CHAPTER III

RESEARCH METHOD

In this chapter, the researcher presents of research design, population, sample, and sampling, research instrument, methods in collecting data, treatments, variables of the research, validity and reliability testing, normality and homogeneity testing, hypothesis testing and data analysis.

A. Research Design

Research design is the way to collect data. This research used the quantitative research with experimental research design. The researcher chooses experimental research design because it involves a study of the effect of the systematic manipulation of one variable on another variable. This idea is in line with that of Creswell (2012:295) that experimental study is for the research which was helping the researcher to know the cause and effect between independent variables and dependent variables. In this research, the researcher wants to know the effectiveness of Think-Talk-Write strategy toward students' ability in writing procedure text.

Type of experimental research design which was used in this research was quasi-experimental research design. In quasi-experimental research design, there were two groups involved in the research. The first group was called as experimental group in which it was given treatment about Think-Talk-Write strategy. On the other hand, the second group was called as control group in which it was not taught by Think-Talk-Write strategy. The researcher gave pre-test and post-test for both of groups. The

difference between them, the experimental group was given treatment before post-test.

Table 3.1 The Illustration of Quasi Experimental Research Design

Group	Pre-test	Treatment	Post-test
A	Y1	X	Y2
B	Y1	-	Y2

In which,

A   : Experimental group (IX A)

B   : Control group (IX B)

Y1   : Pre-Test

X   : Treatment using Think-Talk-Write strategy

Y2   : Post-Test

Thus, in this research the researcher used quasi experimental design (an experimental group and control group). Based on the Table 3.1, the procedures of using two group pre-test post-test design were:

a. Administering pre-test in both of groups (experimental and control) to measure students' writing ability in procedure text at 9th grade in MTs Fathul Hidayah Lamongan.

b. Applying the experimental treatments in the experimental group to teach writing procedure text by using Think-Talk-Write strategy and applying convensional strategy for control group.

c. Administering post-test in both of groups (experimental and control) to measure students' writing ability in procedure text at 9th grade in MTs Fathul Hidayah Lamongan.

B. Population, Sampling, Sample

1. Population

Population is generally a large collection of individuals or subjects that was the main focus of a scientific. It concluded of all individuals that have similar characteristics. Gay (2006) stated that population is a certain group of things (people, objects, events, etc) chosen by the researcher whose study on the research that can be generalized to the group that has a population at least one characteristic that distinguishes it from the other group. According to Sugiyono (2010:117), population is generalization area consisting of objects or subjects that have certain quality and characteristics decided by the researcher to be researched and be taken the conclusion then.

The illustration of population and sample:
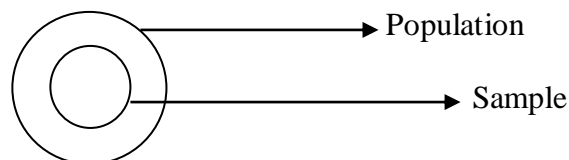
The population of this research was students' in the 9th grade of MTs Fathul Hidayah Pangean Lamongan which has

around 125 students'. There were five 9th grade classes at MTs Fathul Hidayah Pangean Lamongan . They were IX A, IX B, IX C, IX D and IX E, in academic years of 2019/2020 and each class was consist with different number of students'.

2. Sample

According to Ary et al (2010:148) sample is the small group that is observed. Cresswell (2012 :142) state that "A sample is a subgroup of the target population". Fraenkel and Wallen (2006:92) also give explanation that sample is the group on which information is obtained. Based on those descriptions, the researcher defined that sample was a small group taken from population with a certain media that was researched by researcher.

For the research was quasi experimental, the sample was choosen by applying purposive sampling. Applying this method, two classes were chosen by using a certain criterion in which the choosed classes must be normal or in average. Based on the criterion the sample of this research was the students of IX B as a control group and IX A as a experimental group in which total of IX A class was 24 students and IX B was 25 students. So, the total sample was 49 students.

Table 3.2 The Research Sample By Class

No	Class	The Number of Students
1.	IX A	24
2.	IX B	25

Those sample was divided into two groups. The first group was class IX B as the control group and the second group was class IX A as the experimental group. The experimental group was given the Think-Talk-Write strategy in their writing ability. The researcher made lesson plans and some activities for every meeting based on curriculum. The control group was given the same materials but without using Think-Talk-Write strategy in their writing ability.

Table 3.3 The Distribution of the Treatment

Group	Class	Treatment	Number of Students
Experimental	IX A	Think-Talk-Write Strategy	24
Control	IX B	Conventional Strategy	25

3. Sampling

Sampling is a technique to take sample from group of population. Sampling an important characteristic of inferential, and statistics is the process of going from the part to whole Ary et al

(2010:148). In this research, the researcher did not use all populations to be sampled. Therefore, purposive sampling used to take samples. Purposive sampling technique is a type of non probability sampling where the researcher consciously selects subjects for addition in a study so as to make sure that the elements will have certain characteristics pertinent to the study. In purposive sampling, which also referred to as judgment sampling, sample elements judge to a typical or representative are chosen from the population Ary et al (2010:156). It was technique to determined sample with a particular consideration. Purposive sampling used based on a certain consideration and the main consideration was the chosen classess had homogeneous writing ability. In other words, the students in those classess had average proficiency in writing.

C. Research Instrument

Research instrument is tool of collecting data. According to Sugiyono (2015:148), instrument is a tool used to measured natural phenomena or social will be observed. Identified before the researchers collect data, the instrument may be a test, questionnaire, tally sheet, log, observational checklist, inventory, or assessment instrument. The instrument of this research is a test. Arikunto (2006:127) states that test is a series, question, exercise or other means which used to measure the skill, knowledge, intelligent, ability or talent that have by individual or group.

In this research, the test was in the form of writing test to see the different result of students' ability in writing procedure text taught by using and without using Think-Talk-Write strategy. The test was developed from K13 and syllabus which was used by MTs Fathul Hidayah Pangean Lamongan and seeing the standard competence. After knowing the standard competence, researcher developed some indicators that must be reached by the students. From those indicators, researcher developed the test that consists of two kinds of test included pre-test and post-test. In this research, the test consisted of theme, time allotment, and some instructions. The topic for both pre-test and post-test are different to avoid students writing the same words. The researcher gave time allotment in writing the text to make the students discipline to the time given. Then, there were some instructions to help students in writing procedure text. For the first instruction, the students were asked to write down their name and class on the left of the answer sheet in order to give the students' identity. The second instruction was students must write a procedure text based on the topic given. In pre-test the topic given was about How To Make a Plate of Special Fried Rice, and in post-test was about How To Make Your Favorite Food. The last instruction was students must write procedure text according to generic structure and language features in procedure text and they must work individually.

Then, to assess students' writing, the researcher set up analytical scoring rubric as created by Weigle (2002:116) which included the criteria such as (1) Content, (2) Organization, (3) Vocabulary, (4) Language Use,

and (5) Mechanics. In order to make the test valid the researcher asked to English lecturer to give validation the test. After the test was valid, the researcher conducted try-out the test to ninth grade of MTs Fathul Hidayah Pangean Lamongan exactly IX C class, and the score was calculated with SPSS 16.0 to know the reliability of the test. Then, after the test was reliable the researcher conducted pre-test and post-test for the experimental class and control class.

D. Methods in Collecting Data

Technique of collecting data is aimed to support the success of the research. It helps the researcher to get the data and the information about the process of improving students' in this research, the researcher-applied test as an instrument for collecting the data.

Brown (2004: 3) states that test is a method of measuring a person's ability, knowledge, performance in a given domain. The researcher used two kinds of test in this research, those were pre-test and post-test. Following is the detail information.

a. Pre-test

Pre-test is the test which conducted before the students get the treatment. In this research, the pre-test was given for the two groups. They were experimental group and control group. It is conducted to know the students' ability in writing procedure text before treatment. In this research the researcher chose writing especially in procedure text. The researcher

chose the procedure text because the students can share their idea or arguments in the form. The form of the pre-test was in the form of imperative sentence to make procedure text. It had already done on Monday, 20th of January 2020 for control group and it had already done on Tuesday, 21st of January 2020 for experimental group. The time allocation was 30 minutes for the test.

b. Post-test

The post-test was administered after the treatment. In this research, the post-test was given for the two groups. They were experimental group and control group. Post-test is given to know the achievement or competence of the students after given treatment. The researcher wanted to know the students' score in writing especially in procedure text. Post-test was given in the last meeting of teaching learning process. It was used to measure the students' ability after given treatment. The procedures of giving pre-test and post-test were equal. The test is imperative sentence to make procedure text. The time allocation 30 minutes to test. After the researcher knew the score of the test, the researcher compared the pre-test and post-test score. It had already done on Tuesday, 28th of January 2020 for control group and it had already done on Wednesday, 29th of January 2020 for experimental group.

Furthermore, to scores students writing on pre-test and post-test, the researcher used analytical scoring rubric adopted from Weigle (2002).

Table 3.4 Scoring Rubric Adopted from Weigle (2002)

No	Element	Score	Criteria
1.	Content	30-26	EXCELLENT: The text gives paragraph unity (topic, state good topic sentence, supporting sentence. concluding sentence) and coherence (relationship among ideas, understandable). It fulfills all criteria well.
		25-21	GOOD: The text gives paragraph unity (topic, state good topic sentence, supporting sentence. Concluding sentence) and coherence (relationship among ideas, understandable), but one criteria is weak.
		20-16	FAIR: The text gives paragraph unity (topic, state good topic

			sentence, supporting sentence. Concluding sentence) and coherence (relationship among ideas, understandable), but some citeria are weak.
		15-11	POOR: The text gives paragraph unity (topic, state good topic sentence, supporting sentence. Concluding sentence) and coherence (relationship among ideas, understandable), but most criteria are weak
2.	Organization	15-13	EXCELLENT: The text is coherent and the coherences are correct. Using chronological order and repeating the key words
		12-10	GOOD: The text is coherent and the coherences are correct. Using chronological order.
		9-7	FAIR: The text is coherent and some criterias are appropriate enough.
		7-5	POOR: The coherences among

			sentences are weak.
3.	Grammar	25-21	EXCELLENT: Using simple present tense, adjectives and adverbs correctly.
		20-16	GOOD: Using simple present tense, adjectives and adverbs with few errors.
		15-11	FAIR: Using simple present tense, adjectives and adverbs with many errors.
		10-6	POOR: Using none or only one of grammatical features of descriptive text with errors.
4.	Vocabulary	25-21	EXCELLENT: Using appropriate words to describe places effectively.
		20-16	GOOD: Using appropriate words with few errors.
		15-11	FAIR: Using appropriate words with many errors

		10-6	POOR: Using inappropriate words
5.	Mechanics	5	EXCELLENT: Using correct punctuation, spelling and capitalization. It fulfills all criteria.
		4	GOOD: Using correct punctuation, spelling and capitalization. But one of the criteria is weak.
		3	FAIR: Using correct punctuation, spelling and capitalization. But two criteria are weak.
		2	POOR: Using incorrect punctuation, spelling and capitalization. All the criteria are weak.

E. Treatments

In this research the researcher gave twice for treatments. Treatment here means the instructional to write the procedure text that the researcher used think-talk-write strategy. Treatment was conducted on Wednesday, January 22nd 2020 and Tuesday, January 28th 2020. Treatment was made the students to get the motivation, ideas or materials in writing a procedure text. The procedure of giving treatment can be seen as in the table 3.5 and 3.6:

Table 3.5 The Schedule of First Treatment

The first treatment on Wednesday, 20th of January 2020

No.	Aspect	Teachers' Activity	Students' Activity
1.	Pre Activity	✓ The teacher gave greeting to the students	✓ The students responded the teacher's greeting.
		✓ The teacher checked the students attendance list	✓ The students responded to the teacher.
		✓ The teacher gave stimulus to the students by delivering questions.	✓ The students answered the teacher's questions.
		✓ The teacher asked the students to makes group.	✓ The students followed the teacher's instructions.

2.	Main Activity	✓ The teacher asked the students to observe and undrestand the materials about the definition, social function, generic structure, language feature of procedure text ✓ The teacher gave an example of procedure text by using power point media.	✓ The students followed the teacher's instructions.
		✓ The teacher asked the students about their undrestanding of material that was given.	✓ The students delivered their difficulties in undrestanding.
		✓ The teacher explained more about the material that still not undrestood by the students.	✓ The students paid attention to teacher's explanations.
		✓ The teacher explained about the steps in implementing the think-talk-write strategy.	✓ The students paid attention to teacher's explanations.

		✓ The teacher asked the students to write procedure text in groups by using think-talk-write strategy.	✓ The students followed the teacher's instructions.
		✓ The teacher asked the representative group to present their work in front of the class.	✓ The representative group presented their work in front of the class.
3.	Closing Activity	✓ The teacher gave feedback in generally about the students' writing project and continued in giving evaluation about the activities that have been done.	✓ The students paid attention to teacher's explanations.
		✓ The teacher gave the motivation to the students and closed the learning process.	✓ The students responded to the teacher.

Table 3.6 The Schedule of Second Treatment

The second treatment on Tuesday, 28th of January 2020

No.	Aspect	Teachers' Activity	Students' Activity
1.	Pre Activity	✓ The teacher gave greeting to the students	✓ The students responded the teacher's greeting.
		✓ The teacher checked the students attendance list	✓ The students responded to the teacher.
		✓ The teacher gave stimulus to the students by delivering questions.	✓ The students answered the teacher's questions.
		✓ The teacher asked the students to makes group.	✓ The students followed the teacher's instructions.
2.	Main Activity	✓ The teacher asked the students to observe and undrestand the materials about the definition, social function, generic structure, language feature of procedure text ✓ The teacher gave an	✓ The students followed the teacher's instructions.

		example of procedure text by using power point media.	
		✓ The teacher asked the students about their undrestanding of material that was given.	✓ The students delivered their difficulties in undrestanding.
		✓ The teacher explained more about the material that still not undrestood by the students.	✓ The students paid attention to teacher's explanations.
		✓ The teacher explained about the steps in implementing the think-talk-write strategy.	✓ The students paid attention to teacher's explanations.
		✓ The teacher asked the students to write procedure text in groups by using think-talk-write strategy.	✓ The students followed the teacher's instructions.

		✓ The teacher asked the representative group to present their work in front of the class.	✓ The representative group presented their work in front of the class.
3.	Closing Activity	✓ The teacher gave feedback in generally about the students' writing project and continued in giving evaluation about the activities that have been done.	✓ The students paid attention to teacher's explanations.
		✓ The teacher gave the motivation to the students and closed the learning process.	✓ The students responded to the teacher.

F. **The Procedures of Teaching Writing Procedure Text by Using Think-Talk-Write Strategy.**

The focus in this research was to know the effectiveness of Think-Talk-Write strategy toward students' ability in writing procedure text.

Then, the ways of applying Think-Talk-Write strategy in teaching writing is described as follows;

1. The teacher divided the students into several groups. Minimally, each group consisted of two members, but it depended on the total of students and the effectiveness of the group itself.

2. The teacher invited the students to sit with the member of the group.

3. The teacher asked a question to the students whether they have already cooked any food or drink by themselves or not. Then, the students answered the teacher's question.

4. The teacher showed the power point that has been made before about the procedure text.

5. The teacher explained about the procedure text start from the definition, purpose, generic structure, language features, and the example of procedure text.

6. After giving the material, the teacher asked a question to the students about their difficulties in understanding the material.

7. The teacher asked the students to prepare a pen in each group.

8. The teacher explained the steps in implementing this strategy (think-talk-write strategy). The steps included;

   a. The teacher gave a picture for each group about certain food or drink. They were also given a piece of paper (worksheet) to the writing project. Then, the students in each group were asked to analyze the picture, the ingredients, and how to make it. In this stage, the students conducted (Think) step.

b. The teacher asked the students to discuss about the conten of the picture with their group. Then, they were asked to share their ideas to other friends in the group. It included (Talk) step.

c. The teacher asked the students to write their ideas as the product of thinking that have been discussed before in the piece of paper or worksheet. In this stage, the students conducted (Write) step.

d. The teacher gave time allocation around thirty minutes to write their writing project based on the picture.

e. If the time is up, the teacher asked the representative group to present their work in front of the class.

f. The students in the other group must pay attention and gave comment to the group that is presenting their work.

g. The teacher gave feedback in generally about the students' writing and continues in giving evaluation about the activities that have been done.

G. Variables of The Research

A variable is a construct or a characteristic that can take on differentvalues or scores (Ary et al., 2010:37). There are two kinds of variable in this research. They are independent variable and dependent variable.

1. Independent Variable

Ary et al. (2010:266) state that the independent variable is manipulated (changed) by the experimenter. It means that the independent

variable can give effect to dependent variable. The independent variable in this research was think-talk-write strategy.

2. Dependent Variable

According to Ary et al (2010:266), the variable on which the effects of the changes are observed is called the dependent variable, which is observed but not manipulated by the experimenter. So, the dependent variable is an outcome from the effect of the independent variable. The dependent variable in this research was students' writing ability in procedure text.

H. Validity and Reliability Testing

Validity and reliability testing are the important part since the test is used as an instrument to collect the data. The validity and reliability were used to ensure that the test was suitable to use.

1. Validity

The most complex criterion of an effective test and the most important principle of language testing is validity. According to Ary et al (2010: 225) validity is the most important consideration in developing and evaluating measuring instruments. Validity was defined as the extent to which an instrument measured what it claimes to measure. The focus of recent views of validity is not on the instrument it self but on the interpretation and meaning of the scores derived from the instrument. In this research, the researcher used some validity testing as follows:

a. Content Validity

Content validity is a test where the test can measure a certain objectives that appropriate with the material or the content of learning that is given Arikunto (2006: 82). It means that the content of test must appropriate with the material that exist in the curriculum. Moreover, the instrument in this research fulfilled the requirement of having content validity since the test was designed based on the core competence and basic competence in 2013 curriculum of English for Junior High School at 9th grade.

Table 3.7 Core Competence and Basic Competence in 2013 Curriculum of English for Junior High School at 9th Grade

Core Competence	Basic Competence
4. Experimenting, processing, presenting in concrete aspects (applying, synthesizing, arranging, modifying, and composing) and in abstract aspects (writing, reading, counting, drawing, and creating) based on what have been learned in school and other sources from the same perspectives.	4.8 Arranging procedure text oral and written, in the form of short and simple recipes and manuals, taking into account social functions, structures of text, and linguistic elements that are true and in context.

Based on those table, it can be seen that procedure text was one of the text that must be mastered by the 9th grade students of Junior High School in K13 curriculum. Therefore, the content of the test in this study used procedure text, since it was suitable for ninth graders.

b. **Construct Validity**

Brown (2003) stated that construct validity is any theory, hypothesis, or model that attempts to explain observed phenomena in our universe of perceptions. Construct may or may not be directly or empirically measured their verification often requires inferential data. Gay (2012:161) stated that construct validity is a mass convergent, divergent, and content-related evidence to determine that the presumed construct is what is being measured. Construct validity is a slightly more complex issues relating to the internal structure of an instrument and the concept it is measuring. Based on those theories, the researcher created the test based on the material that is suitable for the students at ninth grade of MTs Fathul Hidayah Pangean Lamongan. Furthermore, in the class the researcher asked the students to do the test in the form of writing procedure text. This test was to measure the student achievement in writing especially in procedure text. To measure the construct validity, the researcher made a blueprint.

c. Face Validity

Face validity is a term sometimes used in connection with a test's content. Face validity refers to the extent to which examinees believe the instrument is measuring what it is supposed to measure Ary et al (2010: 228). It means that the test should look clear or the instruction must be understandable for the students. The test in this research was design to measure students' achievement in writing text. Thus, to achieve face validity, the researcher provided the instruction on the paper test. In this study, the face validity was done through validator by the experts. The purpose of the face validity which is used in this research was to check some aspects that are consideration in the test, they are:

1. To check that the instruction must be clear and understandable for the students.

2. The test was suitable with syllabus and their level.

3. Time allocation must be given clearly.

2. Reliability

A good test must be valid and reliable. According Lodico et.al (2006:87), reliability refers to the consistency of score, that is, an instrument's ability to produce "approximately" the same score for individual over repeated testing or across different ratters. One of the ways to achieve the reliability in a test was that a researcher may apply rater reliability. There are two kinds of rater reliability; the

first was inter-rater reliability in which to raters or scores do the scoring, well the second was known intra-rater reliability in which a rather or a scorer does the scoring twice. In this test the researcher used inter-rater reliability where the researcher involved two raters do in scoring the students' writing ability. According to Sarosdy et al.(2006: 135), inter-rater reliability refers to consistency of scores given by two or more scores to the same set of oral or written texts. The two scorers in this research were the researcher (rater 1) and an English teacher (rater 2).

After getting the score of try out from both of raters, the researcher calculated the score of try out using SPSS 16.0 application to know the reliability coefficient. Ridwan (2004:118) devided the reliability instruments into five classes as follows:

1. If the alpha cronbach score 0.00 – 0.20: less reliable

2. If the alpha cronbach score 0.21 – 0.40: rather reliable

3. If the alpha cronbach score 0.41 – 0.60: enough reliable

4. If the alpha cronbach score 0.61 – 0.80: reliable

5. If the alpha cronbach score 0.81 – 1.00: very reliable.

The result of reliability testing can be seen from the following table:

Table 3.8 Reliability Testing of Pre-Test

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.986	.987	2

Table 3.9 Reliability Testing of Post-Test

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.987	.989	2

From the computation in SPSS 16.0, the reliability value of pre-test was 0.986. Based on the Cronbach's Alpha scale in the table 3.8 was very reliable because the value of reliability testing was between 0.81 – 1.00. Moreover, the reliability value of post-test was 0.987. Based on the Cronbach's Alpha scale in the table 3.9 was very reliable because the value lied between 0.81 – 1.00. So it can be said that the both instruments of pre-test and post-test was reliable.

I. Normality and Homogeneity Testing.

    1. Normality Testing

        Normality testing is needed to find out whether the data is in normal distribution or not. Choyimah (2014:24) stated that the normality of data is important because the data can be considered to represent the population when it is in normal distribution. There were two types of testing which can be used to test the normality, those were Kolmogorov-Smirnov or Shapiro-Wilk. The appropriate test can be utilized based on the number of sample used in the research. Dahlan (2010) states that if the research samples are more than 50, the normality test uses Kolmogorov-Smirnov and while the research sample are less than 50, it can be used Shapiro-Wilk.

        Thus, to determine the level of significance, the researcher used Shapiro-Wilk in the significance level: 0.05. from SPSS version 16.0 of Windows computer program because this research used 49 students as the research sample. The researcher used Shapiro-Wilk method to test normality of data in pre-test and post-test both of control group and experimental group. According to Stanislaus (2009), the hypotheses for normality testing are:

a. H_0 : Data is normal distribution

b. H_a : Data is not normal distribution

        The hypotheses for normality testing explain that the data was normal distribution if H_0 was accepted and the data was not in normal

distribution if H_a was accepted. The H_0 was accepted when the significance value is higher than 0.05 ($\alpha = 5\%$), while H_0 was rejected when the significance value is lower than 0.05 ($\alpha = 5\%$).

Based on the result testing of normality used SPSS 16.0 program, the researcher found normality pre-test and post-test as follows:

Table 3.10 Control Group Normality Testing

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pre	.145	25	.184	.949	25	**.234**
Post	.116	25	.200[*]	.979	25	**.859**

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Table 3.11 Experimental Group Normality Testing

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Pre	.122	24	.200[*]	.941	24	**.176**
Post	.114	24	.200[*]	.981	24	**.922**

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Based on the output of Shapiro-Wilk test in SPSS 16.0 at table 3.10 and table 3.11, it resulted the normality between pre-test and post-test. In the pre-test, it found that the significance of experimental

variable was 0.176 and control variable was 0.234. Then in the post-test, it found that the significance of experimental variable is 0.922 and control variable is 0.859. From those data, all the significance variables both of pre-test and post-test indicated that the results were more than 0.05. So, it can be concluded that the data was normally distributed. Therefore, the data was qualified to be analyzed.

2. Homogeneity Testing

Homogeneity testing is used to know homogeneous or not the variance of the two samples from the same population. According to Nurgiyantoro (2004) states that in examining the homogeneity of variance should do testing of variance of the distribution score of group involved. To know the homogeneity, the researcher used Homogeneity of Variances Test by using SPSS 16.0. The value of significance (α) = 0.05. According to Stanislaus (2009), the basic decisions making in homogeneity testing were as follows:

a. If the significance value > 0.05, then the data distribution is homogeneous.

b. If the significance value < 0.05, then the data distribution is not homogeneous.

Table 3.12 Pre-Test Control-Experimental Group Homogeneity

Testing

Test of Homogeneity of Variances

PRE-TEST

Levene Statistic	df1	df2	Sig.
.616	1	47	.436

Table 3.13 Post-Test Control-Experimental Group Homogeneity

Testing

Test of Homogeneity of Variances

POST-TEST

Levene Statistic	df1	df2	Sig.
1.897	1	47	.175

Based on the output from table 3.12 and 3.13 there were known that the significance value from both of pre-test and post-test in control-experimental group were 0.436 and 0.175. Those values were higher than 0.05 (α = 5%). It meant that H_0 was accepted or the instrument was homogeneous.

J. Hypothesis Testing

The function of hypothesis testing is to know whether the hypothesis of the study is rejected or not. The hypothesis testing in this study as follows:

a. Null Hypotesis (H_0)

There is no any significant different score in writing procedure text between the students who are taught and those who are not taught by using Think-Talk-Write strategy.

b. Alternative Hypothesis (H_a).

There is significant different score in writing procedure text between the students who are taught and those who are not taught by using Think-Talk-Write strategy.

K. Data Analysis

According to Ary et al (2010:32) stated that analyzing the data is the data collected in research must be analyzed. Quantitative data are usually in the form of numbers that the researcher analyze using various statistical procedures. Even verbal data, such as compositions written by high school students, would be converted through the scoring process to a numerical form. The analysis of the numerical data in quantitative research provides evidence that supports or fails to support the hypothesis of the study. In this research, the researcher uses a quantitative data analysis technique by using statistical method. This method is used to find the significant difference score in writing procedure text between the students who are taught and those who are not taught by using Think-Talk-Write

strategy. To know the effectiveness of Think-Talk-Write strategy in teaching writing especially in procedure text, the data was collected from students' score in pre-test and post-test. Then the data which was gained from those two tests were analyzed by using statistical instrument (SPSS) especially using Independent Sample T-Test at SPSS 16.0.