-10	60	10	E-10	80
11	C-11	85	11	E-11	85
12	C-12	70	12	E-12	60
13	C-13	75	13	E-13	75
14	C-14	55	14	E-14	65
15	C-15	65	15	E-15	75
16	C-16	65	16	E-16	70
17	C-17	75	17	E-17	90
18	C-18	80	18	E-18	95
19	C-19	80	19	E-19	95
20	C-20	60	20	E-20	75
21	C-21	85	21	E-21	75
22	C-22	70	22	E-22	85
23	C-23	70	23	E-23	75
24	C-24	75	24	E-24	90
25	C-25	50	25	E-25	75
26	C-26	65	26	E-26	65
27	C-27	65	27	E-27	60
28	C-28	65	28	E-28	80
29	C-29	70	29	E-29	65

Table 10

The Normality Test of Post-Test of Control Class

Class Interval	Limit Class	Z for the Limit Class	P(Z _i) Opportunities for Z	Size Classes for Z	O _i	E _i	$\frac{(O_i - E_i)^2}{E_i}$
	44.5	-2.35	0.4906				
45 – 51				0.0371	2	1.1	0.7937
	51.5	-1.68	0.4535				
52 – 58				0.1122	2	3.3	0.4831
	58.5	-1.00	0.3413				
59 – 65				0.4628	9	13.4	1.4564
	65.5	-0.32	0.1215				
66 – 72				0.2621	5	7.6	0.8900
	72.5	0.36	0.1406				
73 – 79				0.2102	5	6.1	0.1970

	79.5	1.04	0.3508				
80 – 86				0.1065	6	3.1	2.7446
	86.5	1.72	0.4573				
Total					29	$X^2 = 6.5649$	

With $\alpha = 5\%$ and $df = 6-3=3$, from the chi-square distribution table, obtained $X_{table} = 7.82$. Because X^2_{count} is lower than X^2_{table} ($6.5649 < 7.82$). So, the distribution list is normal.

Table 11

The Normality Test of Post-test of Experimental Class

Class Interval	Limit Class	Z for the Limit Class	P(Z _i) Opportunities for Z	Size Classes for Z	O _i	E _i	$\frac{(O_i - E_i)^2}{E_i}$
	52.5	-2.19	0.4857				
53 – 60				0.0500	3	1.5	1.6569
	60.5	-1.52	0.4357				
61 – 68				0.1334	4	3.9	0.0045
	68.5	-0.85	0.3023				
69 – 76				0.3737	7	10.8	1.3587
	76.5	-0.18	0.0714				
77 – 84				0.1165	3	3.4	0.0424
	84.5	0.49	0.1879				
85 – 92				0.1891	8	5.5	1.1544
	92.5	1.16	0.3770				
93 – 100				0.0894	4	2.6	0.7640
	100.5	1.83	0.4664				
Total					29	$X^2 = 4.9809$	

With $\alpha = 5\%$ and $df = 6-3=3$, from the chi-square distribution table, obtained $X_{table} = 7.82$. Because X^2_{count} is lower than X^2_{table} ($4.9809 < 7.82$). So, the distribution list is normal.

5. Searching the homogeneity of the experimental class and the control class

Hypothesis :

$$H_o : \sigma_1^2 = \sigma_2^2$$

$$H_A : \sigma_1^2 \neq \sigma_2^2$$

Test of hypothesis:

The formula is used:

$$F = \frac{\text{Biggest variant}}{\text{smallest variant}}$$

Table 12

Homogeneity of Post-test of Control and Experimental Classes

Source Variant	Experiment	Control
Total	2280.00	1995.00
n	29	29
\bar{x}	78.62	68.79
Variant (s^2)	142.6724	106.5271
Standard deviation (s)	11.94	10.32

Based on the formula, it is obtained:

$$F = \frac{142.6724}{106.5271} = 1.339$$

With $\alpha = 5\%$ and $df = (29-1 = 28)$: $(29-1 = 28)$, obtained $F_{table} = 1.88$. Because F_{count} is lower than F_{table} ($1.339 < 1.88$). So, H_o is accepted and the two groups have same variant / homogeneous.

6. Testing the similarity of average between experimental class and control class.

To test the average similarity, data is analyzed using t-test.

$$H_o: \mu_1 = \mu_2$$

$$H_a: \mu_1 \neq \mu_2$$

Description:

μ_1 : average of experimental class

μ_2 : average of control class

Table 13
The Average Similarity of Post-Test of Experimental Class and Control Class

Source variant	Experimental class	Control class
Total	2280	1995
N	29	29
\bar{X}	78.6207	68.7931
Variant (s^2)	142.6724	106.5271
Standard deviation (s)	11.9446	10.3212

$$\begin{aligned}
 S &= \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}} \\
 &= \sqrt{\frac{(29 - 1)142,67 + (29 - 1)106,53}{29 + 29 - 2}} = \sqrt{\frac{(28)142,67 + (28)106,53}{56}} \\
 &= \sqrt{\frac{3994.83 + 2982.76}{56}} \\
 &= \sqrt{\frac{6977.58}{56}} \\
 &= 11.16
 \end{aligned}$$

So, the computation t-test:

$$\begin{aligned}
 t &= \frac{\bar{x}_1 - \bar{x}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \\
 &= \frac{78.62 - 68.79}{11,16 \sqrt{\frac{1}{29} + \frac{1}{29}}} = \frac{9.83}{11,16 \sqrt{0,068}} = \frac{9.83}{(11,16)(0,26)} = \frac{9.83}{2,93} = 3,35
 \end{aligned}$$

With $\alpha = 5\%$ and $df = 29 + 29 - 2 = 56$, obtained $t_{table} = 2.003$. Because t_{count} is higher than t_{table} ($3.35 > 2.003$).

From the result, it can be concluded that there is a difference in students' oral use of past tense (tell story) score between students taught using storytelling and those taught using non-storytelling. The hypothesis is accepted.

C. Discussion of Research Finding

The result of the research shows that the experimental class (the students who are stimulated using storytelling as a medium) has the mean score value pre-test 69.66 and post-test 78.62. Meanwhile, the control class (the students who are stimulated using non-storytelling) has the mean score value pre-test 63.97 and post test 68.79.

From the last phase of the t-test, it is obtained $t_{count} = 3.35$ with $t_{table} = 2.003$ with the standard of significant 5%. Because of $t_{count} > t_{table}$, so the zero hypothesis (H_0) is rejected and alternative hypothesis (H_a) is accepted.

It can be said that score of experimental class is higher than control class. Furthermore, teaching past tense using storytelling as a medium to stimulate students' oral is more effective than conventional teaching medium.

It means that there are significant differences between the students' oral use of simple past tense that had been stimulated using storytelling as a medium and the students' oral use of simple past tense who had not given the same treatment. This difference can be said as the effectiveness of storytelling as a medium in stimulating students' oral use of simple past tense.

Storytelling has some significant roles for students in learning English especially grammar related to oral production. Because the story is able to: stimulate students' imagination and understanding of the world, develop students' ability in language, and story is an enormous language treasure. In addition, story can create atmosphere and real life environment that encourage students to talk, tell and discuss their story with their friend

From the explanation above, can be concluded and can be drawn in the chart in order to give easier understanding about the result of this research, as follows:

Chart 1

The mean score of pre-test between experimental and control group

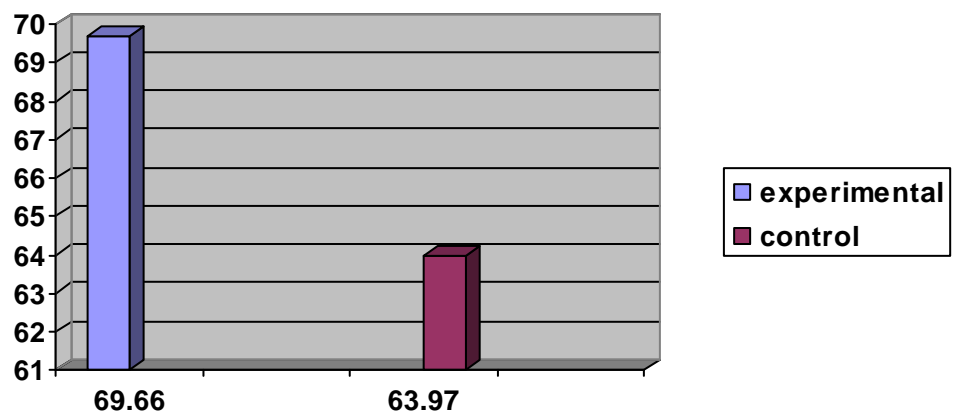


Chart 2

The mean score of post test between experimental class and control class

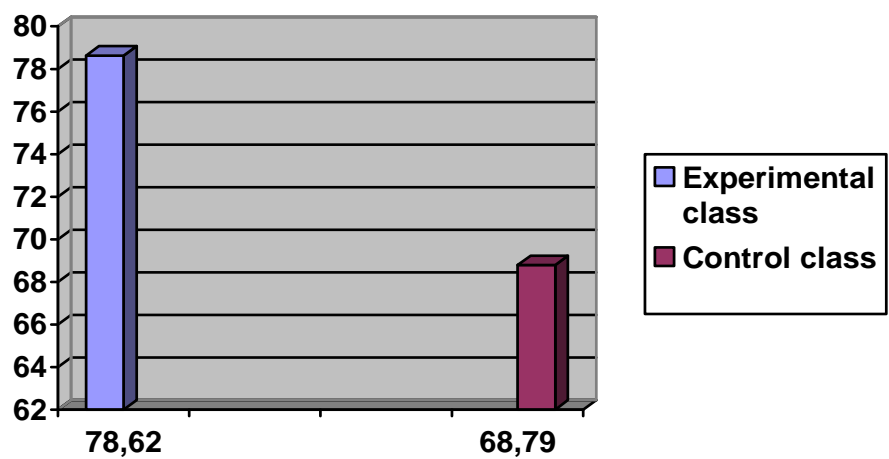
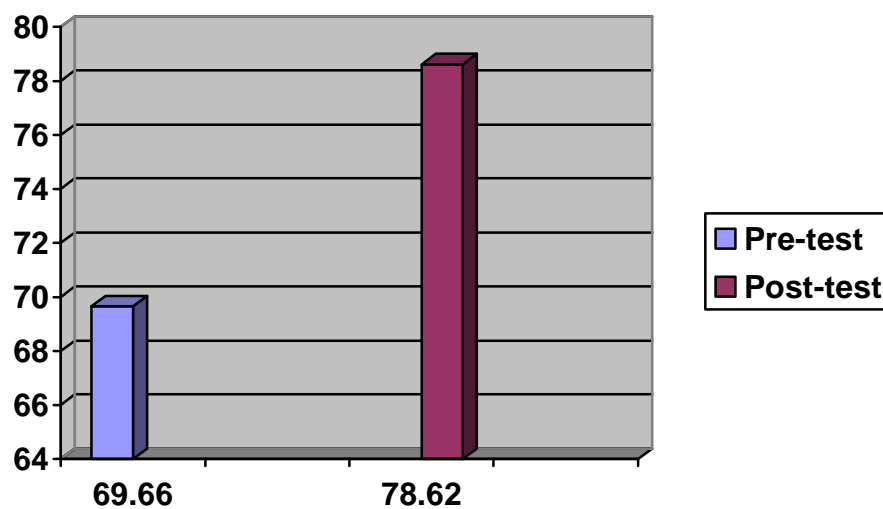
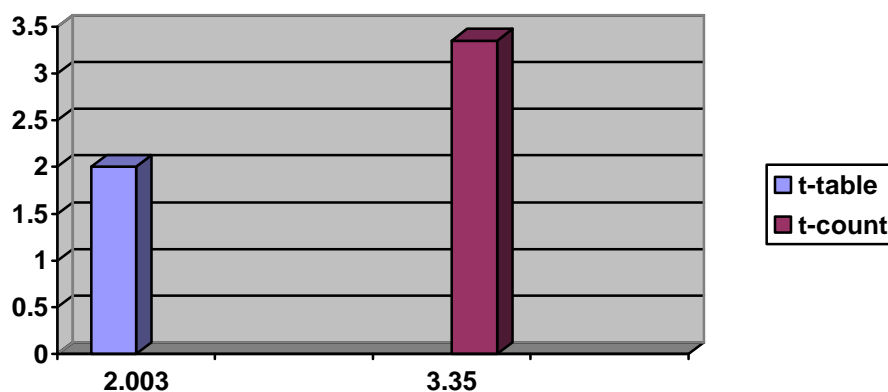


Chart 3

The mean score of experimental class between pre-test and post test

**Chart 4**

The result of t-test with standard of significant 5%



From the observation result, the experimental class has percentage 73,33 % (Average). It means that the activities of this class are less good. While control class has percentage 71,11 %(average). It means that the activities of both classes are the same (less good). For the result of observation scheme can be seen in appendix 13 and 14.

Based on the students' interview result, storytelling has some positive influences for the students in stimulating students' oral production. There are some reasons why students can be motivated in learning simple past tense (simple past tense) especially when they have to express their experience by using storytelling. They are as follows:

1. By using storytelling, the students have encouragement and are ambitious to express their story and idea freely, and feel more confident.
2. Storytelling can make the students more enjoyably relax in learning and teaching process.
3. Generally, a story consists of plot, character etc. So that, by using storytelling students can enjoy the story and learn the form of past tense by paying attention to the sentences.
4. Students feel more understanding than using conventional method, because by storytelling students can learn grammar (simple past tense) directly.
5. Students hope for the next period will be found a new method to make the education in Indonesia more developed.

Besides, there are some obstacles in mastering English especially past tense. They are as follows:

1. The perception that English is the difficult lesson in school.
2. A poor motivation from the students to learn English seriously
3. The difficulties in determining the verb II either irregular or regular verbs.
4. There is no encouragement to learn English
5. Students feel bored with conventional method which makes them uncomfortable in learning process.

For the result of interview scheme can be seen in appendix 16.

In this research, the researcher used the storytelling to stimulate students' oral use of simple past tense in MTs Sumber Payung Bataal Barat Gending Sumenep Madura. So, the research findings are only representative in that school. The researcher hopes that more researches will be done by others to prove this method in improving students' oral use of simple past tense and to find out other methods in learning and teaching English.

D. Limitation of the Research

The researcher realizes that this research had not been done optimally. There were constraints and obstacles faced during the research process. Some limitations of this research are:

1. Limited time of research makes this research could not be done maximally.
2. The research is limited at MTs Sumber Payung Bataal Barat Ganding Sumenep Madura. Nevertheless, it is possible to get flexibility result, if the same research will be done in other school.
3. The implementation of the research process was less smooth; this was more due to the lack of supporting of the stakeholder and many factors of the researcher its self, either internal or external factors.

Considering all those limitations, there is a need to do more research about teaching grammar especially in past tense (simple past tense) using storytelling. As a result, the more optimal result will be gained.