

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

A. Description of Research Findings

To find out the effectiveness of using Think-Pair-Share with realia in teaching writing descriptive text on the students' achievement in class VIII SMP NU 03 Islam Kaliwungu, the writer did an analysis of quantitative data. After conducting the research, she got the data of research finding that is obtained by using the test of the experiment class and control class after conducting different treatment of learning process in both classes.

The implementation of this study was divided in two classes, namely the experiment class (VIII A) and the control class (VIII B). Before the activities were conducted, the writer determines the materials and lesson plan of learning. Learning in the experiment class was conducted by using Think-Pair-Share with realia, while in the control class using the conventional learning.

Test was given before and after the students follow the learning process that was provided by the writer. After the data were collected, the writer analyzed them to prove the truth of the hypothesis that had been formulated. However, before the analysis

was done, first the writer scored the results of the test that had been given to the students.

Before analyze the data, first the writer knew the data from the beginning of control class and experiments class that is taken from the pre-test score. The initial score of the data control class and experimental class are on the appendix.

After the control class and the experiment class conducted the learning processes, then both classes were given a post test to obtain the data that will be analyzed.

B. Data Analysis and Hypothesis Test

Hypothetical analysis is intended to process the data collected from pre-test and post test. The goal of this analysis is to prove the hypothesis whether it is received or rejected. Steps adopted in analyzing the hypothetical test are:

1. Analysis of Pre-Test

It was done to know the normality and homogeneity of the initial data in the experimental class and control class.

Table 4.1
Value of Pre-Test of the Control and the Experiment
classes

Control class			Experiment Class		
No.	Code	Score total	No.	Code	Score total
1	C-01	34	1	E-01	51
2	C-02	52	2	E-02	41
3	C-03	40	3	E-03	52
4	C-04	78	4	E-04	47
5	C-05	60	5	E-05	76
6	C-06	50	6	E-06	80
7	C-07	40	7	E-07	52
8	C-08	45	8	E-08	49
9	C-09	42	9	E-09	50
10	C-10	34	10	E-10	63
11	C-11	38	11	E-11	55
12	C-12	42	12	E-12	47
13	C-13	59	13	E-13	58
14	C-14	61	14	E-14	75
15	C-15	38	15	E-15	39
16	C-16	61	16	E-16	60
17	C-17	34	17	E-17	41
18	C-18	52	18	E-18	40
19	C-19	48	19	E-19	42
20	C-20	45	20	E-20	51
21	C-21	59	21	E-21	55
22	C-22	38	22	E-22	65
23	C-23	45	23	E-23	43
24	C-24	45	24	E-24	38
25	C-25	71	25	E-25	51
26	C-26	56	26	E-26	40
27	C-27	48	27	E-27	63
28	C-28	54	28	E-28	50
29	C-29	50	29	E-29	54
30	C-30	50	30	E-30	40

a. Normality Test

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.

Hypothesis:

H_o : the distribution list was normal

H_a : the distribution list was normal

With the criteria H_o accepted if $\chi^2_{\text{count}} < \chi^2_{\text{table}}$.

Table 4.2
The Normality Result of Pre-Test

Class	N	Average	Variants	χ^2_{count}	χ^2_{table}	Criteria
Experimental	30	52,26	127,926	6,21	7,81	Normal
Control	30	48,62	119,620	5,28		Normal

Based on the result of table above, it can be seen that χ^2_{count} both of class were lower than χ^2_{table} ($\chi^2_{\text{count}} < \chi^2_{\text{table}}$), so H_o is accepted. It can be concluded that the distribution of data of experimental and control class were normal.

a. Homogeneity Test of Pre-Test

Homogeneity test is used to know whether the group sample that was taken from population is homogeneous or not.

Hypothesis:

$$H_0: \sigma_1^2 = \sigma_2^2$$

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

Formula:

$$F = \frac{Vb}{Vk}$$

Table 4.3

The Homogeneity Result of Pre-Test

Class	N	Average	Variants	F _{count}	F _{table}	Criteria
Experimental	30	52,26	127,926	1,069	1,861	Homogeneous
Control	30	48,62	119.620			

According to the formula above, it is obtained that:

$$F = \frac{Vb}{Vk} = \frac{\text{Biggest variant}}{\text{Smallest variant}}$$

$$= \frac{127,926}{119.620} = 1,069$$

For $\alpha = 5\%$ with:

$$dk = nb - 1 = 30 - 1 = 29$$

$$dk = nk - 1 = 30 - 1 = 29$$

$$F_{(0.025)(29:29)} = 1,861$$

Since $F_{count} < F_{table}$, the experimental and control group had the same variant. With $\alpha = 5\%$ and $dk = (30-1=29) : (30-1=29)$, it is obtained that $F_{table} = 1,861$. Because F_{count} was lower than F_{table} ($1,069 \leq 1,861$). So, H_0 was accepted and the two groups had the same variant/ homogeneous.

b. The Average Similarity Test of Pre-Test

Hypothesis:

$$H_0 : \mu_1 = \mu_2$$

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

Formula:

$$s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}$$

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Table 4.4

The Average Similarity Test of Pre-Test

Variation Source	Experimental	Control	Criteria
Total	1586	1459	

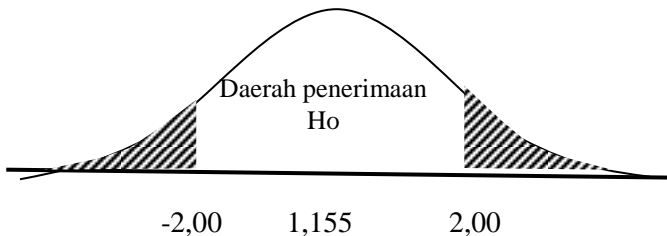
N	30	30	Ho accepted
\bar{X}	52,26	48,62	
Variants (s^2)	127,926	119,620	
Standard deviation (s)	11,310	10,937	

According to the formula above, it is obtained that:

$$s = \sqrt{\frac{(30 - 1)127,926 + (30 - 1)119,620}{30 + 30 - 2}} = 11,125$$

$$t = \frac{52,26 - 48,62}{11,125 \sqrt{\frac{1}{30} + \frac{1}{30}}} = 1,155$$

For $\alpha = 5\%$ and $dk = 30 + 30 - 2 = 58$, $t_{(0,95)(58)} = 2,00$.



With $\alpha = 5\%$ and $dk = 30 + 30 - 2 = 58$, obtained $t_{table} = 2,00$. Thus we found out that

$- t_{table} = -2,00 \leq t_{count} = 1,155 \leq t_{table} = 2,00$. Because t_{count} was in the H_0 accepted area, so, H_0 was accepted and there was no difference of the pre-test average value from both groups.

2. Analysis of Post-Test

It was done to answer hypothesis of this research. The data used are the result of post-tests of both classes. The experimental class taught by using Think-Pair-share with realia and the control class taught without using Think-Pair-Share with realia.

The pos-test analysis contains of normality test, homogeneity test, and hypothesis test.

Table 4.5
The Value of Post-Test of the Experiment and the Control
Classes

Control class			Experiment class		
No.	Code	Score total	No.	Code	Score total
1	C-01	56	1	E-01	71
2	C-02	64	2	E-02	55
3	C-03	77	3	E-03	70
4	C-04	80	4	E-04	55
5	C-05	62	5	E-05	88
6	C-06	65	6	E-06	86
7	C-07	57	7	E-07	83
8	C-08	55	8	E-08	63
9	C-09	65	9	E-09	68
10	C-10	44	10	E-10	78
11	C-11	55	11	E-11	63
12	C-12	63	12	E-12	68
13	C-13	55	13	E-13	78
14	C-14	68	14	E-14	84
15	C-15	52	15	E-15	62
16	C-16	67	16	E-16	70
17	C-17	55	17	E-17	53
18	C-18	57	18	E-18	63

19	C-19	70	19	E-19	77
20	C-20	85	20	E-20	70
21	C-21	70	21	E-21	62
22	C-22	62	22	E-22	76
23	C-23	60	23	E-23	85
24	C-24	70	24	E-24	70
25	C-25	55	25	E-25	48
26	C-26	70	26	E-26	70
27	C-27	45	27	E-27	55
28	C-28	70	28	E-28	70
29	C-29	76	29	E-29	55
30	C-30	50	30	E-30	70

a. Normality Test of Post-Test

Hypothesis:

H₀ : the distribution list was normal

H_a : the distribution list was normal

With the criteria H₀ accepted if $\chi^2_{\text{count}} < \chi^2_{\text{table}}$.

Table 4.6

The Normality Result of Post-Test

Class	N	Average	Variants	χ^2_{count}	χ^2_{table}	Criteria
Experimental	30	68,93	111,789	4,05	7,81	Normal
Control	30	62,67	99,506	6,19		Normal

From the table above, it can be seen that χ^2_{count} both of class were lower than χ^2_{table} ($\chi^2_{\text{count}} <$

χ^2_{table}), so H_0 is accepted. It can be concluded that the distribution of data of experimental and control class were normal.

b. Homogeneity Test of Post-Test

Homogeneity test is used to determine the mean and variance of the students' score in experimental or control group.

Hypothesis:

$$H_0: \sigma_1^2 = \sigma_2^2$$

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

Formula:

$$F = \frac{vb}{vk}$$

Table 4.7

The Homogeneity Result of Post-Test

Class	N	Average	Variants	F_{count}	F_{table}	Criteria
Experimental	30	68,93	111,789	1,135	1,861	Homogeneous
Control	30	62,67	99,506			

According to the formula above, it is obtained that:

$$F = \frac{Vb}{Vk} = \frac{\text{biggestvariant}}{\text{smallestvariant}}$$

$$= \frac{111,789}{99,506} = 1,135$$

For $\alpha = 5\%$ with:

$$dk = nb - 1 = 30 - 1 = 29$$

$$dk = nk - 1 = 30 - 1 = 29$$

$$F_{(0.025)(29;29)} = 1,861$$

Since $F_{count} < F_{table}$, the experimental and control group had the same variance. With $\alpha = 5\%$ and $dk = (30-1=29) : (30-1=29)$, it is obtained that $F_{table} = 1,861$. Because F_{count} was lower than F_{table} ($1,135 < 1,861$). So, H_0 was accepted and the two groups had the same variant/ homogeneous.

c. The Hypothesis Test

Hypothesis:

$$H_0 : \mu_1 \leq \mu_2$$

$$H_a : \mu_1 > \mu_2$$

Formula:

$$s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}$$

$$t = \frac{\bar{x}_1 - \bar{x}_2}{s \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Table 4.8

The Hypothesis Test

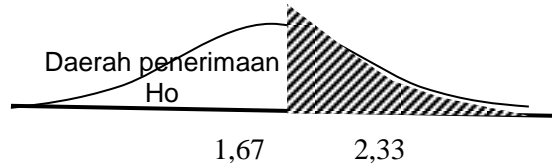
Variation Source	Experimental	Control	Criteria
Total	2068	1881	Ha accepted
N	30	30	
\bar{X}	68,93	62,66	
Variants (s^2)	111,789	99,506	
Standard deviation (s)	10,573	9,925	

According to the formula above, it is obtained that:

$$s = \sqrt{\frac{(30 - 1)111,789 + (30 - 1)99,506}{30 + 30 - 2}} = 10,254$$

$$t = \frac{68,93 - 62,66}{10,254 \sqrt{\frac{1}{30} + \frac{1}{30}}} = 2,330$$

For $\alpha = 5\%$ and $dk = 40 + 30 - 2 = 68$, $t_{(0.975) (58)} = 1,67$



Since $t_{\text{count}} > t_{\text{table}}$ means that there is a significant difference between experimental and control class on the test the experimental is higher than the control one. From the computation above, by

5% alpha level of significance and $dk = 30+30-2= 68$. It was Obtained t_{table} was 1,67 while t_{count} was 2,33. So, it can be concluded H_0 was rejected, H_a was accepted, because t_{count} was higher than the critical value on the t_{table} ($2,33>1,67$).

From the result, the hypothesis in this research can be concluded that there was a significant difference in teaching descriptive text achievement score between students who were experimental class which was taught by using TPS with realia and control class which was taught without using TPS with realia

C. Discussion of the Research Findings

1. The score of pre-test

Based on the calculation of normality and homogeneity test from class VIII A as the experiment class and class VIII B as the control class is normal distribution and homogeneous.

2. The score of post-test

The result of this research is obtained the average score of experiment class was 68,93 which were higher than the result of control class was 62,66

The average score of experiment class was 68,93 and standard deviation (s) was 10,573. Teaching writing in experiment class by using Think-Pair-Share with realia to

teach descriptive text can encourage the students to be more active and motivated. TPS with realia can create situation in teaching writing more interesting and make the students easier to understand in lesson. It can be seen on average score of experiment class which better result than control class.

The average score of control class was 62,66 and standard deviation (s) was 9,925. Teaching writing in control class by using conventional method or lecturing to teach writing descriptive text make the students feel staurated with the material that is presented bacause the method too monotone. The students still had difficult in transferring their taught and ideas their writing.

Based on the result of calculation t-test is obtained t_{count} : 2, 33 and t_{table} : 1,67. This is show that $t_{count} > t_{table}$ (t_{count} higher than t_{table}). So it means that there is a significane difference between writing skill improvement of students who were taught by using TPS with realia and students who were taught by conventional learning in teaching writing descriptive text.

D. Limitation of the Research

Writer 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. The research is limited at SMP NU 03 Islam Kaliwungu in the academic year of 2016/2017, so that when the same research

is conducted in other schools, it is still possible that different result will be gained.

2. Relative short of research time makes this research could not be done maximally. But it is enough to fulfill all requirements for a research.
3. The writer is still lacking of many experiences and knowledge in doing research. So the research is not done optimally. But the writer has done the research as good as possible to do this study accordance with capability of knowledge and the guide from advisor.
4. The research is limited at the descriptive text material for eighth year students of Junior High School, so it is still possible that will be gained at the different material.

Considering all those limitations, there is a need to do more research about teaching writing of descriptive text TPS with realia. In the hope there will be more optimal result.