

CHAPTER III

RESEARCH METHOD

A. Research Design

This research will do to get the result about the significant of quick writing strategy toward student writing achievement. For this reason, the design of this research is experimental research. Gay and Airasian (2003:367) state that experimental research is type of research that the researcher can prove the hypothesis to know the relationship of cause and the effect.

In this research, the writer was used Quick Writing Strategy as independent variable and writing activity as dependent variable. There are two groups involved in this research, the one is experimental and the other one is control group. Both of groups get the same topic, the same length of time and the same teacher, but different strategies. The experimental group is taught by using *Quick Writing Strategy* and control group does not taught by this strategy. Before given the treatment the writer was given the pretest. The writer was given pre test in experiment class and control class. After giving pre-test the writer was given treatment. The treatment is given to experimental group about six meetings; it is assumed that six meetings are enough to see the differences that will arised between using Quick Writing strategy and without Quick Writing strategy. Every meeting, the writer was given different topics. At the end of treatment the writer give the students post-test.

At the end of the research, the writer was taken the result of post-test of both classes. Written test was given to the students. The students make a simple recount text with their words and observed the component of writing. And then, to determine whether Quick Writing Strategy gives significant effect toward students' writing ability or not, the result of students writing in post test will describe and analyze. The research design can be seen on the table below:

Table 3.1
Research Design

	Pre- test	Treatment	Post-test
Experiment	O ₁	X	O ₂
Control	O ₁	-	O ₂

Where :

X = treatment of experimental group

O₁ = pre-test

O₂ = post-test

B. Population and Sample

1. Population

Population is the number of students on this research. The population is all of the member that consist of five classes. Gay and Airasian (2000:122) states that population is the group of interest to the researcher. It means that the writer would like to know the result of the study to be generalized. The population of this research is the X Grade at Senior High School 3 Pariaman who is registered at 2017/2018 academic year. The population of this research

is students from Nature Science Program at SMAN 3 Pariaman. There are five classes of Nature Science Program at the school. Thus, the population of this research can be seen in the table below:

Table 3.2
Total of Students Class X IPA Senior High School 3 Pariaman
Academic Year 2017/2018

Class	Students' sum
X IPA 1	24
X IPA 2	27
X IPA 3	25
X IPA 4	27
X IPA 5	27
Total	130

2. Sample

Sample is a set of elements selected in some way from a population. It means, a sample is a part of a population or large group that interest and chose by the writer with uses a way or technique. The aim of sampling is to save time and effort and also gain information about the population by using the sample. The sample of the research was taken based on the normality and the homogenous of the students' test score.

Gay and Airasian (2000:121) content that sampling is the process of selecting a number of individuals for a study in such a way that they represent the larger group from which they were selected. In order to get sample, the writer was used cluster random sampling. It selects groups and has similar characteristics. In doing this research, the writer was needed two classes as the

sample; the experimental and control class. Gay and Airasian (2000:129) says the cluster random sampling is a way to select sample in groups, not individually but randomly selected.

In this research, the writer was find the experimental class to get a class for treatment, every class X of Senior High School 3 Pariaman is given a lottery such as class X IPA 1 lottery 1, X IPA 2 lottery 2, X IPA 3 lottery 3, X IPA 4 lottery 4, X IPA 5 lottery 5, and put all of the lotteries in a box than the writer shake it and removed a lottery. In this case at last the writer get class X IPA 4 as experiment group and X IPA 5 as control group. Before the researcher took the sample, the researcher did these steps:

- a. Collect the Midterm test score data from all students grade X IPA in first semester see appendix I.
- b. Test of normality

Normality test had an objective to know the population normal or not.

In this research, to do the normality test the writer used Kolmogrov Smirnov and Shapiro Wilk. This test was SPSS test. If the data was significant or more than 0.05 the class was normal. Then, two classes had a normal data (X IPA 4 and X IPA 5). Based on the graphics Q-Q Plot, if the data were around and near with the line, it meant, the data was normal. The normality table as is stated as follow

Descriptives

VAR00002		Statistic	Std. Error
VAR0000 1	Mean	63.58	2.644
1	95% Confidence Interval for Lower Bound	58.11	
	Mean Upper Bound	69.05	
	5% Trimmed Mean	64.16	
	Median	66.50	
	Variance	167.732	
	Std. Deviation	12.951	
	Minimum	34	
	Maximum	81	
	Range	47	
	Interquartile Range	21	
	Skewness	-.558	.472
	Kurtosis	-.550	.918
	2	Mean	51.52
	95% Confidence Interval for Lower Bound	47.53	
	Mean Upper Bound	55.51	
	5% Trimmed Mean	51.55	
	Median	51.00	
	Variance	101.798	
	Std. Deviation	10.089	
	Minimum	35	
	Maximum	67	
	Range	32	
	Interquartile Range	15	
	Skewness	-.051	.448
	Kurtosis	-1.201	.872
	3	Mean	59.16

	95% Confidence Interval for Mean	Lower Bound	55.53	
		Upper Bound	62.79	
	5% Trimmed Mean		59.61	
	Median		60.00	
	Variance		77.473	
	Std. Deviation		8.802	
	Minimum		38	
	Maximum		71	
	Range		33	
	Interquartile Range		12	
	Skewness		-.677	.464
	Kurtosis		-.016	.902
4	Mean		54.67	2.404
	95% Confidence Interval for Mean	Lower Bound	49.73	
		Upper Bound	59.61	
	5% Trimmed Mean		53.99	
	Median		55.00	
	Variance		156.000	
	Std. Deviation		12.490	
	Minimum		37	
	Maximum		86	
	Range		49	
	Interquartile Range		16	
	Skewness		.606	.448
	Kurtosis		.322	.872
5	Mean		59.74	1.696
	95% Confidence Interval for Mean	Lower Bound	56.25	
		Upper Bound	63.23	

5% Trimmed Mean	60.04	
Median	61.00	
Variance	77.661	
Std. Deviation	8.813	
Minimum	41	
Maximum	72	
Range	31	
Interquartile Range	15	
Skewness	-.413	.448
Kurtosis	-.871	.872

Tes Normality

Tests of Normality

VAR00 002	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
VAR0000 1	.157	24	.128	.938	24	.145
1 2	.116	27	.200 [*]	.944	27	.155
3	.098	25	.200 [*]	.943	25	.172
4	.088	27	.200 [*]	.952	27	.244
5	.130	27	.200 [*]	.944	27	.153

a. Lilliefors Significance Correction

Tests of Normality

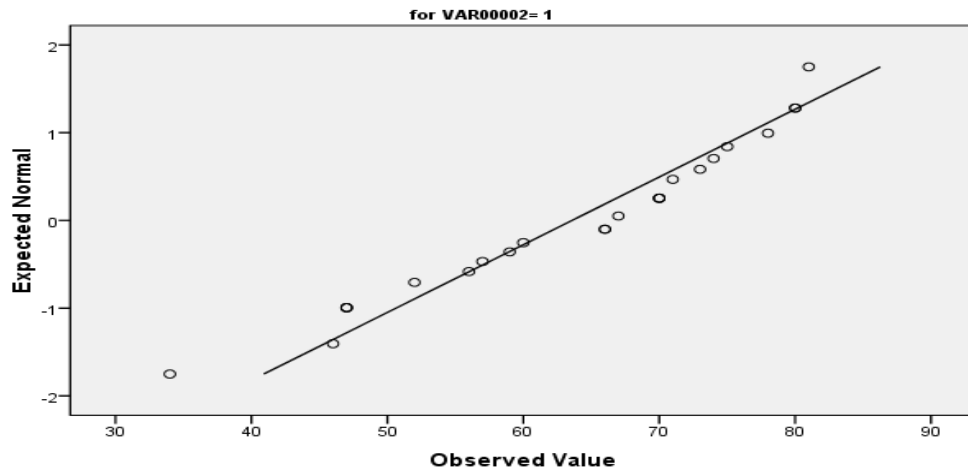
VAR00 002	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
VAR0000 1	.157	24	.128	.938	24	.145
1 2	.116	27	.200*	.944	27	.155
3	.098	25	.200*	.943	25	.172
4	.088	27	.200*	.952	27	.244
5	.130	27	.200*	.944	27	.153



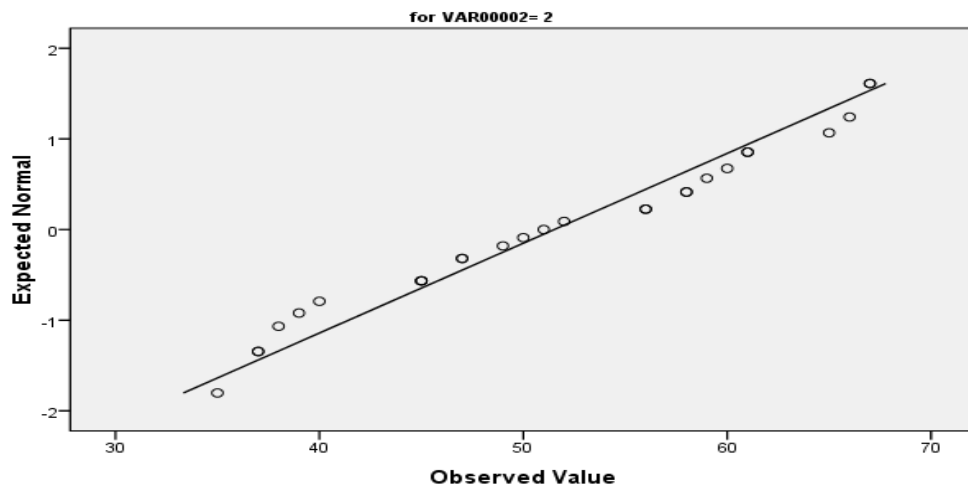
Table 3.4
Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
VAR00001	Based on Mean	2.028	4	125	.094
	Based on Median	1.615	4	125	.175
	Based on Median and with adjusted df	1.615	4	106.322	.176
	Based on trimmed mean	1.969	4	125	.103

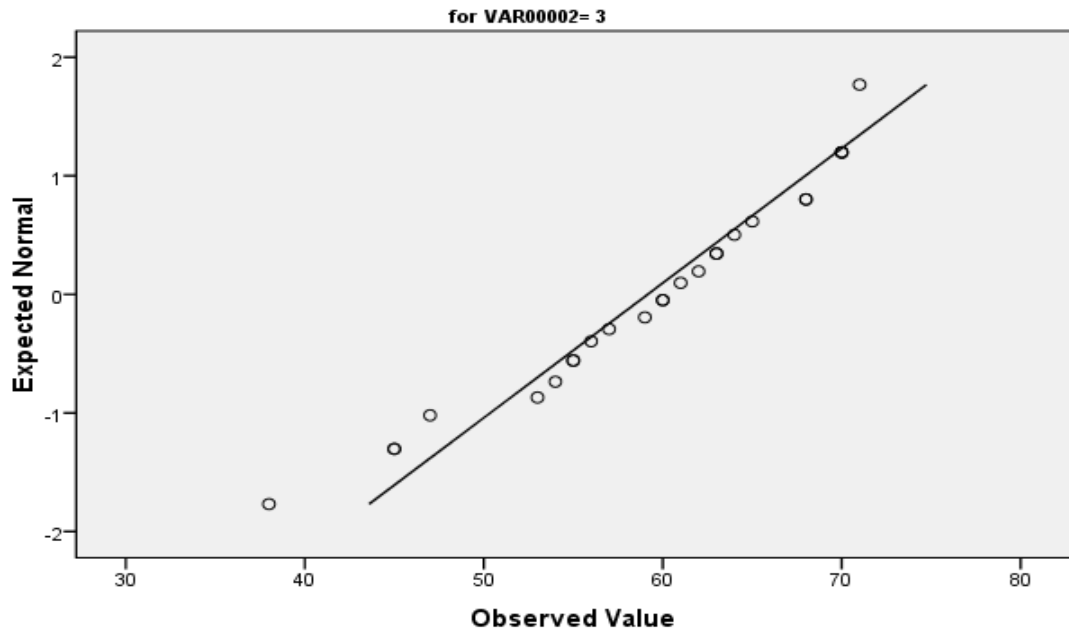
Normal Q-Q Plot of VAR00001



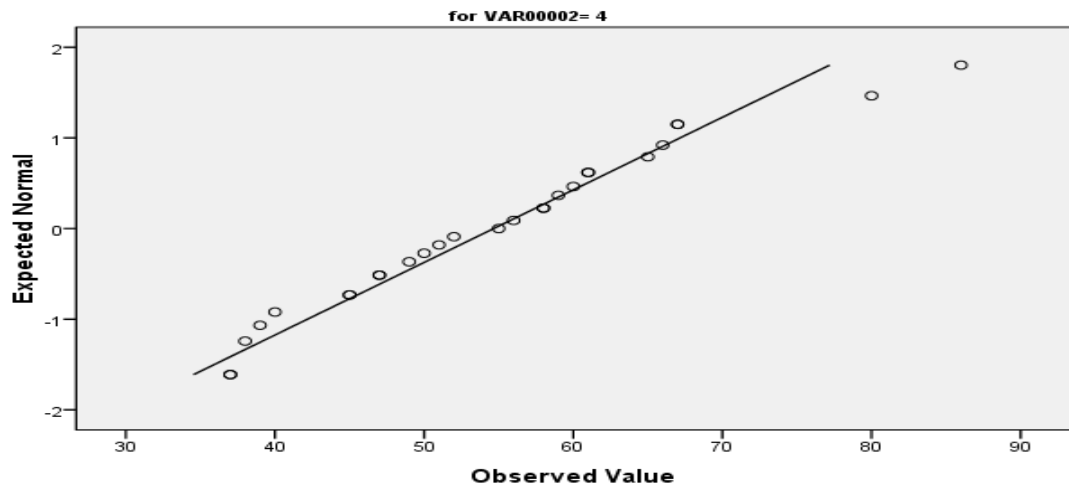
Normal Q-Q Plot of VAR00001

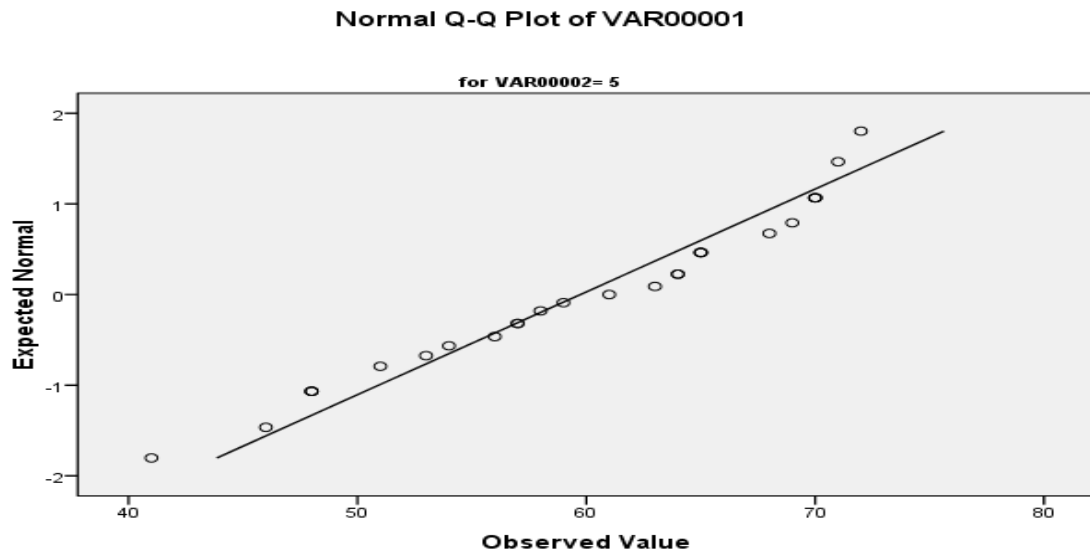


Normal Q-Q Plot of VAR00001



Normal Q-Q Plot of VAR00001





C. Instrument

The instrument for this research is the form of writing test. The writer was used the test type from Jacob's criteria (1981:90) in scoring students' writing test. According to Arikunto (2006) says "a test have had a validity if it could be measured the specific purpose related to the material that students have learned".

In this research the writer was used written test and the text as an instrument. Each student was asked to write a text based on the topic that gives by the writer.

The scoring of this research based on students abilities in writing such as: content, vocabulary, organization, language use, and mechanic.

D. Place and Time

This research was carried out at SMAN 3 Pariaman; the treatment was conducted at the first year students of first semester. The experiment was

treatment from July until September (six times of meeting). The treatment was carried out based on the teaching schedule of SMAN 3 Pariaman.

E. Technique of Data Collection

The writer was given both of group different treatment in writing test. Experimental class was taught by using quick writing strategy, and control class was taught by using conventional strategy. The data were collected through a post-test score. The post test score was taken at the end after giving treatment. At the end, both groups were given the post test. The post-test was administrated to get the final result of the research.

To collect data by using test, the writer was guided with Jacob's criteria in writing. Those criteria can be seen in chapter 2

F. Procedure of Research

Generally, there are three phases procedures of this research, they are preparation, application, and the final phase.

1. Technical Procedure

- a. The writer makes schedule of the research
- b. The writer prepares the appropriate material based on the syllabus.
- c. The writer makes lesson plans
- d. The writer prepares all of elements that will be needed in experiment
for instance: Test sheet.

2. Application Phases

The application phases of the research can be seen in the table below :

Table 3.3
Teaching Procedure for Experimental and Control Group

No	EXPERIMENTAL CLASS	CONTROL CLASS
1	<p>Pre-activity (10 minutes)</p> <ul style="list-style-type: none"> - Teacher greets the students - Praying - Teacher checks students' attendance - Teacher asks students about the last material - Teacher builds the students' background knowledge - Teacher explains the aim of teaching and learning - Motivate the students 	<p>Pre-activity (10 minutes)</p> <ul style="list-style-type: none"> - Teacher greets the students - Praying - Teacher checks students' attendance - Teacher asks students about the last material - Teacher builds the students' background knowledge - Teacher explains the aim of teaching and learning - Motivate the students.
2	<p>Main Activity(70 minutes)</p> <p><i>Observing</i></p> <ul style="list-style-type: none"> - Teacher gives the students samples of recount text. - Teacher asks the students to read the sample texts. - Teacher asks the students to observe the texts, such as the goal, generic structure, and the language use. <p><i>Questioning</i></p> <ul style="list-style-type: none"> - Teacher helps the students to ask about the goal, generic structure, and language use in recount texts. - Teacher helps the students to 	<p>Main activity (70 minutes)</p> <p><i>Observing</i></p> <ul style="list-style-type: none"> - Teacher writes down the topic on the white board - Teacher modeled recount text asks students to read the modeled recount text - Teacher ask students to read and identify the characteristic of a simple recount text <p><i>Questioning</i></p> <ul style="list-style-type: none"> - Under the guidance of teachers, students ask about some vocabularies they did not know. - The students ask confirmation about the modeled recount text,

<p>ask the difference among the structure of the texts.</p> <ul style="list-style-type: none"> - The students ask the other example of recount texts <p><i>Associating</i></p> <ul style="list-style-type: none"> - Teacher helps the students to analyze the informations that they have learned in the last activity - Teacher helps the students analyze the material related to their real life. <p><i>Exploring/Doing</i></p> <ul style="list-style-type: none"> - The teacher asks students to write text about recount text - The students asks concentrate on idea - The teacher asks students dont stop writing when their write recount text. - The teacher asks students may want to pause to think for a minute what they have written for ideas only before starting - The students silent before doing activity and discuss about their topic - The teacher may want to quick write along with the students to set an example. By taking a single piece of paper and putting it directly on your desk, you can write noisily, thereby providing sound as well as visual modeling. 	<p>social function, the structure of the text, and linguistic elements of each of the text.</p> <ul style="list-style-type: none"> - Teacher explains what the orientation is?, what sequence of events is?, and what re-orientation is? <p><i>Associating</i></p> <ul style="list-style-type: none"> - The teacher gives responses to the entries made by students - The teacher guides the students to relate the material with the last material <p><i>Exploring</i></p> <ul style="list-style-type: none"> - Teacher asks students in pair, they are going to make a recount text - Teacher asks students to identify the information from recount text have been discussed - Teacher and students discuss about some vocabularies related to the recount text - Teacher ask students to discuss about purpose, generic structure, and language features of the text - Teacher asks students to write a recount text based on the characteristics, purpose, generic structure, and language features of the recount text.
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	<p><i>Communicating</i></p> <ul style="list-style-type: none"> - Teacher asks some groups to presented their paragraph. - Teacher and students evaluate the paragraph together. 	<p><i>Communicating</i></p> <ul style="list-style-type: none"> - Teacher ask students to communicate their writing in front of the class - The teacher and the other students have to give confirmation about the student's performance. - Teacher collects the students' work
3	<p>Post-Activity (10 minutes)</p> <ul style="list-style-type: none"> - Teacher gives feedback to the teaching process - Teacher and students conclude what they learned - Teacher gives the students homework - Teacher informs the next material. - Teacher close the class 	<p>Post-Activity (10 minutes)</p> <ul style="list-style-type: none"> - Teacher gives feedback to the teaching process - Teacher and students conclude what they learned - Teacher gives the students homework - Teacher informs the next material. Teacher close the class

G. Technique of Data Analysis

In analyzing the data, the writer was given the scores of post test both in experimental and control group. These scores were analyzed by using statistical analysis. The purpose is to see difference of writing achievement between experimental group and control group.

Furthermore, the data was analyzed by using T- test formula as suggested by Sudjana (2005: 239). T-test formulas develop which is presented as follow: In analyzing the students' test score, some steps were done before analyzing the different mean by using t-test formula as follows;

1. This formula was applied to decide mean of students' test score in experimental and control groups;

$$\bar{X}_1 = \frac{\sum F_1 X_1}{\sum F_1} \text{ (Experimental group)}$$

$$\bar{X}_2 = \frac{\sum F_2 X_2}{\sum F_2} \text{ (Control group)}$$

2. This formula was used to decide standard deviation of experimental group;

$$S_1^2 = \frac{n_1 \times \sum F_1 x_1^2 - (\sum F_1 X_1)^2}{n_1 (n_1 - 1)}$$

3. This formula was used to decide standard deviation of control group;

$$S_2^2 = \frac{n_2 \times \sum F_2 x_2^2 - (\sum F_2 X_2)^2}{n_2 (n_2 - 1)}$$

The formula of t-test was as follows

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

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

Where;

t : The value of t calculated / observer / obtained

\bar{X}_1 : Mean score of experiment sample

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

n_1 : The number of subject of experimental group

n_2 : The number of subject of control group

S_1^2 : Standard deviation of experimental group

S_2^2 : Standard deviation of control group.



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