

CHAPTER III

RESEARCH METHOD

A. Research Design

This research was conducted by used experimental research. This research concerned the effect of pair work technique as a dependent variable and students' writing skill as an independent variable. Researcher divides the sample into two groups. Their concern was experimental research. According to Sudjana and Ibrahim (2012:19), experimental research method was used to find the relation between two or more variables, and how the effect one variable to another variable.

Additionally, Gay (2002:250) states that experimental research is the only type of research that can test hypotheses, establish cause-effect relations. It represents the most valid approach to the solution or educational problems, both practical and theoretical, and to the advancement of education as a science. He also states that an experimental typically there is two groups; an experimental group and a control group.

The experimental group was taught by pair work technique. The treatments were given to the experimental group about six meetings. After finishing the treatment, the teacher was given a post-test to the students for identifying whether the using Pair Work technique in the learning process of writing gave a significant effect of their writing skill at the last meeting. The

result will be known by comparing the score of pretest and posttest. The design of the research can be described based on the table:

Table 3.1
Research design

Groups	Treatment	Posttest
X1	O1	Y2
X2	O2	Y2

Where:

X1: Experiment group

X2: Control group

O1: Treatment for the experimental group by using technique

O2: Treatment for the control group without using technique

Y2: Posttest for experimental and control group

A. Population and Sample

1. Population

Gay (1987: 102) says that population is a group to which to be able generalize would like the results of the study by researchers and sampling is the processes of selecting a number of individuals for a study in such a way that the individuals represent the large group from which they are select. In this research, the population is the grade eight students of Junior High School

3 Gunung Talang. They are distributed into five classes. The total number of students is 90 and each class consisted of 22 to 23 students.

They will be chosen as the population based on the assumption that they had the same basic knowledge in writing and they were distributed in a same average score, there was no the superior class. They also will be taught by the same teacher, material and syllabus, but different treatment.

Table 3.2
Total of Students Grade Eight of Islamic Junior High School 4 Agam

No	Class	Total
1	VIII. A	22
2	VIII. B	22
3	VIII. C	23
4	VIII. D	23
	Total	90

They were chosen as the population based on the assumption that they had a basic knowledge in writing. They also were taught with the same material and syllabus.

2. Sample

The sample was taken by cluster sampling. Gay (2012:135) said that cluster random sampling is sampling intact group, not individuals, are randomly selected. The researcher used this sampling technique because it was hard to regroup the existed group. The samples in this study were VIII A

as the experimental class and VIII B as the control class, the selected samples were assumed homogenous since the students were classified based on a same average knowledge and score by the school. Then, a number of all sample were 44 students; 22 students were in the experimental class and 20 students were in the control class. Dealing with the sample size of experimental research, 22 students were representative enough to be the sample of this research.

3. Place and Time of Research

This research was done in grade VIII at Junior High School 3 Gunung Talang. This place was chosen because the researcher had ever observed there. The conducted in March, 2017 in academic year 2017/2018 at second semester.

4. Instrument

The instrument of this research was tested. The test must have content validity if it measures what was gone to be measure. Arikunto (2001:62) says that one of the characteristics of test validity is content validity. It means the test was valid if it fixes with the material that has been given to the students and it was based on the Curriculum and syllabus. The writer would use the Curriculum or syllabus and teaching material to construct the test.

In this research, the research used a writing test. The writing test was done on treatment and post-test toward two classes (experimental and control class).

There were some criteria to analyze the students` writing, they were as follows:

- a. Content
 - 1) The substance of writing.
 - 2) The ideas of expressed.
 - 3) The arrangement of schematic structure.
- b. Grammar
 - 1) The employing of grammatical form and syntactic patterns.
 - 2) The use of past tense.
- c. Organization
 - 1) The organization of the contents.
 - 2) The arrangement of generic structure.
- d. Vocabulary
 - The choice of words
- e. Mechanic
 - Capitalization, punctuation and spelling.



Table 3.3
The tables scoring of written test are as follows:

No	The elements of writing	Score
1	Content	1-30
2	Grammar	1-25
3	Organization	1-20
4	Vocabulary	1-20
5	Mechanic	1-5
	Total	100

One of the strategies that could be applied was Pair Work. It will enable the students in generating and organizing their ideas. Thus, this study was intended to investigate the implementation of Pair Work Technique in the effect students' writing skill.

Table 3.4
The Criteria of writing Evaluation

No	Components	Criteria of each item	Score
1	Content	Excellent to very good: Knowledgeable; substantive; thorough development of thesis; relevant to assigned topic.	30-27
		Good to average: Some knowledge of the subject; adequate range; limited development of the thesis; mostly relevant to the topic, but lacks detail.	26-22
		Fair to poor: limited knowledge of subject; little substance; inadequate development of topic.	21-17
		Very poor: does not show knowledge of the subject; non-substantive; not pertinent; or not enough to evaluate.	16-13
2	Organization	Excellent to very good: Fluent expression; ideas clearly stated/supported; succinct; well organized; logical sequencing; cohesive.	20-18
		Good to average: somewhat choppy; loosely organized, but main ideas stand out; limited support; logical but incomplete sequencing.	17-14
		Fair to poor: non-fluent; ideas confused or disconnected; lacks logical sequencing and development.	13-10

		Very poor: does not communicate; no organization; or not enough to evaluate.	9-7
3	Vocabulary	Excellent to very good: sophisticated range; effective word / idiom choice and usage; word form mastery; appropriate register. Good to average: adequate range; occasional errors of word / idiom form, choice, usage but meaning not obscured. Fair to poor: limited range; frequent errors of word / form choice, usage; meaning confused or obscured. Very poor: essentially translation; title knowledge of English vocabulary, idioms, word form, or not enough to evaluate.	20-18 17-14 13-10 9-7
4	Language Use	Excellent to very good: effective complex constructions; few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions. Good to average: effective but simple construction; minor problems in complex constructions; several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning seldom obscured. Fair to poor: major problems in simple / complex constructions; frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions; meaning confused or obscured. Very poor: virtually no mastery of sentence constructions rules; dominated by errors; does not	25-22 21-18 17-11 10-5

		communicate; or not enough to evaluate.	
5	Mechanics	<p>Excellent to very good: demonstrates mastery of conventions few errors of spelling, punctuations, capitalizations, paragraphing.</p> <p>Good to average: occasional errors of spelling, punctuation, and capitalization, paragraphing, but meaning not obscured.</p> <p>Fair to Poor: Frequent errors of spelling, punctuations, capitalizations, paragraphing; poor handwriting, meaning confused or obscured.</p> <p>Very poor: no mastery of conventions dominated by errors of spelling, punctuation, capitalization, paragraphing; handwriting illegible; or not enough to evaluate.</p>	<p>5</p> <p>4</p> <p>3</p> <p>2</p>

Table Sample of Instrument in Giving Writing Score

Number of Sample	Components					Total
	C (13-30)	O (7-20)	V (7-20)	L (5-25)	M (2-5)	
1						
2						
3						
4						
5						

1. Procedure of Doing Research

a. Treatment

The researcher gave the treatment to the students by using Pair Work Technique in teaching writing towards recount text in experimental class.

b. Post Test

Post test was the process of give the test after giving the treatment. It was aimed to compare the contribution of using group investigation technique in teaching and learning writing process to students' writing skill towards recount text.

2. Technique of Data Collection

The data can collect by giving written test. Data of this research was the students' scores of treatment and post-test in the final meeting. The treatment was given in the first until five meetings and the post-test at the end of the meeting. Writing test was given to both of the control and experimental group for 75 minutes. In addition, treatment was given to recognize that how far the skill of students in writing before the writer

conducts the post test. Furthermore, the writer gave the experimental group for six times by using the pair work technique.

3. Technique for Data Analysis

The data of the study are analyzed by using statistical procedure t-test. The formula that used was a t-test. The purpose was to differentiate of students' writing competence between the experimental group and control group.

The formula of t-test was as follows Sudjana (1989: 239)

$$T = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

Where:

\bar{X}_1 = Mean score of experimental sample

\bar{X}_2 = Mean score of control sample

S_1^2 = Standard deviation of experimental group

S_2^2 = Standard deviation of control group

n_1 = Number of samples in experimental group

n_2 = Number of samples in control group

The t-table was employed to see whether there was a significant difference between the mean score of pre-test and post-test of

experimental class. Then, it was also used to see whether there was a significant difference between the mean score of pre-test and post-test of control group. The value of t obtained was consulted with the value of t-table. The data was analyzed by using simple regression for hypothesis with 5 % ($=0.05$) of significance level and the value of t-table of the level of freedom $(N_1-1) + (N_2-1)$. If the value t-obtained was bigger than the value of t-table, the null hypothesis was accepted. On the contrary, if the value of the t obtained was equal, bigger or smaller than the value t-table, the alternative one was not accepted (t-table) t-obtained.

