CHAPTER III

RESEARCH METHODOLGY

A. The Research Design

This research was experimental research. In this research the effect of using Think, Talk, Write (TTW) strategy as dependent variable and students' writing ability as independent variable. Researcher divided sample into two groups. They concern for experimental research. According to Sugiyono (2008:72), experimental research methods can be interpreted as the research methods used to find the effect of a particular treatment ov[illegible] another in a run away condition.

Gay [illegible]0: 367-368), the experimental res[illegible] is the only type of research that [illegible] hypotheses to establish [illegible] effect relationship. It represents the st[illegible]hain of [illegible]ng about the link between variable. In an experimental [illegible] researcher manipulates at least one independent variable, controls other relevant variables, and observes the effect on one or more dependent variables. He also defines experimental research is the most structured of all types of research. In an experimental study, the researcher is in on the action from the very beginning. He or she selects the groups, decides what treatment will go to which group, controls extraneous variables, and measures the effect of the treatment at the end of the study.

The two groups were taught by different writing strategy but same teacher and same topic. The experimental group was taught by using TTW strategy and the control class was taught by conventional strategy.

The treatment was given to experimental class about six meetings. Every meeting the researcher was given different topics. At the end of treatment, the researcher was gave the students post-test. So, at the end of the research, the researcher was use the post-test to see how both of them, using Think, Talk, Write (TTW) strategy to improve students writing descriptive text. According Sugiyono (2008:76) this research describes like:

Table 2. Th ple Research Design

	Treatment	test
Experim	X	O_2
Control		O_4

X= treatment of experimental class

O_2= post-test for experimental class

O_4= post-test for control class

B. Population and Sample

1. Population

Gay states population is the group of interest to the researcher, the group which she or he would like the result of the study to generalize whereas sample is a number of individuals for a study in such a way that the individual represent the larger group from which they are selected. This research was conducted at Islamic Junior High School 3 Solok Selatan. The population on this research is students of class VII Islamic Junior High School 3 Solok Selatan . There were two classes took from five regular classes as the sample, namely class VII.2 as the control class and class VII.3 as the experimental class. Researcher was took VII.2 and VII.3 as the sample, because the students of each class almost had same ability in English proficiency. Distribution of this population can be seen as follows:

Table 3. Distribution of students in Class VII of Islamic Junior High School 3 Solok Selatan

No	Classes	Number of students
1	VII 1	31
2	VII 2	31
3	VII 3	31
4	VII 4	29
5	VII 5	29

Source: Curriculum staff of Islamic Junior High School 3 Solok Selatan

From the table above we can conclude that total of population are 151 students, consist of 5 classes, namely VII.1, VII.2, VII.3, VII.4, VII.5.

After deciding population, the researcher used SPSS to show normality and homogeneity from the both classes above. After the researcher did the normality test and got the normal data. Then the researcher did the homegeneous variation test. This test had an objective as to know the sample homogeny or not. The researcher did the test of homogeneity by using *Test of homogeneity of variance*. If the data were significant or the data were more than 0.05 it mean the data is homogeneous. Then to show the sample representative or not the researcher d[illegible] the next step:

a) Collected th[illegible]dents' examination score data f[illegible]he English teacher (see appendi[illegible]

b) Test of Normality, N[illegible] test had[illegible]ctive to know the population normal or not. The researche[illegible]olmogrov Smirnov and Shapiro Wilk to do normality test, it is SPSS (*Statistical product and service solution)* test. The data would be normality tests, if every class was significant or more than 0.05.

Table 4. Tests of Normality

	VAR0 0002	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
VAR0000 1	VII.1	.118	31	.200*	.946	31	.120
	VII.2	.121	31	.200*	.945	31	.110
	VII.3	.133	31	.172	.958	31	.255
	VII.4	.139	29	.161	.952	29	.204
	VII.5	.159	29	.059	.941	29	.104

a. Lilliefors Significance Correction

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

c) Test of Homogeneous Varian

After doing the normality test and got the normal data. Then the researcher did the homogeneous variation test. This test had an objective as to know the sample homogeny or not. The researcher did the test of homogeneity by using *Test of homogeneity of variance*. If the data were significant or the data were more than 0.05 it mean the data was homogeneous.

Table 5. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
VAR00001	Based on Mean	.881	4	146	.477
	Based on Median	.780	4	146	.540
	Based on Median and with adjusted df	.780	4	131.544	.540
	Based on trimmed mean	.876	4	146	.480

2. Sample

According to Gay (2000:121) sampling is the process of reflecting a number of individuals for a study in such way that the individual represent the large group which was selected. He also states that a good sample is the one that representative of the population from which is selected. In this research, the researcher will choose two classes to be the sample.

In order to get sample, the researcher was used cluster random sampling. Gay (2000:124) stated that cluster random sampling involves the following steps:

a) Identify and define the population
b) Determine the desired sample size.
c) Identify and define a logical cluster (neighborhood, school, city block, etc.)
d) List all clusters (or obtain a list) that make up the population of clusters.
e) Estimate the average number of population members per cluster.
f) Determine the number of cluster needed by dividing the sample size by the estimated size of a cluster.
g) Randomly select the needed number of clusters (using the table of random number).
h) Include in your study all population members in each selected cluster.

In determining control and experimental class, the researcher used cluster sampling. So class VII.2 select to be control class and class VII.3 selecte to be experimental class.

C. Instrument

Based on Arikunto (1997:136), research instrument is the tool or facilities used by writer in collecting data: it is used to get the accurate, complete and systematic reseach result. In this reseach, the instrument that writer used is written test which is used to collect the data about the effect

of Thin, Talk, Write (TTW) strategy to improve students' writing skill in descriptive text at Islamic Junior High School 3 Solok Selatan. The written test was given in Pre-test. In this case, the researcher ask to choose one of the topics given and create the story in the written form during 2X40 minutes. The topics is : My Best Friend, My School, My Favorite Place, My Lovely Home, and My Idol. Instrument Sample for writing skill score :

Table 6. Sample of instrument in Giving Score

No. of Students	Aspects					
	Conten (16-30)	Organization 20)	Voc (9-20)	Gramma (10	Mechanics (1-5)	Total (100)
1						
2						
31						

The researcher used the Jacob's criteria (1981:90) in scoring the students'writing.

D. Procedure of Doing Research

There are some steps to conduct the research such as preparation, application, and finishing.

1. **Preparation**.

The researcher collected the data that relate with preparation steps:

a. Preparing lesson plan

b. Preparing reseach intrument

c. Determining population and sample

2. **Application steps.**

This step was conducted in three teaching activities. The first activities are pre-teaching activity which include greeting, checking attendance, apperception, and motivation. The second is whilst activity include exploration, elaboration and confirmation. The last activities are post activities included concluding material and evaluation. The scenario of learning for experimental class and control class can be seen as follows.

Table 7. Treatment Procedure for Experimental and Control Groups

Experimental Group	Control Group
• Greeting • Praying • Checking students attendance list • The teacher asks the students the topic of the past lesson.	• Greeting • Praying • Checking students attendance list • The teacher asks the students the topic of the past lesson
Observing ▪ Teacher explains the material about descriptive text (The purpose of the text, generic structure of the text and the use of the text). ▪ Teacher checks students' understanding about the text (purpose, language feature, and generic structure). **Questioning** ▪ Teacher gives worksheets or the teacher divides the reading text that contains the problem	**Observing** ▪ Students observe images on screen and hear examples of descriptive text read by teachers with social functions, text structure. ▪ Teachers record / assess aspects of attitudes and sincerity / active students. **Questioning** ▪ By questioning the director of the teacher, learners

situation (descriptive text) and the instructions and procedures for implementation to each student. ▪ Students read the worksheet, understand the problems individually and make small notes (think). **Exploring** ▪ Ask the students to interact with their group to discuss contents of worksheet. The students are asked to identify [illegible] text environment (talk). Te[illegible] as mediators of learning. **Associating** ▪ Students construct their knowledge as product of collaboration (write). **Communicating** ▪ Students perform a descriptive	questioned about social functions, text structure **Exploring** ▪ Students rewrite the text in collabo[illegible]n (draft). ▪ St[illegible]vise the draft **Associating** ▪ Students write simple descriptive text individually. ▪ Teachers assess aspects of

text in oral in front of the class to attain a social function, the structure of the text, and linguistic elements appropriate to the context.	student's attitude and sincerity / activeness **Communicating** ▪ Teacher gives feedback
▪ Students conclude learning materials that have been studied. ▪ Students reflect mastery of the material that has been studied to create the mastery of the material. ▪ Teacher closed the	▪ Students conclude learning materials that have been studied. ▪ Students reflect mastery of the material that has been studied to create a note the material. ▪ Teacher closed the class

3. Finishing Steps

a. Collecting the data (students' writing)

b. Processing data towards experiment and control class by using T-test formula

c. Getting finding.

E. Technique of Data Collection

For this research, the researcher used writing test to collect the data. The test is given in post-test. Post-test is the process of identifying

the students' writing skill after giving the treatment. Treatment is the process of Think Talk Write as strategy a in teaching and learning process to improve the student's writing skill.

In analyzing and assessing the students' writing ability, the analytic scale is used as described in table below:

SCORE	LEVEL	CRITERIA
CONTENT	30-27	EXCELLENT TO VERY GOOD: knowledgeable a substantive • thorough development of thesis • relevant to assigned topic
	-22	GOOD TO AVERAC ome knowledge of subject • adequate limited development f thesis relevant to topic but lack de
	21-17	FAIR TO POOR: limited knowledge of subject • little substance • inadequate development of topic
	16-13	VERY POOR: does not show knowledge of subject • non substantive • not pertinent • or not enough to evaluate
ORGANIZATION	20-18	EXCELLENT TO VERY GOOD: fluent

		expression • ideas clearly stated/supported • succinct • well organized • logical sequencing • cohesive
	17-14	GOOD TO AVERAGE: somewhat choppy • loosely organized but main ideas stand out • limited support • logical but incomplete sequencing
	13-10	FAIR TO POOR: non-fluent • ideas confused or disconnected • lacks logical sequencing and development
	9-7	VERY POOR: does not communicative • no organization • or not enough to evaluate
VOCABULARY	20-18	EXCELLENT VERY GOOD: sophisticated range • effective word/idiom choice and usage • word form mastery • appropriate register
	17-14	GOOD TO AVERAGE: adequate range • occasional errors of word/idiom form, choice, usage *but meaning not obscured*
	13-10	FAIR TO POOR: limited range • frequently errors of word/idiom form, choice, usage • *meaning confused or obscured*
	9-7	VERY POOR: essentially translation • little

		knowledge of English vocabulary, idioms, word form • or not enough to evaluate
LANGUAGE USE	25-22	EXCELLENT TO VERY GOOD: effective complex constructions • few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions
	21-18	GOOD TO AVERAGE: effective but simple constructions • minor problems in complex constructions • several errors of agreement, tense, number, word order, function, articles, pronouns, prepositions • *but meaning seldom obscured*
		FAIR TO POOR: 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*
	10-5	VERY POOR: virtually no mastery of sentence construction rules • dominated by errors • does not communicate • or not enough to evaluate
MECHANICS	5	EXCELLENT TO VERY GOOD:

		demonstrates mastery of conventions • few errors of spelling, punctuation, capitalization, paragraphing
	4	GOOD TO AVERAGE: occasional errors of spelling, punctuation, capitalization, paragraphing *but meaning not obscured*
	3	FAIR TO POOR: frequent errors of spelling, punctuation, capitalization, paragraphing • poor handwriting • *meaning confused or obscured*
	2	VERY POOR: no mastery of conventions • dominated by errors of spelling, punctuation, capitalization, paragraphing • handwriting illegible • Not enough to Evaluate
TOTAL SCORE:		

F. Technique of Data Analysis

To analyze the students' score on posttest, the researcher was used t-test that take from Gay (1987) and Statistical Software Program SPSS version 20. In this case, T-test means a statistical procedure use to determine whether there are many significant differences between the mean of the two sets score from control and experiment class.

In analyzing the students' test score, some steps were did before analyzing the different mean by using t-test formula as follows;

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

$$\overline{X_1} = \frac{\sum F_1 X_1}{\sum F_1}$$ (Experimental group)

$$\overline{X_2} = \frac{\sum F_2 X_2}{\sum F_2}$$ (Control group)

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

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

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

$$S_2^2 = \frac{n_2 x \sum F_2 \quad - X_2)^2}{n_2 (n_2 -}$$

The formula of t-test as follows (Sudjana, 1996).

$$t = \frac{\overline{X_1} - \overline{X_2}}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

With;

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

Notes;

t : The value of t calculated / observer / obtained

$\overline{X_1}$: Mean score of experiment sample

$\overline{X_2}$: Mean score of control sample

n_1 : The number of subject of experimental class

n_2 : The number of subject of control class

S_1^2 : Standard deviation of experimental class

S_2^2 : Standard deviation of control class

The $t\text{-}_{table}$ was employed to see whether there was a significant difference between the mean score of both experimental class and control class. The value of $t\text{-}_{obtained}$ was consulted with the value of $t\text{-}_{table}$ at the degree of freedom $(n_1\text{-}1) + (n_2\text{-}1)$ and the level of confidence of 95% = 0.05. If the value of $t\text{-}_{obtained}$ was less than the value $t\text{-}_{table}$, the null hypothesis was accepted; on the contrary, if the value of $t\text{-}_{obtained}$ is equal or bigger than value of $t\text{-}_{table}$ the alternative one is not accepted.