## **CHAPTER III**

# **RESEARCH METHOD**

## A. Research Design

This research was pre-experimental research; it is aimed to find out whether the implementation of Translation-Action-Details strategy gives significant effect on students' writing ability. According to Gay (2000: 265-266), the one group pretest-posttest design involves a single group as experiment group that is pretested (O), exposed to a treatment (X), and tested again (O). The success of the treatment is determined by comparing pretest and posttest score. The study conducted into two steps: Pre-test and Post-test. The pre-test was given at the first meeting of the research to see the students' writing ability before doing the treatment, and the post-test was done at the last meeting of the research to find out the result of the treatment given to the students. In this research the experimental group was given a treatment by applied the Translation-Action-Details strategy to improve their writing ability.

Based on the design, Gay (2000 : 265) shows the one group pre-test post-test in schema below :



Where :

O: Pre-test

X : Treatment

O: Post-test

By doing this Research, the researcher gave pre-test before giving the treatment to the students, after that the researcher provided some treatments by using Transition-Action-Details strategy. At the end of the research, the researcher gave post-test to the students to know their abilities in writing recount text.

# Table 3.2

STEPS	PROCEDURE	AIM
Step 1	PRE-TEST	To measures the degree dependent
	(Writing test)	variable before the treatment.
Step 2	TREATMENT	To influence the dependent variable
Step 3	POST-TEST	To measures the degree of change on
	(Writing test)	dependent variable.

# **Procedure of the One Group Pre test – Post test Design**

# **B.** Population and Sample

#### **1.** Population

Gay (1987: 102) says that population is a group to which the researcher would like the results of the study to be generalizable 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 were selected. In this research, the population was the third grade students of MAN 4 Pasaman Barat. The total number of the population is 59 students. They were distributed into three classes. The member of each class in third grade of students Islamic Senior High School 4 Pasaman Barat shown as follows:

#### Table 3.3

### The total Third grade of Islamic Senior High School 4

Class	Male	Female	<b>Total Students</b>
XII IPA	8	12	20
XII IPS	6	13	19
XII IPK	4	16	20
Total	18	41	59

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# 2. Sample

Sample is part of population that represents the problem values of the population. A sample comprises the individuals, items, or events selected from a large group referred to as a population. The purpose of sampling is to gain information about the population by using the sample.

The sample of this research used simple cluster sampling. Gay (2000: 131) says that simple cluster sampling is the process of selecting a sample in such a way that all individuals in the defined population have an equal and dependent chance of selection for the sample. The selection of the sample was completely out of the researcher's control; instead, a random, or chance, procedure selects the sample. In other words, every individual has the same probability of being selected. The sample of this study was XII IPK and the students consist of 20 students as sample. The class was chosen because it could represent the homogenous population.

To get the representative sample of this research the researcher used Simple Cluster Sampling. The researcher did the following steps:

- a Collecting the midterm test score data from the entire Third grade in first semester of Islamic Senior High School 4 Pasaman Barat.
- b Test of Normality

Normality test has an objective to know the population normal or not. The normality was analyzed by using SPSS (*Statistical Product and Service Solution*) with data exploration of Kolmogorov-Smoirnov test and Shapiro Wilk. Based on that test the data stated normal if every classes has significance or probability score bigger than 0. 05 ( $\geq$  0.05). Then, three classes tested a normal data (XII<sub>IPA</sub>, XII<sub>IPS</sub> and XII<sub>IPK</sub>). Based on the graphics, Q-Q Plot, if the data were around and near with the line, it meant the data was normal.

# Table 3.4

ſ		Kolmogorov-Smirnov <sup>a</sup>		Shapiro-Wilk			
	KELAS	Statistic	Df	Sig.	Statistic	df	Sig.
NILAI	XII IPA	.178	20	.096	.905	20	.052
	XII IPK	.146	20	$.200^{*}$	.920	20	.100
	XII IPS	.125	19	$.200^{*}$	.910	19	.073

a. Lilliefors Significance Correction

Test of Normality

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

Based on the table of analysis of normality test above, it can be seen that the significance of all the classes bigger than 0.05 in both Kolmogorov-Smirnov and Shapiro-Wilk.

To see whether the sample normal or not in distribution, the researcher also used normal graphic of Q-Q plot, the data is normal if the distribution of data plot be in the surrounding of aslant and athwart line.

c Test of Homogeneous Variance

After test of normality and get normal data, the researcher did the homogeneous variation test. This test had an objective as to know the sample homogeny or not. This test used SPSS with Levene test, if the data are significant or the data are more than 0. 05 it meant the data homogeneous.

#### Table 3.5

# **Test of Homogeneity of Variances**

		Levene Statistic	df1	df2	Sig.
NILAI	Based on Mean	.415	2	56	.662
	Based on Median	.208	2	56	.813
	Based on Median and with adjusted df	.208	2	54.328	.813
	Based on trimmed mean	.391	2	56	.678

The decision of column test of homogeneity of variance shown that was bigger than 0.05, so it can be concluded that all the class were homogeny.

Next, get the mean class that has no significant differences, then the researcher chose one class as experimental group. to decided the sample the researcher used piece of paper of the experimental class was XII<sub>IPK</sub>.

#### C. Instrument of the Research

Instrument is a tool to collect the data from the sample. The instrumental that used in this research was test. The test was writing test, it was used to collect the data about the improvement of students' writing skill before and after using Translation-Action-Details strategy. The test was given in the first meeting (pre-test) and at the end of the meeting (post-test). In pre-test and post-test the students was given some topics and then they asked to write some paragraph. The students must pay attention to their writing of five aspects; they are content, organization, vocabulary, language use and mechanics.

# **D. Place and Time**

This research was carried out at Islamic Senior High School 4 Pasaman Barat, the treatment was conducted at the third grade students of first semester. This research was done in six meetings. It was started on November 18<sup>th</sup> 2017 until December 8<sup>th</sup> 2017 where the researcher gave students the pre-test in the first meeting, gave treatments four times for four

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days, and the last meeting the researcher gave post-test in order to know the students' writing skill. And to see whether to use Transition-Action-Details strategy gave significant effect on students' writing skill, the researcher compared between the pre-test and post-test result in the class. The schedule of the research also can be seen as the table below:

## Table 3.6

No.	Day / Date	Class	Time	Activity
1.	Saturday, November 18 <sup>th</sup>		1 <mark>1.00</mark> -12.30	Pre-test
	2017			
2.	Monday, November 20 <sup>th</sup>		08.00-09.30	Treatment
	2017			
3.	Saturday, November 25 <sup>th</sup>		11.00-12.30	Treatment
	2017	XII <mark>IPK</mark>		
4.	Monday, November 27 <sup>th</sup>		08.00-09.30	Treatment
	2017			
5.	Saturday, December 2 <sup>nd</sup>		11.00-12.30	Treatment
	2017			
6.	Monday, December 4 <sup>th</sup>		08.00-09.30	Post-test
	2017			

# **Research Schedule**

#### **E.** Procedure of Experiment

This Research was conducted in one class. The students were given a pre-test at the first meeting then treatment for fourth meetings and posttest at the last meeting. To achieve the goal of the research the researcher used three steps, they are preparation, application and finishing.

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## 1. Preparation Phase

The researcher collected the data that relate with preparation steps :

- a. Planning learning for experimental class.
- b. Determining learning material.
- c. Determining population and sample.
- d. Preparing the learning design.
- e. Preparing research instrument.
- 2. Application Phase

The application process of teaching and learning activity was using Translation-Action-Details strategy. The scenario of learning in experimental class could be seen in lesson plan.

# Table 3.7

# **Procedure of Experiment**

NO	Experimental Class	Time
1.	Apperception	5 Minutes
2.	Main Activity	10 Minutes
	<ul> <li>Teacher shows TAD chart and recount text to the students.</li> <li>Teacher asks students to read a simple recount text and TAD chart.</li> <li>Teacher assigns students to identify the characteristic of a model recount text.</li> </ul>	OL
	<ul> <li>Questioning</li> <li>Under the guidance and direction of the teacher, students asking and questioning about the social function, generic structure and language feature of the text.</li> <li>Teacher explains how to use TAD chart to produce a paragraph</li> </ul>	20 Minutes

		• Teacher divides students into groups and asks them to do questioning and answering about their last experience to fill in TAD chart.			
		Exploring			
		<ul> <li>Teacher prepares a TAD chart, and asks students to write down some information in TAD chart.</li> <li>Students fill in the first action box.</li> <li>Students fill in the last action box.</li> </ul>			
		<ul><li>Write down in the middle of sequence.</li><li>Read over from the top to bottom of the actions how</li></ul>			
		<ul> <li>Students fill in the details.</li> <li>Write down in the transitions</li> </ul>			
		• After the TAD chart have been fulfilled, the teacher asks students to change it into paragraph form.			
		<ul> <li>Associating</li> <li>Teacher asks students to change their task, and</li> </ul>	15 Minutes		
		<ul> <li>correct for other own.</li> <li>Teacher asks students to revise their task, and teacher gives responses to the written made by students.</li> </ul>			
		<ul> <li>Communicating</li> <li>Teacher asks students to communicate their writing in front of the class.</li> </ul>	10 Minutes		
U		<ul><li>Teacher and other students have to give confirmation about the students' performance.</li><li>Teacher collects the students' work.</li></ul>	OL		
	3.		5 Minutes		
		<ul> <li>Teacher and students conclude the lesson.</li> <li>Teacher gives advice to the students.</li> <li>Teacher collects students' writing.</li> <li>Teacher closes the class.</li> </ul>			

- 3. Finishing Phase
  - a. Giving post-test
  - b. The researcher collected the data in post-test (students' writing)
  - c. Processing data towards post-test
  - d. Taking conclusion.

# F. Technique of Data Collection

The data was collected through pre-test and post-test. Pre-test was given before the treatment and post-test was given at the end of the research or after finishing the treatment for four meetings. In doing the post-test the researcher prepared worksheet of post-test consist of the topic, the instruction and components of writing as writing assessment to get students' score in writing that states by Jacob (1981: 90). Then, the researcher determined the topic for the students' test. After that, the researcher asked the students to write recount text by using TAD chart based on the topic and the last the researcher asked the students to wrote their writing in TAD chart into paragraphs.

#### G. Technique of Data Analysis

The students' writing products were analyzed by using Jacob's scale of assessing writing that considered five components such as content, organization, vocabulary, language use and mechanics. It was used to see different quality of the students' writing before and after implement Translation-Action-Details strategy. Furthermore, the data was analyzed by using t-test formula as suggest by Gay (2000: 488). T-test means a statistical procedure used to determine whether there is any significant different between the mean of the two sets of scores or between two coefficient of correlation. It was purpose to see writing skill achievement and the different quality of the students' writing before and after using Transition-Action-Details strategy (students' writing ability between pre-test and post-test).

In analyzing students' test score some steps had been done before analyzed the different mean using t-test formula as follows :

a. This formula was applied to decide mean of students' test score in experimental class :

$$Mx = \frac{\sum fx}{N}$$

Where :

Mx = Mean score of students $\sum fx = Total \text{ score of each students}$ 

N = Number of students

b. This formula was applied to decide standard deviation of the score in experimental class.

$$SD = \sqrt{\frac{\sum fx^2}{N}}$$

Where:

SD = Standard deviation

 $\sum fx^2$  = The sum result of multiplication of each score's frequency with the deviation score after being quadrate.

N = Numbers of students

After analyze the data was analyzed by using previous formula then the data was analyzed by t-test formula as follows:

$$= \frac{D}{\sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{N}}{N (N-1)}}}$$

t = t-test

t

D = Deviation (variable X-Y)

 $\sum D =$ Sum of Deviation (variable X-Y)

N = Number of students

The t-table was employed to see whether there was any significant difference between the mean score of pre-test and post-test in experimental class. The value of t obtained is consulted with the value of t-table. The data was analyzed by using simple regression for hypothesis with 1% of significance level, 5% (=0.05) of significance level and the value of t-table of the level of freedom df= N-1.

If the value t-obtained or t-test bigger than the value of t-table, the null hypothesis is accepted. On the contrary, if the value of the t-obtained is equal, bigger or smaller than the value t-table, the alternative one is not accepted (t-table) t-obtained.

The students' writing were scored by two scorers. The researcher did not score the students' writing by her self in case to make the data more valid. The researcher explained how to score the students' writing to the scorer before.

The formula is follow: Score =  $\frac{\text{score } 1 + \text{score } 2}{2}$