CHAPTER III

THE RESEARCH METHOD

A. The Research Design

This research was Quasi-experimental research. According to John W. Cresswell, experiment is you test an idea (or practice procedure) to determine whether it influences an outcome or dependent variable. Quasi experiments is the research that consists of control and experiment group and use intact group not random.[1] According to Gay and Airasian, in order to receive permission to use school of children in a research, a researcher often has to agree to keep students in existing classrooms intact. The design of this research is quasi experimental design which uses pre-test and post-test non equivalent control group design.[2]

In this research, the researcher uses pretest and posttest design.Thereseacher was used two classes in conducting this research; one class was as experimental class taught by breaking habits of seeing strategy and other was control class taught by conventional strategy. The writer was assign treatmetns to experimant class and control class, administers a pretest to both groups, conducts experimental treatmentactivities with experimental group only and then administers a

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[1]Jhon W. Cresswell, *Educational Research: Planning, Conducting, and evaluating Quantitative and Qualitative Research*. (New Jersey: Person Education, 2008), pp. 313-314

[2] L. R Gay and Peter Arisian, *Educational Research Competencies for Analysis and Application*. (New Jersey: Prentice-Hall Inc, 2000), p. 388

posttest to both groups in order to assess the significant effect of students' ability in writing a descriptive paragraph who are taught by using breaking habit of seeing strategy and who are taught by using conventional strategy.So, the design of this research could be illustrated as follows:

Tabel III. 1
The Research Design

Class	Pre-test	Treatment	Post-test
Experimental	T1	X	T2
Control	T1		T2

Note:

T1   : Pre-test for both experimental and control class

T2   : Post-test for both experimental and control class

. X   : Receiving treatment, that is using Breaking Habits of Seeing

          Strategy

          : No treatment

B. The Location and the Time of the Research

This research was conducted at state junior high school 2 Tembilahan was located at TanjungHarapan street,from 01 April 2014 to 23Mei 2014.

C. The Subject and the Object of the Research

The subject of the research was the second year students at state junior high school 2 Tembilahan. The object of this research was the effect of using breaking habits of seeing strategy on writing a descriptive paragraph.

D. The Population and the Sample of the Research

The population of this research was the second year students at state junior high school 2 Tembilahan2013-2014 academic years. It had 10classes . The total population of this research was 200 students.

Based on the limitation of the writer. The writer took 2 classes after doing cluster random sampling technique while VIII.8 was an experimental class and VIII.9 was a control class.

Table III. 2

Total Population of the Second Year Students at State Junior

High School 2 Tembilahan

No	Classes	Population		Total
		Female	**Male**	
1	**VIII 1**	7	13	20
2	**VIII 2**	10	10	20
3	**VIII 3**	11	9	21
4	**VIII 4**	12	8	22
5	**VIII 5**	7	13	19
6	**VIII 6**	6	14	18
7	**VIII 7**	14	6	20
8	**VIII 8**	10	10	20
9	**VIII 9**	8	12	20
10	**VIII 10**	9	11	20
Total Population				200

Table III.3

The Sample of the Research at SMPN 2 Tembilahan

No	Classes	Population		Total
		Female	Male	
1	VIII 8	10	10	20
2	VIII 9	8	12	20
Total				40

E. The Technique of Collecting Data

To obtain data from the samples of this research, the writer used writing test. The test had been distributed to measure the students' writing ability in writing descriptive paragraph. The aspects that should be measured in writing a descriptive paragraph were content, organization, vocabulary, language features, and spelling and punctuation. The test was divided into two tests; pre-test and post-test. Pre-test was given before the treatment, while post-test was given after treatment.

Table III.4

The Assesment of Writing Descriptive Paragraph

No	Aspects Assessed	Score			
		1	2	3	4
1	Content				

2	Organization
	    a. Identification
	    b. Description				

3	Vocabulary				

4	Grammatical Features
	    a. Adjectives and compound adjectives
	    b. Attribute has and have
	    c. Lingking verbs
	    d. Simple Present Tense				

5	Spelling & Punctuation				
	Total				
	Maximum Score			20	

Scoring students' writing was be measured by using writing test used by the teacher of English of state junior high school of SMPN 2 Tembilahan as assessment standard in KTSP. The writing assessment provided some criteria that should be measured by the teacher. It can be explained as follows:

Explanation of score:

1 = incompetent

2 = competent enough

3 = competent

4 = very competent

Final Score = $\frac{TotalScore}{MaximumScore} x\ 80$

Table III.5

The Classification of Students' Score (taken from Musfirah)[3]

SCORE	LEVEL OF ABILITY
76– 100	Very Competent
51 –75	Competent
26 – 50	Competent Enough
0– 25	Incompetent

F.   The Validity and Reliability of the Test

The quality of the instrument is very important. Every test, whether, it is a short, informal test, or a public examination should be as valid as the test constructor that can make it. So, the writer used a number of procedures to measure the data that had been collected, that were valid and reliable.

1. **Validity**

Validity is the most important characteristic of a test to measure instrument. Gay said that validity is concerned with the appropriateness of the interpretations made from test scores.[4] Clearly validity is a crucial feature of any test. If a test does not

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[3]Musfirah .*Writing Assessment as an Assessment Standard in KTSP*. SMPN 2 Tembilahan,(Tembilahan:Unpublised, 2013/2014) p.2

[4]L.R. Gay and Peter Airasian, *Educational Research Competencies for Analysis and Application. Sixth Edition,*(New Jersey: Prentice-hall, Inc, 2000), p.161

have high validity, it does not allow users to make the interpretation desired, it should not be used. Furthermore, Gay states that there are three kinds of validity.[5] They are content validity, criterion-related validity, and construct validity.In order to know the validity of writing ability test, the writer used content validity. Thus, the test was given based on the material studied by the students. The material of the test was taken from the textbook used by the second year students of state junior high school 2 Tembilahan.

2. Reliability

Reliability in assessment is related to the consistency of the comparison to the preestablished standard.[6] The testing of students' writing ability had to have reliability in order to get the same scores obtained when the tests done were more than once. There are five types of reliability: stability, equivalence, equivalence and stability, internal consistency, and rater agreement. In this research, the writer used the rater agreement type of reliability concerned with inter-rater reliability as the scores were given by two raters. Then the intercorrelation of the raters is used in finding the reliability of the test. The following table is the category of reliability test used in determining the level of reliability of the tests.

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[5]*Ibid.,* p. 162-168

[6]James D. Williams, Preparing to Teach Writing: Research, Theory, and Practice, Third Edition, (New Jersey: Lawrence Erlbaum Associates, Inc, 2003), pp.304

Table III. 6
The level of Reliability

No	Reliability	Level of Reliability
1	0.0 – 0.20	Low
2	0.21 – 0.40	Sufficient
3	0.41 – 0.70	High
4	0.71 – 1.0	Very High

Table III. 7
The Correlations's Score Between Rater 1 and Rater 2

Correlations

		rater1	rater2
rater1	Pearson Correlation	1	.831[**]
	Sig. (2-tailed)		.000
	N	20	20
rater2	Pearson Correlation	.831[**]	1
	Sig. (2-tailed)	.000	
	N	20	20

**. Correlation is significant at the 0.01 level (2-tailed).

From the output above, it can be seen that r_o(r $_{obtained}$)was 0.831 correlated to r_t (r $_{table)}$. It is necessary to find the df (degree of freedom).

df = N – nr

df : degree of freedom

N : Number of cases

nr : number of correlated variable

df = 40 – 2 = 38

The writer took df= 18 to be correlated either at level 5% or 1%. At level 5%, r $_{table}$ is 0.325; while at level 1% r $_{table}$ is 0.418. Thus, the r $_{obtained}$ is obtained higher than r $_{table}$, either at level 5% or 1%. So the writer concluded that there is a significant correlation between score given by rater 1 and score given by rater 2. In other words, the writing test is reliable.

Then, to know the level of the correlation, the $r_o$is process through *Spearman-Brown Prophecy formula*as follows:[7]

$$r_{tt} = \frac{nr_{A,B}}{1+(n-1)r_{A,B}}$$

Where,

r_{tt} = inter-rater reliability

n = the number of raters whose combined estimates the final mark for the examines

$r_{A.B}$= the correlation between raters, or the average correlation among all raters if there are more than two

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[7]Grant Henning, *A Guide to Language Testing; Development, Evaluation, and Research,* (Boston: Heinle&Heinle, 1987), p.85

Descriptive Paragraph Reliability

	The Reliability of Writing Test
$r_{tt} =$	$$\dfrac{nr_{A,B}}{1 + \quad n - 1 \ r_{A,B}}$$
$r_{tt} =$	$$\dfrac{2\,(0.831)}{1 + \quad 2 - 1 \ 0.831}$$
$r_{tt} =$	$$\dfrac{1.66}{1 + 0.831}$$
$r_{tt} =$	$$\dfrac{1.66}{1.831}$$
$r_{tt} =$	0.906
$r_{tt} =$	0.90

Based on the data obtained above, the writer concluded that the inter rater reliability in this research was 0.90.

G.   Technique of Data Analysis

The technique of collecting data was using test. The data were analyzed by using statistical analysis. In analyzing the data, the writer used scores of pre-test and post-test of experimental and control groups. This score was analyzed statistically. In order to answer these research questions, writer analyzed the data by using't' test formula through SPSS 17 version.

After calculating the t-test, to know whether the score was significant or not, the writer should know the distinction between t_o and t_{table}. It was necessary to obtain the degree of freedom (df) in order to get the t_{table}. The formula of degree of freedom is:

df = (N_E +N_C) - nr

Where:

df   = the degree of freedom

N_E = number of students from experiment class

N_C = number of students from control class

nr   = number of variable

Finally, when the writer knew the result, the writer concluded that if t_o< t_{table}, H_o is accepted. It means that there is no effect of breaking habits of seeing strategy on writing ability of the second grade students at statejunior High School 2 Tembilahan T. If t_o> t_{table}, H_a is accepted. It means that there is a significant effect of writing ability between students who are taught and those who are not taught by using Breaking Habits of Seeing Strategy of State junior High School 2 Tembilahan.