CHAPTER IV
RESEARCH FINDING AND DISCUSSION

A. Description of Research Finding

The Research had been conducted since March 20th, 2013 to April 10th, 2013 in MTs Riyadlotut Thalabah Sedan Rembang. This research had been carried through 4 steps. They involve pre-test, two times of treatment, and post-test.

To find out the result of students' understanding of writing narrative text using Think-Pair-Share, the researcher identified some results, they are: the score of students before treatment and the differences between pre-test and post-test of students.

The researcher did an analysis of quantitative data. The data was obtained by giving test to the experimental class and the control class after giving a different treatment to both classes. The Subjects of this research were divided into two classes. They are the experimental class (VIII A) and the control class (VIII B).

Before the activities were conducted, the researcher determined the materials and lesson plan of learning. The learning process in the experimental class used Think-Pair-Share technique, while the control class using the conventional method.

After the both classes conducted the learning process, students were given a test as their assessment. This assessment then counted to get the result of this research which analyzed to prove the truth of hypothesis that had been planned.

The data in this research were obtained from the test result, as follows:

1. Result of Research

    a. Analysis of Scoring Test

        After collecting the data, the researcher analyzed the result of data from the test had been given to both of classes. In scoring of writing test, the researcher gave the score for each element of writing as follows.

Table 4.1
The Lowest Score and the Highest Score Element of Writing

No	Element of Writing	The Lowest Score	The Highest Score
1	Content	13	30
2	Organization	7	20
3	Vocabulary	7	20
4	Grammar	5	25
5	Mechanic	2	5

    b. The Data Score of Pre-Test of the Experimental Class

        Based on the result of research in class VIII A before being taught by using Think-Pair-Share in writing narrative texts the highest score achieved was 81, the lowest was 56, the range (R) was 25, the number of class (K) was 6, and the class interval was 5, from the calculation $\sum f_i x_i = 2085$, $\sum (f_i x_i)^2 = 146265$, so the mean $(\bar{x}) = 69.50$ with standard deviation (s) = 6.32. The result of the calculation above was then inputted into the table of frequency distribution as follows:

Table 4.2
**List of Frequency Distribution Value of Pre-Test of the**
Experimental Class

No	Interval	Absolute Frequency	Relative Frequency (%)
1	56 – 60	2	6.66
2	61 – 65	8	26.66
3	66 – 70	8	26.66
4	71 - 75	4	13.33
5	76 – 80	7	23.33
6	81 - 85	1	3.33

(See in appendix 10)

The researcher applied frequency distribution score into charts

to make easier to understand as follows:

Chart 1
Histogram frequency distribution value of pre test of the experimental
class
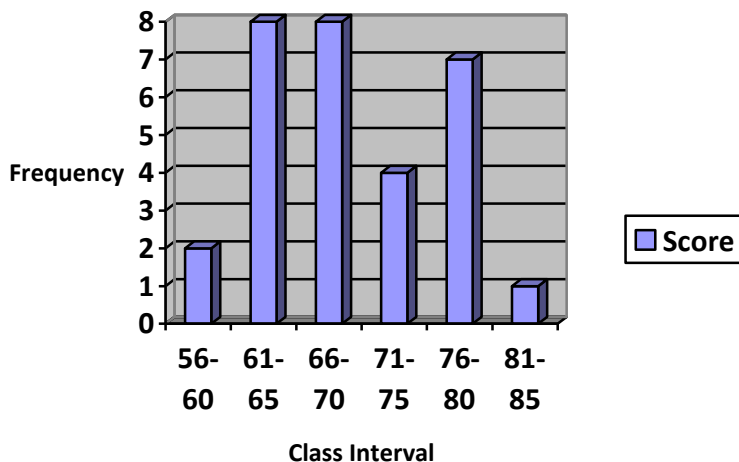
c. The Data Score of Pre-Test of the Control Class

Based on the result of research in class VIII B before being taught by using conventional learning (without using Think-Pair-Share technique) in writing narrative texts the highest score achieved was 83, the lowest score was 63, range (R) was = 20, the number of class (K) was = 6, and the class interval was 4, from the calculation $\sum f_i x_i =$ 2111, $\sum (f_i x_i)^2 =$ 149304, so the mean $\left(\overline{x} \right) =$ 70.37 with standard deviation (s) = 4.60. The result of the calculation above was then inputted into the table of frequency distribution as follows:

Table 4.3
List of Frequency Distribution Value of Pre-Test of the
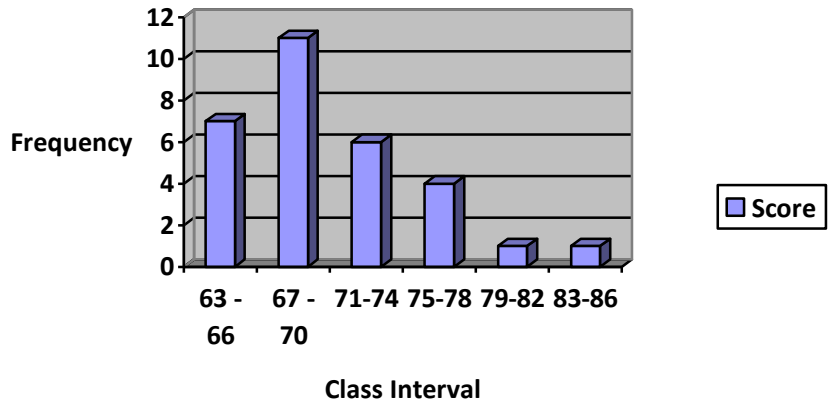**Control Class**

No	Interval	Absolute Frequency	Relative Frequency (%)
1	63 – 66	7	23.33
2	67 – 70	11	36.66
3	71 – 74	6	20
4	75 – 78	4	13.33
5	79 – 82	1	3.33
6	83 – 86	1	3.33

(See in appendix 11)

The researcher applied frequency distribution value into charts to make easier to understand as follows:

Chart 2

Histogram frequency distribution value of pre-test of the control class

d. The Data Score of Post-Test of the Experimental Class

Based on the result of research in class VIII A after being taught by Think-Pair-Share technique in writing narrative texts the highest score achieved was 85, the lowest score was 70, range (R) = 15, the number of class (K) was = 6, and the class interval was = 3, from the calculation $\sum f_i x_i = 2340$, $\sum (f_i x_i)^2 = 183102$, so the mean $\left(\bar{x}\right) = 77.70$ with standard deviation (S) = 4.60 The result of the calculation above was then inputted into the table of frequency distribution as follows:

Table 4.4
List of Frequency Distribution Value of Post-Test of
the Experimental Class

No	Interval	Absolute Frequency	Relative Frequency (%)
1	70 - 72	4	13.33
2	73 - 75	6	20
3	76 - 78	5	16.67
4	79 - 81	8	26.67
5	82 - 84	5	16.67
6	85 - 87	2	6.67

(See in appendix 14)

The researcher applied frequency distribution value into charts to make easier to understand as follows:

Chart 3
Histogram frequency distribution value of post-test of the experimental class.
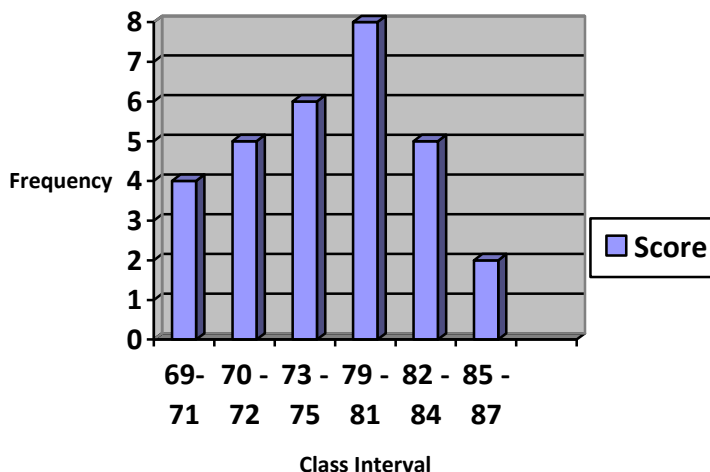
e. The Data Score of Post-Test of the Control Class.

Based on the result of research in class VIII B after being taught by using conventional method in writing narrative texts the highest score achieved was 84, the lowest score was 67, range (R) was = 17, the number of class (K) was = 6, and the class interval was 3, from the calculation $\sum f_i x_i = 2181$ $\sum (f_i x_i)^2 = 158985$, so the mean $\left(\overline{x}\right) = 72.80$ with standard deviation (s) was = 4.00. The result of the calculation above was inputted into the table of frequency distribution as follows:

Table 4.5
**List of Frequency Distribution Value of Post-Test of the**
Control Class

No	Interval	Absolute Frequency	Relative Frequency (%)
1	67 – 79	6	20
2	70 – 72	11	36.67
3	73 – 75	6	20
4	76 – 78	5	16.67
5	79 – 81	1	3.33
6	82 – 84	1	3.33

(See in appendix 15)

The researcher applied frequency distribution value into charts to make easier to understand as follows:

Chart 4

Histogram frequency distribution value of post-test of the control class
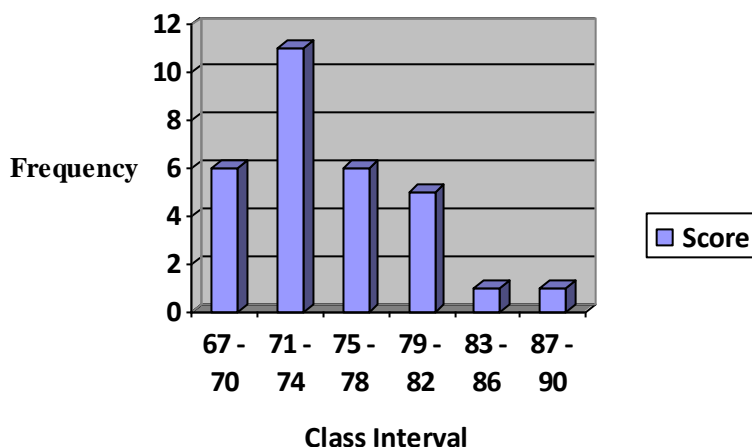
The Average Score of Pre Test and Post-Test of the Experimental Class and the Control Class.

The data were obtained from the students' ability scores of the writing narrative texts. They were pre test and post test scores from the experimental and the control classes. The average score from the experimental class was 69.23 for the pre test and 77.83 for the post test. The rise percentage for the experimental class was 5.84 %. While the average score for the control class was 70.33 for the pre test and 72.70 for the post test. The rise percentage for the control class was 1.65 %. The following was the simple table for the pre-test and post-test students' average scores:

Table 4.6
The Result of Average Score of the Pre-Test and
Post-Test of the Experimental and the Control Classes

Class	The average score of the pre test	The average score of the post test	The rise percentage (%)
Experimental	69.23	77.83	5.84
Control	70.33	72.70	1.65

The more calculation can be seen in appendix 7.

Based on the table above, it can be seen that there was an improvement of the students' result in writing a narrative texts. Each class had different result. The result of the experimental class was higher than the control class**.**

B. Data Analysis and Hypothesis Test

1. First Phase Analysis

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

Table 4.7
Score of Pre-Test the Experimental and the Control Classes

No	Source of variance	Experimental	Control
1	N	30	30
2	Average	69.23	70.33
3	Variance	39.91	21.61
4	Standard deviation	6.32	4.65
5	Maximal score	81	83
6	Minimal score	56	63

The more calculations can be seen in appendix 7

a. Normality Test of Pre-Test

   The normality test was used to know whether the data was normally distributed or not. To find out the distribution data was used normality test with Chi-square.

   Ho   : the data of normal distribution

   Ha   : the data of un normal distribution

   With criteria, Ho accepted if $x^2_{count} < x^2_{table}$ with α = 5% and $df = k - 3$

Table 4.8
The Result of Normality Pre-Test of the Experimental and the Control Classes

No	Class	Test	x^2_{count}	x^2_{table}	Criteria
1	Experimental	Pre test	5.3260	7.81	Normal
2	Control	Pre test	6.7640	7.81	Normal

The more calculations can be seen in appendix 10 and 11

   Based on the analysis above it can be seen that x^2_{count} both of class was lower than x^2_{table} ($x^2_{count} < x^2_{table}$), so Ho accepted. It can be concluded that the distribution data of the experimental and the control class are normal.

b. Homogeneity Test of Pre Test

The homogeneity test used to know whether the class sample that was taken from population is homogeneous or not.

$Ho = \sigma_1{}^2 = \sigma_2{}^2$ (homogeny variance)

$Ha = \sigma_1{}^2 \neq \sigma_2{}^2$ (non homogeny variance)

With criteria, Ho accepted if $F_{count} < F_{table}$ with $\alpha = 0.05$ and $df = k - 1$

Table 4.9
The Result of Homogeneity Pre-Test of the
Experimental and the Control Classes

No	Class	Variance	N	F_{count}	F_{table}	Criteria
1	Experim ental	39.91	30	1.84	1.86	Homoge nce
2	Control	21.61	30			

The more calculation can be seen in appendix 12.

Based on the formula:

$$F_{count} = \frac{\text{maximum variance}}{\text{minimum variance}}$$

$F_{count} = 1.171$

Based on the computation above it was obtained that F_{count} was lower than F_{table}, so Ho is accepted. It can be concluded that the data of pre test from the experimental and the control class have the same variance or homogence.

c. Testing the similarity of average of the initial data between the experimental and the control classes.

To test the difference of average, the researcher used t-test.

Ho: $\mu_1 = \mu_2$

Ha: $\mu_1 \neq \mu_2$

Where:

μ_1 : average data of the experimental group

μ_2: average data of the control group

Table 4.10
The Average Similarity Test of Pre-Test of the
Experimental and the Control Classes.

Source of variance	Experimental	Control	Criteria
Sum	2077	2110	Same
N	30	30	
Average	69.23	70.33	
Variance (S^2)	39.91	21.61	
Standard deviation (S)	6.32	4.65	

The more calculations can be seen in appendix 13.

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

$$= 5.546$$

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

$$t = -0.768$$

Ho was accepted if $-t_{(1-\frac{1}{2}\alpha)(n1+n2-2)} < t < t_{(1-\frac{1}{2}\alpha)(n1+n2-2)}$. Based on the computation above, by $\alpha = 5\%$ and df = 30+30- 2 = 58 is obtained $t_{table} = 2.00$ and $t_{count} = -0.768$. Ho is accepted if $-t_{table} < t_{count} < t_{table}$. So, it can be concluded that there was not significant different of the average pre test between the experimental and the control classes, because t_{count} at the reception area of Ho.

2. End Phase Analysis

It was done to answer hypothesis of this research. The data used were the result of post test of both classes. The final analysis contained the normality test, homogeneity test and the difference average test of post test.

a. Normality Test of Post Test

   Ho : the data of normal distribution

   Ha : the data of un normal distribution

With criteria, Ho accepted if $x^2_{count} < x^2_{table}$ with α = 5% and df = k-3.

Table 4.11
The Result of Normality Post-Test of the Experimental and the Control Classes

No	Class	x^2_{count}	x^2_{table}	Criteria
1	Experimental	2.0143	7.81	Normal
2	Control	4.8390	7.81	Normal

The more calculations can be seen in appendix 14 and 15

Based on the computation above it was obtained that x^2_{count} was lower than x^2_{table} by α = 5% with df = 6-3 = 3. So it can be concluded that the distribution data of post-test of the experimental and the control class are normal.

b. Homogeneity Test of Post-Test

   $Ho = \sigma_1^2 = \sigma_2^2$ (homogeny variance)

   $Ha = \sigma_1^2 \neq \sigma_2^2$ (non homogeny variance)

With criteria, Ho accepted if $F_{count} < F_{table}$ with $\alpha = 0.05$ and $df = $ k-1

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Table 4.12
The Result of Homogeneity Post-Test of the Experimental Class
and the Control Classes

No	Class	Variance	N	F_{count}	F_{table}	Criteria
1	Experimental	21.109	30	1.372	1.861	Homogen
2	Control	15.390	30			

The more calculation can be seen in appendix 16.

Based on the formula:

$$F_{count} = \frac{\text{maximum variance}}{\text{minimum variance}}$$

$$F_{count} = 1{,}372$$

Based on the computation above it was obtained that F_{count} was lower than F_{table}, it means that Ho was accepted. It can be concluded that data of post test of the experimental and the control classes have the same variance or homogeneous.

c. Hypothesis Test

Hypothesis test was used to know whether there was a difference average on post test of the experimental class and the control class. The data which were used to test the hypothesis was the post- test score of both classes. To test the difference of average used t-test.

Ho: $\mu_1 \leq \mu_2$: it means there is no significant difference between the writing skill improvement of students who were taught by using think-pair-share and who were taught by using conventional method.

Ha: $\mu_1 > \mu_2$:   it means there is significant difference between the writing skill improvement of students who were taught by using think-pair-share and who were taught by using conventional method.

Ha is accepted if $t_{count} > t_{(1-\alpha)(n1+n2-2)}$

Table 4.13
The Score of Post-Test of the Experimental and the Control Classes

No	Source of variance	Experimental	Control
1	N	30	30
2	Average	77.83	72.70
3	Variance	21.11	15.39
4	Standard deviation	4.59	3.92
5	Maximal score	85	84
6	Minimal score	70	67

The more calculations can be seen in appendix 7.

Table 4.14
The Result of computation t-test

Class	N	Average ($\bar{X}$)	Variance (S^2)	Standard Deviation (s)	t_{table}	t_{count}	Criteria
Experimental	30	77.83	21.11	4.59	1.67	4.654	Ha accepted
Control	30	72.70	15.39	3.92			

The more calculation can be seen in result of SPSS.

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Based on the computation above, it was obtained that the average of post test of the experimental class who were taught by using Think-Pair-Share was 77.83 and standard deviation (s) was 4.59. While the average of post-test of the control class who were taught by using without Think-Pair-Share was 72.70 and standard deviation (s) was 3.92 with df = 30+30-2 = 58 by α = 5%, so obtained t_{table} = 1.67 from the result of calculation t-test t_{count} = 4.654 It means that t_{count} is higher than t_{table} (t_{count} > t_{table}). So Ho is rejected and Ha is accepted.

Because t_{count} > t_{table} , it can be concluded that there was a significant difference between the experimental class and the control class on post-test, the score of the experimental class was higher than the control class.

C. Discussion of the Research Finding

1. The score of initial ability (pre test)

Based on the calculation of normality and homogeneity test from class VIII A as the experimental class and class VIII B as the control class, both of classes are normal distribution and homogeneous.

2. The score of final ability (post test)

The result of this research was obtained the average score of experimental class was 77.83 while the result of control class was 72.70.

The average score of the experimental class was 77.83, standard deviation (s) was 4.59 and the growth percentage was 5.84 %. It means that teaching writing in the experimental class by using Think-Pair-Share technique to teach narrative texts can encourage the students to be more active and motivated. Think-Pair-Share technique in teaching-learning process can create situation in teaching writing more interesting and make the students easier to understand the material. It can be seen on average score of the experimental class which better result than the control class.

The average score of control class was 72.70, standard deviation (s) was 3.92 and the growth precentage was 1.65 %. It means teaching writing in the control class without using Think-Pair-Share to teach writing narrative texts make the students feel bored with the material that was presented because the method was too monotone. The students still had difficulties in transferring their taught and ideas in writing.

Based on the result of calculation t-test is obtained t_{count}: 4.654 and t_{table}: 1.67 with $\alpha = 5\%$ and $df = (n_1 + n_2 - 2)$. It showed that $t_{count} > t_{table}$ (t_{count} higher than t_{table}). So, it means that there is a significant difference between writing skill improvement of students taught by using think-pair-share and taught by using conventional method in writing narrative texts.

D. Limitation of the Research

In collecting the data, there were constrains and obstacles faced during the research process. Some limitations of this research are as follows:

1. The research was limited at MTs Riyadlotut Thalabah Sedan Rembang and just used class VIII A and class VIII B as the sample, so that when the same research was conducted in other school, it was still possible that different result will be gained.

2. The researcher was still lacking of many experience and knowledge in doing the research. But, the researcher has done the research as good as possible to do this study accordance with capability of knowledge and the guide from advisors.

3. The research was limited at the narrative texts material for eighth grade students of Islamic Senior High School, so it was still possible that different result will be gained at the different material.

Considering all those limitations, there was a need to do more research about teaching writing narrative texts using the same or different technique. In the hope there would be more optimal result.