CHAPTER IV RESEARCH FINDING AND ANALYSIS

This chapter is related to the analysis of data collection from the research finding and discussion. This research was intended to find out the effectiveness of using herringbone technique to improve students' reading and writing skills in recount text.

A. Profile of SMP Hasanuddin 6 Semarang

SMP Hasanuddin 6 Semarang is islamic-based school that had built since 1983 based on the initiative from NU and the citizen. The vission of SMP Hasanuddin 6 Semarang is "Preparing Smart, skilled, and Good Character Generation". While the mission of SMP Hasanuddin 6 Semarang are:

- 1. Implementing education and guidance effectively, so that the learners can be developed with their potential optimally.
- 2. Improving the quality of intensive learning to the learners.
- 3. Creating the experience and comprehension toward the teaching of Islamic religion and culture to the learners, so that it becomes a source of wisdom in action.

The aim of SMP Hasanuddin 6 Semarang are:

- 1. Improving the quality of human resources in the environment of SMP Hasanuddin 6 Semarang.
- 2. Achieving the goals based on the vision and mission carried by SMP Hasanuddin 6 Semarang.

- 3. Learning process can be established optimally by paying attention into the basis of intelligence, knowledge, personality, character, and skills to live independently and to follow further education.
- 4. The use of school facilities and infrastructure in learning optimally.

B. Description of Research

Findings of this research described that there were different result between experimental class which was taught by using Herringbone Techinique and control class which was taught using Conventional Method in teaching Recount text. The research was conducted in MTs Hasanuddin Semarang with the eighth grade in the academic year 2014/2015.

No	A ativity		Month/ Date						
190.	Activity			Octob	oer-No	vembe	r		
		21^{st}	23 rd	27^{th}	28^{th}	30^{th}	31 st	4^{th}	6^{th}
1.	Try-Out test								
2	pre-test								
3	a. Experimental class								
	b. Control Class								
4	Teaching by using non-herringbone technique in control class				\checkmark				
5	Treatment in experimental class								
6	post-test								
	a. Control class								
	b. Experimental class								

Table 4.1Schedule of the Research

Before items were given to the students, the researcher gave tryout test for try-out class on 21st October 2014 to analyze validity, reliability, difficulty level and the discrimination power of each item. The researcher prepared 40 items as the instrument of the test. Test was given to know the validity, reliability, degree of test difficulty, and discriminating power of test items of try-out test in control class that was provided by the writer.

In this research finding of try out test, the researcher used *product-moment* formula to analyze validity. The researcher applied the *spearman-brown* formula which was combined with *product-moment* formula to analyze reliability instrument. The degree of test difficulty used difficulty level formula by considered five levels of difficulty. The last analysis of try-out test was discriminating power by divided into two classes; lower class and upper class which consist of 12 students in each class.

The researcher gave pre-test on 23rd March 2014 in control class and experimental class. The questions consisted of 20 items were stated valid according to try-out analysis. After giving pre-test, the writer determined the materials and lesson plans of learning activities. Pre-test was conducted to both classes to know that two classes were normal and homogeny.

After knowing the control class and experimental class had same variant. Before giving the treatment and conventional method, the researcher prepared lesson plan and material to learning activity. The researcher conducted conventional teaching in control class on 27rd and 28th October 2014. The control class was taught by using conventional method, but the teacher explained the material using conventional method without giving variation or special treatment in learning process.

The treatment for experimental class conducted on 30th and 31th October 2014 by using Heringbone Technique which is appropriate to teach recount text focused in reading and writing skills.

After giving treatments in experimental class and conventional teaching in control class, the researcher gave post-test which consisted 20 test items which approximately finished on 40 minutes. The researcher gave post-test on 4th November to control class and 6th November to experimental class.

Teaching recount text in experimental class by using Herringbone Technique as a medium can encourage the students to be more active and motivated in learning activities. Herringbone Technique as a teaching medium can create the atmosphere and situation in teaching recount text interesting and make the students easier to understand the material and memorable. It can be seen on average score of experimental class which had better result than control class.

Teaching recount text in control class by using conventional method made the students feel bored with the material that is being presented because the method is too

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monotonous. So, the material can't be well-transferred to the students optimally.

C. Data Analysis

1. The Data Analysis of Try-out Finding

This discussion covered validity, reliability, level of difficulty and discriminating power.

a. Validity of Instrument

As mentioned in chapter III, validity refers to the precise measurement of the test. In this study, item validity was used to know the index validity of the test. To know the validity of instrument, the writer used the Pearson product moment formula to analyze each item. It was obtained that from 40 test items; there were 24 test items which were valid and 16 test items which were invalid. It was invalid with the reason the computation result of their r_{xy} value (the correlation of score each item) was lower than their t_{able} value.

Table 4.2 Validity of Each Item

Criteria	r _{table}	Number of questions	Total
Valid	0. 404	2, 3, 6, 7, 10, 12, 13, 14, 15, 16, 17, 19, 20 21, 23, 24, 25, 26, 29, 30, 32, 33, 38, 40.	24
Invalid		1, 4, 5, 8, 9, 11, 18, 22, 27, 28, 31, 34, 35, 36, 37, 39.	16

The following was the example of item validity computation for item number 1 and for the other items would use the same formula.

$$N = 24 \qquad \sum Y = 521$$

$$\sum XY = 290 \qquad \sum X^{2} = 12$$

$$\sum X = 12 \qquad \sum Y^{2} = 12885$$

$$r_{xy} = \frac{N\sum XY - \sum (X)\sum (Y)}{\sqrt{\{N\sum X^{2} - (\sum X)^{2}\}} \sqrt{N\sum Y^{2} - (\sum Y)^{2}\}}}$$

$$r_{xy} = \frac{24(290) - 12(521)}{\sqrt{\{24(12) - (12)^{2}\}} \sqrt{24(12885) - (521)^{2}\}}}$$

$$r_{xy} = \frac{708}{2333.03579}$$

$$r_{xy} = 0,303$$

From the computation above, the result of computing validity of the item number 1 was 0.303. After that, the researcher consulted the result to the table of r Product Moment with the number of subject (N) =24 and significance level 5% it was 0.404. Since the result of the computation was lower than r in table, the index of validity of the item number 1 was considered to be invalid.

b. Reliability

A good test must be valid and reliable. To get the coefficient of correlation, the researcher applied the *product-moment* formula and then continued to the *spearman-brown* formula. The formula of product moment as follow: Before computing the reliability, the researcher had to compute *product moment* formula (r_{xy}) with the formula below:

N = 24	$\sum XY = 3047$
$\sum Y = 313$	$\sum X^2 = 2134$
$\sum Y^2 = 4657$	$\sum X = 208$
$r_{xy} = \frac{N}{\sqrt{\left\{N\sum X^2\right\}}}$	$\frac{\sum XY - \sum (X) \sum (Y)}{\left(2 - \left(\sum X\right)^2\right) \left(N \sum Y^2 - \left(\sum Y\right)^2\right)}$
$r_{xy} = \frac{2}{\sqrt{24(2134)}}$	$\frac{24(3047) - (208(313))}{(208)^2 \left\{ 24(4657) - (313)^2 \right\}}$
$r_{xy} = \frac{8024}{10475.192}$	-
$r_{xy} = 0,766$	

After finding *product moment* formula (r_{XY}) the computation was continued to the *Spearman-Brown* formula as follow:

$$r_{11} = \frac{2 \times r_{xy}}{\sqrt{1 + r_{xy}}}$$
$$r_{11} = \frac{2x0,766}{\sqrt{1 + 0,77}}$$
$$r_{11} = \frac{0,867}{100}$$

From the computation above, it was found out that r_{11} (the total of reliability test) was 0,867 whereas the number of subjects was 24 and the critical value for r-table with significance level 5% was 0.404. Thus, the value resulted from the computation was higher than its critical value. It could be concluded that the instrument used in this research was reliable.

c. Degree of test difficulty

The following is the computation of the level difficulty for item number 1 and for the other items would use the same formula.

$$B=8+4=12$$

$$JS=24$$

$$P = \frac{B}{JS}$$

$$P = \frac{12}{24} = 0,50$$

It is proper to say that the index difficulty of the item number 1 above can be said as the medium category,

because the calculation result of the item number 1 is in the interval 0. $50 \le p \le 0,70$. After computing 40 items of the try-out test, there were 9 items were considered to be easy, 30 items were considered to be medium, and there were 1 item was considered the difficult

Criteria	Number of questions	Total			
Easy	3, 5, 7, 10, 12, 15, 19, 29, 32.	9			
Medium	1, 2, 4, 6, 8, 9, 11, 13, 14, 16, 17,				
	20, 21, 23, 24, 25, 26, 27, 28, 30,	30			
	31, 33, 34, 35, 36, 37, 38, 39, 40				
Difficulty	18	1			

Table 4.3Degree of Difficulty of Each Item

d. The Discriminating Power

The following is the computation of discriminating power of item number 1. To do this analysis, the number of try-out subjects was divided into two classes, upper and lower classes. They were upper and lower class.

Table 4.4						
The Table of Discriminating Power of Item Number 1						

Upper Class			Lower Class			
No	Code	Score	No	Code	Score	
1	T-1	0	1	T-13	0	
2	T-2	1	2	T-14	1	
3	T-3	0	3	T-15	0	
4	T-4	1	4	T-16	0	
5	T-5	1	5	T-17	1	
6	T-6	1	6	T-18	0	

Upper Class			Lower Class			
No	Code	Score	No Code		Score	
7	T-7	0	7	T-19	0	
8	T-8	1	8	T-20	0	
9	T-9	1	9	T-21	0	
10	T-10	1	10	T-22	1	
11	T-11	1	11	T-23	1	
12	T-12	0	12	T-24	0	
	Sum	8		Sum	4	

This was the analysis of discriminating power for item number 1:

JA =12
JB = 12
BA=8
BB =4
$$D = \frac{B_A}{J_A} - \frac{B_B}{J_B}$$
$$D = \frac{8}{12} - \frac{4}{12} = \frac{4}{12}$$
$$D = 0, 33$$

According to the criteria, the item number 1 above was medium category, because the calculation result of the item number 1 was in the interval $0.20 \le D \le 0.40$. After computing 40 items of try –out test and after being consulted to the discriminating power category, there were 15 items which considered being good, 20 items were satisfied and 5 items were poor.

Discriminating Power of Each Item						
Criteria	Number of questions	Total				
Poor	27, 28, 35, 36, 39	5				
Satisfied	1, 2, 3, 4, 5, 6, 7, 9, 10, 13, 15, 17,	20				
	18, 20, 21, 22, 26, 32, 33, 34.					
Good	8, 11, 12, 15, 16, 19, 23, 24, 25, 29,	15				
	30, 31, 37, 38, 40.					

Table 4.5

Based on the analysis of validity, reliability, difficulty level, and discriminating power, finally 40 items of test, there were 20 items were accepted to be used in pre-test and post-test. They were number 2, 3, 7, 12, 13, 14, 15, 16, 17, 19, 20, 21, 23, 26, 29, 30, 32, 33, 38, and 40.

2. Data Analysis and Hypothesis Test of Reading Skill

Before collecting the data, the researcher did some activities to collect it during the research. Such as try out the test, pre-test, treatment, conventional teaching, and doing post-test.

After the researcher finished the try out test, the researcher also held pre-test, treatment, conventional teaching and post-test to the students. It is hoped that the researcher could know the improvement of the students' reading and writing skills in recount text using herringbone technique.

a. First Phase Analysis

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

1) Normality Test

The normality test is used to know whether the data is normally distributed or not. Test data of this research used the formula of Chisquare.

Ho: the data distributes normally

Ha: the data does not distribute normally

With the criteria:

Ho accepted if $X^2_{count} < X^2_{table}$

Ho rejected if $X^{2}_{count} > X^{2}_{table}$

With a = 5% and df = k-1.

Table 4.6The Normality Result of Reading Skill Pre-test in
Experimental and Control Class

Class	X^2_{count}	X^2_{table}	Criteria
Experimental	3.04	9.49	Normal
Control	4.46	9.49	Normal

Based on analysis above, it can be seen that X^{2}_{count} both of class lower that X^{2}_{table} ($X^{2}_{count} < X^{2}_{table}$), so Ho accepted. And the conclusion is the distribution data of experimental and control classes are normal.

2) Homogeneity test

The homogeneity test is used to know whether the group samplethat was taken from population is homogeneous or not.

Ho: $\sigma_1^2 = \sigma_2^2$ Ha: $\sigma_1^2 \neq \sigma_2^2$

Table 4.7The Homogeneity Result of Reading Skill Pre-Test
in Experimental and Control Class

Class	Variance (S ²)	Ν	df	F _{count}	F_{table}	Criteria
Experimental	111. 265	23	22	1, 793	2.05	Homogen
Control	62.055	23	22			8

According to the formula above, it is obtained

that:

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

$$F = \frac{111, 265}{62, 055}$$

$$= 1, 793$$

Based on computation above it is obtained that F_{count} is lower than F_{table} so Ho accepted. It can be concluded that data of pre test from experimental and control class have the same variance or homogeneous. 3) Testing The Similarity of Average of the Initial Data between Experimental and Control Classes.

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

Ho: $\mu_1 = \mu_2$

Ha: $\mu_1 \neq \mu_2$

Where

 μ_1 : average data of experimental group

 μ_2 : average data of control group

Table 4.8The Average Similarity Test of Reading SkillPretest in Experimental and Control Class

Variation Source	Experimental	Control	Criteria
Sum	1470	1365	
Ν	23	23	Samo
Average (X)	63,913	59,348	Same
Variance (S ²)	111,265	62,055	
Standar of			
deviation (S)	10,548	7,878	

With $\alpha = 5\%$ and df = 23 + 23 - 2 = 44,

obtained $t_{table} = 2.02$. Because t_{count} was lower than t_{table} (1,663 < 2, 02). So, Ho was accepted and there was no difference of the pre-test average value from both classes.

b. End Phase Analysis

It was done to answer hypothesis of this research. The data used are the result of post tests of both classes. The final analysis contains of normality test, homogeneity test and the hyphotesis test.

1) Normality test

Ho: the data distributes normally

Ha: the data does not distribute normally

With the criteria:

Ho accepted if $X^{2}_{count} < X^{2}_{table}$

Ho rejected if $X_{count}^2 > X_{table}^2$

With a = 5% and df = k-1.

Table 4.9

The Normality Result of Reading Skill Post-Test in Experimental And Control Class

Class	X^2_{count}	X^2_{table}	Criteria
Experimental	0.76	9.49	Normal
Control	6.03	9.49	Normal

Based on analysis above, it can be seen that X_{count}^2 both of class lower that X_{table}^2 ($X_{count}^2 < X_{table}^2$), so Ho accepted. And the conclusion is the distribution data of experimental and control classes are normal.

2) Homogeneity test

The homogeneity test is used to know whether the group samplethat was taken from population is homogeneous or not.

Ho: $\sigma_1^2 = \sigma_2^2$ Ha: $\sigma_1^2 \neq \sigma_2$

Table 4.10 The Homogeneity Result of Reading Skill Post-Test in Experimental And Control Class

Class	Variance (S ²)	N	df	F_{count}	F _{table}	Criteria
Experimental	172.727	23	22	1.222	2.05	Homogen
Control	141.403	23	22			

According to the formula above, it is obtained

that:

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

$$F = \frac{172.727}{141.403}$$
$$= 1.222$$

Based on computation above it is obtained that F_{count} is lower than F_{table} so Ho accepted. It can be concluded that data of pre test from experimental and control class have the same variance or homogeneous. 3) Hypothesis test

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

- Ho: $\mu_1 = \mu_2$: it means there is no significant difference between the reading skill improvement of students who were taught by using Herringbone Technique and who were taught by using non-Herringbone Technique.
- Ha: $\mu_1 \neq \mu_2$: it means there is significant difference between the reading skill improvement of students who were taught by using Herringbone Technique and who were taught by using non-Herringbone Technique.

Table 4.11 The Result of Computation T-Test of Reading Skill

Class	N	Average (X)	Variance (S ²)	Standar of deviation (s)	t _{table}	t _{count}	criteria
Experimental	23	75.000	172.727	13.143	2.02	3.059	На
Control	23	63.696	141.403	11.891			accepted

Based on the computation above, it is obtained that the average of post test of the

experimental class who are taught by using Herringbone Technique is 75.00 and standard deviation (s) is 13.14. While the average of post test of the control class who are taught by using nonherringbone technique is 63.69 and standard deviation (s) is 11.89. with df = 23+23-2 = 44 by α = 5%, so obtained t_{table} = 2.02. From the result of calculation ttest t_{count} = 3.059. if compared between t_{table} and t_{count} , $t_{count} > t_{table}$, it means that Ho is rejected and Ha is accepted.

3. Data Analysis and Hypothesis Test of Writing skill

a. First Phase Analysis

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

1) Normality Test

The normality test is used to know whether the data is normally distributed or not. Test data of this research used the formula of Chisquare.

Ho: the data distributes normally

Ha: the data does not distribute normally

With the criteria:

Ho accepted if $X^{2}_{count} < X^{2}_{table}$ Ho rejected if $X^{2}_{count} > X^{2}_{table}$ With a = 5% and df = k-1.

the normanty Result of writing 5km ric-test m							
Experimental and Control Class							
Class	X^2_{count}	X^2_{table}	Criteria				
Experimental	6.46	9.49	Normal				
Control	3.15	9.49	Normal				

Table 4.12 The Normality Result of Writing Skill Pre-test in Experimental and Control Class

Based on analysis above, it can be seen that X^{2}_{count} both of class lower that X^{2}_{table} ($X^{2}_{count} < X^{2}_{table}$), so Ho accepted. And the conclusion is the distribution data of experimental and control classes are normal.

2) Homogeneity test

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

Ho: $\sigma_1^2 = \sigma_2^2$ Ha: $\sigma_1^2 \neq \sigma_2^2$

Table 4.13 The Homogeneity Result of Writing Skill Pre-Test in Experimental and Control Class

Class	Variance	Ν	Df	F _{count}	F_{table}	Criteria		
	(S^2)							
Experimental	58.893	23	22					
_				1.016	2.05	Homogen		
Control	53.261	23	22			_		

According to the formula above, it is obtained

that:

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

$$F = \frac{58.893}{53.261} = 1.016$$

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

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

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

Ho: $\mu_1 = \mu_2$

Ha: $\mu_1 \neq \mu_2$

Where

 μ_1 : average data of experimental group

 μ_2 : average data of control group

Table 4.14 The Average Similarity Test of Writing Skill Pretest in Experimental and Control Class

Variation Source	Experimental	Control	Criteria
Sum	1255	1070	
N	23	23	
Average (X)	54,565	46,522	Not
Variance (S^2)	58,893	53.261	Same
Standar of			
deviation (S)	7,674	7,298	

With $\alpha = 5\%$ and df = 23 + 23 - 2 = 44, obtained $t_{table} = 2.05$. Because t_{count} was lower than

 t_{table} (3,643 > 2, 02). So, Ho was rejected and there was difference of the pre-test average value from both classes.

b. End Phase Analysis

It was done to answer hypothesis of this research. The data used are the result of post tests of both classes. The final analysis contains of normality test, homogeneity test and the hyphotesis test.

1) Normality test

Ho: the data distributes normally

Ha: the data does not distribute normally

With the criteria:

Ho accepted if $X^2_{count} < X^2_{table}$

Ho rejected if $X_{count}^2 > X_{table}^2$

With a = 5% and df = k-1.

Table 4.15

The Normality Result of Writing Skill Post-Test in Experimental and Control Class

Class	X^2_{count}	X^2_{table}	Criteria
Experimental	6.58	9.49	Normal
Control	6.14	9.49	Normal

Based on analysis above, it can be seen that X^{2}_{count} both of class lower that X^{2}_{table} ($X^{2}_{count} < X$

 ${}^{2}_{table}$), so Ho accepted. And the conclusion is the distribution data of experimental and control classes are normal.

2) Homogeneity test

The homogeneity test is used to know whether the group samplethat was taken from population is homogeneous or not.

Ho: $\sigma_1^2 = \sigma_2^2$ Ha: $\sigma_1^2 \neq \sigma_2^2$

Table 4.16 The Homogeneity Result of Writing Skill Post-Test in Experimental and Control Class

Class	Variance	Ν	df	F _{count}	F_{table}	Criteria
	(S^2)					
Experimental	97.621	23	22			
-				1.838	2.05	Homogen
Control	53.111	23	22			0

According to the formula above, it is obtained

that:

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

$$F = \frac{97.6206}{53.1107}$$

$$= 1.838$$

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

3) Hypothesis test

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

it means there is no significant Ho: $\mu_1 = \mu_2$: difference between the reading skill improvement of students who were taught by using Herringbone Technique and who were taught by using non-Herringbone Technique Ha: $\mu_1 \neq \mu_2$: there is significant means it difference between the writing skill improvement of students who were taught by using Herringbone Technique and who were taught by using non-Herringbone Technique

Class	Ν	Average (X)	Variance (S ²)	Standar of	t _{table}	t _{count}	criteria
				deviation (s)			
Experimental	23	62.435	97.621	9.880	2.02	4.365	Ha
Control	23	51.261	53.111	7.288			accepted

 Table 4.17

 The Result of Computation T-Test of Writing Skill

Based on the computation above, it is obtained that the average of post test of the experimental class who are taught by using Herringbone Technique is 62.43 and standard deviation (s) is 9.88. While the average of post test of the control class who are taught by using non-herringbone technique is 51.26 and standard deviation (s) is 7.28. with df = 23+23-2 = 44 by α = 5%, so obtained t_{table} = 2.02. From the result of calculation t-test t_{count} = 4.363. if compared between t_{table} and t_{count} , $t_{count} > t_{table}$. it means that Ho is rejected and Ha is accepted.

4. Anova Test

Anova test (*Analysis of variances*) is used to know wheter there is significant difference of average intergroup. With the criteria:

Ho : $\mu_1 = \mu_2 = = \mu_k$ Ha : $\mu_{1\neq} \mu_{2\neq} \neq \mu_k$

Group	Pre-test (A_1)	Post-test (A ₂)	
Exportmontol	N11=46	N21=46	N•1=92
class (B1)	M11= 59,239	M21= 68,717	M•1=63,978
class (D1)	s11=10,272	s21=13,135	s•1=12,657
Control class	N12=46	N22=46	N•2=92
(\mathbf{P}^2)	M12= 52,935	M22= 57,478	M•2= 55,207
(B2)	s12= 9,921	s22= 11,602	s•2= 10,975
Total of factor	N1•= 92	N2•= 92	N••= 184
	M1•= 56,087	M2•= 57,478	M••= 59,592
A	s1•= 10,531	s2•= 13,557	s••= 12,605

Table 4.18Statistics of Varian pre-test and Post-test

Varian	(JK)	(Df)	(RK)	F	F-criteria pada taraf 5%	Kesimpulan
Herringbone (A)	3539,397	1	3539,397	27,702	3,894	Significant
Group (B)	2261,005	1	2261,005	17,696	3,894	Significant
Interaction (A*B)	280,049	1	280,049	2,192	3,894	Not
Dalam	22997,978	180	127,767			significant
Total	29078429	183				-

From the result of calculation above, it can be concluded that there was significance difference of average score from pre-test and post-test of experimental class and there was significance difference of average score from pretest and post-test of control class. From the calculation of interactian A and B, there was no significance/homogeneous but the calculation was not needed.

D. Discussion of the Research Findings

After getting the result of the research, the researcher discussed the data. Based on the teaching learning processed, it could be seen that Herringbone Technique was able to answer the statement of the problem. It was related to Katherine McKnight's statement, "the herringbone graphic organizer is used for establishing supporting details for main idea. It can be used to organize information for all content areas."

 The comparison of average score between pre-testof experimental class and pre-test of control class in reading and writing skill was not significance/homogeneous.

The homogeneity of pre-test is very important for the researcher if he/she want to continue his/her research.¹ The average score of experimental class in reading skill was 63,91 and the average score of control class in reading skill was 59,34, while the average score of experimental class in writing skill was 54,56 and the average score of control class in writing skill was 46,52.

2. The progress between pre-test and post-test of experimental class and control class .

The difference effect of experimental class and control class was on the treatment. The students of experimental class was taught by using Herringbone technique, while the

¹ Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik*, (Jakarta: PT. Rineka Cipta, 2006,) p.321.

students of control class was taught by using non-herringbone technique. The progress of learning process in experimental class was sharp, it can be seen on students' activity in treatment process by using herringbone technique:

a. The students are interest in joining the learning process.

By using Herringbone Technique, the teacher could create an interesting teaching learning process in the classroom because the students could be happy and they would not get bored. It also makes students enthusiastic in reading and writing text, because they just focus on the simple question.

b. The students were motivated to learn together.

It means that teaching using Herringbone Technique had advantages in learning process, especially in reading narrative text. The strategy of using Herringbone Technique could help the students solve their problem in reading; besides, it also encouraged the students to be more active and motivated.

c. The students were started to learn independently.

It means that using Herringbone technique can build students' independent learning, they were more anthusias to learn about reading and writing especially in recount text.

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d. The students can understand more about the material.

It means that after using Herringbone technique students can understand about how to find the main idea in the passage and to write recount text as well.

it was affected to the students average score of posttest in reading skill, that was 75,00, while the average score of pre-test in reading skill was 63,91. Mean while the average score of post-test in writing skill was 62,43, and for the average score of pre-test in writing skill was 54,56.

The progress of learning process in control class was steady, because the researcher taught using non-herringbone technique, it can be seen on the students' average score of post-test in writing skill was 51,26, while the average score of pre-test in writing skill was 46,52.

3. The score of final ability

According to the means score of both groups, the mean score of reading skill in experimental class (75, 00) was higher than the mean score of control class (63, 69), While the mean score of writing skill in experimental class (62, 43) was higher than the mean score of control class (51, 26). So it means that there is a significant difference of score in reading and writing test achieved by the students taught using herringbone technique from those taught using non-herringbone technique.

It means that teaching using Herringbone Technique had advantages in learning process, especially in reading and writing recount text. Teaching recount text needs the technique to help the students understand more about the material. Students who taught by using non-herringbone technique in control class feel bored and confused, because the teacher only exlpained the material to the students and they wrote in their book. So the material can not be transferred to the students optimally.

Herringbone technique was effective in teaching reading and writing in recount text. Herringbone Technique is a technique in teaching learning process which helped the students focus on the lesson, the students would not get bored and it made the classroom to be more cheerful place for their lesson. Herringbone technique's activities make the students are easier to find the main idea and to compose recount text. Therefore, the existence of the teaching technique was important.

Herringbone technique is a structured outlining procedure designed to help the students organize important information in a text by answering WH question based on the text that had provided by the teacher, and then they have to draw the main idea. Herringbone technique can be varied to help the students compose a text, first, the students are answering WH question based on the theme, and then they have to compose a recount text based on their answer in herringbone diagram. Before teaching reading and writing there are some preparations that should be done by a teacher. Such as teaching materials, teaching media and learning environment. Herringbone technique leads the students to be more active in learning process, because they will increase their knowledge and they will be creative students in the class.

The teacher is a model in the class. Everything happens in the class depends on the way of the teacher in creating the atmosphere in the class. Good atmosphere will have good influence in teaching and learning process. Not only the atmosphere but also good preparation and choosing a good technique will create the interest of the students in learning process.

E. 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 were:

- The research was limited at SMP Hasanuddin 6 Semarang in the academic year of 2014/ 2015. When the same researches conducted in other schools, it is still possible that different result will be gained.
- Relative of the implementation process of this research have short of time, makes this research could not be do maximal. But it was enough to fulfill all requirements for a research.

3. Relative lack of experience and knowledge of the researcher, makes implementation process of this research was less smooth. But the researcher tried as maximal as possible to do this research.

Considering all those limitations, there is a need to do more research about teaching recount text using the same or different medium. In the hope there will be more optimal result.