## CHAPTER III <br> RESEARCH METHODOLOGY

## A. Research Design

This research was pre-experimental research. Pre-experimental research were classified depending on whether there is an involvement of one or two groups, and whether the groups are post-test only, or both are pre-test and post-test by Sugiyono, ( 2013 : 111-113 ), this research design will aim to find out whether the implementation of Dictogloss give significant effect on students' writing skill. In this research the experimental group will give a treatment by applying the Dictogloss technique to improve their writing skill.

Based on the expert's views above, researcher used the design which used to found whether Dictogloss gave significant effect on students' writing skill or not conduct by the one-group pretest-posttest design. One group is pretest and expose to the treatment, and then post-test. This is call a one group pretest-posttest design because the two tests were administrate to same group. According to Sugiyono (2010:11) the one-group pretest-posttest design is one of the kinds of pre-experiment research that divide into three steps: pre-test, Treatment and post-test. The pre-test gave at the first meeting on the research to see the students' ability before doing the treatment and post-test is done at the last meeting of the research to find the result of the treatment given. The success of the treatment is determined by comparing pre-test and post-test scores.

Table. 3
One- Group Pre-Test Post-Test Design

| STEPS | PROCEDURE | AIM |
| :---: | :--- | :--- |
| Step 1 | Pre-test <br> (Writing test ) | To measure the degree of the <br> dependent variable before the <br> treatment |
| Step 2 | Treatment | to influence the dependent <br> variable |
| Step 3 | Post-test <br> (Writing <br> test/describe <br> person) | to measure the degree of <br> change on the dependent <br> variable |

Table 4
The Research Design

| Group | Pre-test | Treatment | Post-test |
| :---: | :---: | :---: | :---: |
| A | $\mathrm{O}_{1}$ | X | $\mathrm{O}_{2}$ |

Where :
A : Experimental group
$\mathrm{O}_{1} \quad$ : Pre-test
X : Treatment of experimental group by
Dictogloss technique
$\mathrm{O}_{2} \quad$ : Post-test

## B. Population and Sampling

## 1. Population

Gay (2012) states population is a group of interest to the writer. In the other words, population is the total number of students on a research. In this research, the population were the second year students of State Islamic Junior High School 5 Padang Pariaman. The total number of the population were 70 students. They were distributed into three classes.

Table 5
The Population of Islamic Junior High School 5 Padang Pariaman Grade VIII Academic Year 2018/2019

| No | Class | Male | Female | Total |
| :---: | :---: | :---: | :---: | :---: |
| 1 | VIII 1 | 11 | 13 | 24 |
| 2 | VIII 2 | 8 | 14 | 22 |
| 3 | VIII 3 | 11 | 13 | 24 |
|  | Total | 30 | 48 | 70 |

They would be chosen as the population based on assumption that they had a basic knowledge of writing. They are also are taught with the same material and syllabus.

To know the normality and homogeneous of the data, the researcher uses the aid of computer program called by SPSS (Statistical Product and Service Solution).

## 2. Sample

After decide the population, the researcher needs to choose the research sample. In deciding which was group have been experimental group, the sample were taken by cluster sampling. According to Sugiyono (2010:120) concern that cluster sampling refers to select the sample that researcher believes to be representative of homogenous population. In this research, the researcher chooses one class as experimental group. It was class VIII. 3 because it has normal and homogenous data.

In order to get sample, the sample of this research has been taken by cluster sampling. According to Gay (2012:144) cluster sampling is sampling in which groups, not individuals are randomly selected that have similar characteristics and in which subjects can be found. The sample of
this research has been taken by cluster random sampling. To get the representative sample of this research the following steps:
a. Collecting the score MID test scores the entire students class VIII from the teacher
b. Test of normality

Normality test had an objective to know the population normal or not. In this research, researcher used kolmogrov smitnov and shapiro wilk to know the sample normal or not. Based on analyzed by SPSS ( statistical product and service solution ) 20.0 program all of the groups of population the result of P -vlue lower than 0.05 , it means that the data was not normal.

Test of normality

|  | KELAS | Kolmogorov-Smirnov ${ }^{\text {a }}$ |  |  | Shapiro-Wilk |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Statistic | Df | Sig. | Statistic | Df | Sig. |
| NILAI | 8.1 | ,231 | 24 | ,002 | ,860 | 24 | ,003 |
|  | 8.2 | ,210 | 23 | ,010 | ,864 | 23 | ,005 |
|  | 8.3 | ,141 | 23 | ,200 | ,898 | 23 | ,023 |

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction


Normal Q-Q plot of NILAI
for KELAS-8.z


Normal Q-Q Plot of NILAI
for $\mathrm{KELAS}=8.3$


## c. Test of Homogeneous Variances

After did the normality test and got the data was not normal data. Then the researcher does the homogeneous variation test. This test has an objective as to know the sample homogeny or not. This test uses SPSS with levene test, if the data were significant or not the data were more than 0.05 it meant the data was not homogeneous.

Next, got the mean class that has no significant differences, the researcher chose one class as experimental group. To describe the sample the researcher used of paper it was experimental class is VIII.3.

Homogeneity of variance

|  |  | Levene Statistic | df1 | df2 | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| NILAI | Based on Mean | 4,483 | 2 | 67 | ,015 |
|  | Based on Median | 3,263 | 2 | 67 | ,044 |
|  | Based on Median and with adjusted df | 3,263 | 2 | 36,453 | ,050 |
|  | Based on trimmed mean | 4,328 | 2 | 67 | ,017 |

d. After knowing the normality and homogeneous test by using SPSS, the researcher found that two classes were not normal, they were VIII 1 and VIII 2, while there was one class that normal. It was VIII 3 the significant of normality and homogeneous more than 5\% (0.05).

## C. Place and Time of Research

The research had been held in the class VIII-3 consist of 24 students of state Islamic Junior High School at 5 Padang Pariaman, it was conducted on

June-July 2018. This research was conducted on six meeting in several weeks. At the first meeting, the researcher gave the students pre-test without treatment. After gave treatment for five times in classroom activities. The researcher gave post-test in order to know students' Writing skill, and to see whether Dictogloss technique was effective to improve students' writing skill, the researcher compares the result of pre-test in class VIII-3.

## D. Instrument

Instrument was a tool collect data from the sample. There was one treatment that used in this research. The instrument in this research was written test. The researcher used writing test (describe person) as instrument. This test to know the students writing skill in writing aspect for example: Content, Organization, vocabulary, Language Use and Mechanic.

The researcher gave some picture to the students about descriptive and asked students to description about the picture in a text. The instrument of this research in English test is the form of written test. The test is created by the researcher based on the curriculum and syllabus in the school. The test was about descriptive text. The writing test was given in pre-test and post-test activities are the same material about description person. The blue print of writing test can be seen in the following below:

Table 6
Blue Print of Writing Test

| $\begin{gathered} \mathrm{N} \\ \mathrm{o} \\ \hline \end{gathered}$ | Component of Writing test | Indicator | Topic | Number of item |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ | Content Organization Vocabulary Language Use Mechanic | The students are able to write down a paragraph in good content, organization, vocabulary, language use and mechanic | 1. Stefan william <br> 2. Natasha wilona <br> 3. Iqbal ramadhan <br> 4. Raffi ahmad | $1$ |
| Total |  |  |  | 4 |

From the table above, the students were asked to write a descriptive text based the topics given and also based on the identification and description.

While, in scoring the pre-test and post-test, researcher used the Jacob categories' (1981:111-112), criteria scoring test, such as: content, organization, vocabulary, language use and mechanic.

## E. The Research Procedure

This research conducted one class. The students given a pre-test at the first meeting, had been done treatment five times meetings and a post-test at the last meeting. The researcher used three steps to achieve the goal of the research.

## Treatment activity for experimental class

A. Pre activity

1. Do the opening in learning process, apperception, and motivate students.
2. Before the writing class started teacher activates the students' prior knowledge by giving some question related to the topic which will be discuss.
3. The teacher ask the students about their knowledge
B. Whilst activity
4. The teacher write the topic on the white board students' think of ideas that might be related to the descriptive text
5. The teacher gave information about the descriptive text and how to construct it.
6. The students write down their own descriptive text
C. Post-activity
7. The teacher monitors the students' activity.
8. Teacher reviews and concluded the lesson
9. Give Reflection
10. Close the Class

## F. Technique of Data Collection

The data of this research was collected by gave writing test. The data of this research were student's score in pre-test and post-test. Pre-test is the process to identify the students' skill before giving the treatment. Treatment is the process of using Dictogloss technique in teaching and learning process to improve the student's writing skill.

While, post-test is the process the giving the test after giving the treatment. It purpose to conclude the contribution of Dictogloss technique in teaching and learning process to student's writing skill. The score of the pretest and post-test which data in this research; the data was collected through following procedures:

|  | Score |  |
| :--- | :--- | :--- |
| C | Level | Criteria |
| O | $30-27$ | Excellent to Very Good: knowledgeable; |
| N |  | substantive; through the development of thesis; <br> T |
| E |  | relevant to the assigned topic |$|$| E | $26-22$ |
| :--- | :--- |
| N |  |
| T |  |
| T | Good to Average: some knowledge of the subject; <br> adequate range; limited development of thesis; <br> mostly relevant to the topic, but lacks detail |
|  | $21-1$ |
|  | Fair to Poor: limited knowledge of the subject; <br> little substance; inadequate development of the topic |
|  | $16-13$ |
|  | Very Poor: does not show knowledge of the subject; <br> non-substantive; not pertinent; or not enough to <br> evaluate |


| O | Score <br> Level | Criteria |
| :---: | :---: | :---: |
| G | 20-18 | Excellent to Very Good: fluent expression; ideas clearly stated/supported; succinct; well organized; logical sequencing; cohesive |
| Z | 17-14 | Good to Average: somewhat choppy; loosely organized but main ideas stand out; limited support; logical but incomplete sequencing |
| T I O | 13-10 | Fair to Poor: non-fluent; ideas confused or disconnected; lacks logical sequencing and development |
| N | 9-7 | Very Poor: does not communicate; no organization; or not enough to evaluate |


|  | Score | Criteria |
| :--- | :--- | :--- |
| V | Level |  |
| O | $20-18$ | Excellent to Very Good: sophisticated range; <br> effective word/idiom choice and usage; |
| C |  | word form mastery; appropriate register |
| A |  | B |
|  | $17-14$ | Good to Average: adequate range; <br> occasional errors of word/idiom form; <br> choice; usage but meaning not obscured |
| L |  | cher |
| A | $13-10$ | Fair to Poor: limited range; frequent errors <br> of word/form; choice usage; meaning confused or <br> obscured |
| R |  | Very Poor: essentially translation; little knowledge <br> of English vocabulary; idioms, word form, <br> Y |
|  | $9-7$ | or not enough to evaluate |


| L | Score Level | Criteria |
| :---: | :---: | :---: |
| A | 25-22 | Excellent to Very Good: effective complex construction; few errors of agreement, tense, number, word order/ function, articles, pronouns, prepositions |
| $\begin{aligned} & \mathrm{U} \\ & \mathrm{~A} \\ & \mathrm{G} \\ & \mathrm{E} \end{aligned}$ | 21-18 | 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 |
| $\begin{aligned} & \mathrm{U} \\ & \mathrm{~S} \\ & \mathrm{E} \end{aligned}$ | 17-11 | Fair to Poor: major problems in simple/complex constructions; frequent errors of negations, 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; doesn't communicate, or not enough to evaluate |


|  | Score <br> Level | Criteria |
| :--- | :---: | :--- |
| M | 5 | Excellent to Very Good: demonstrates mastery <br> of conventions; few errors of sperling, <br> punctuations, capitalizations, paragraphing |
| E |  | Good to Average: occasional errors of spelling, <br> punctuation, capitalizations, paragraphing, <br> C |
|  | 4 | Fair to Poor: frequent errors of spelling, <br> punctuation, capitalizations, paragraphing, <br> poor handwriting, meaning confused or obscured |
| A |  | 3 |
| N |  |  |
| I | C |  |
| S | 2 | Very Poor: no mastery of conventions; <br> dominated by errors of spelling, punctuation, <br> capitalizations, paragraphing, handwriting illegible; <br> or not enough to evaluate |
|  |  |  |

## G. Technique of Data Analyzing

The data are described with quantitatively. Tehenique that also used to analyze the data statiscal procedures by used a set of test. It is used to see the
different quality of the student's writing before and after used Dictogloss technique.

T-test mean a statiscal procedure use to determine whether there is any significant different between the means of two sets of scores or between pretest and post-test.

Furthemore, tha data analyzed by using t -test formula as suggest by Subana (2000,2:12).

$$
\begin{aligned}
& =\frac{\overline{\mathrm{X}_{1}}-\overline{\mathrm{X}_{2}}}{\sqrt[s]{\frac{1}{\mathrm{n}_{1}}}+\frac{1}{\mathrm{n}_{2}}} \\
\mathrm{~S}^{2} & =\frac{\left(\mathrm{n}_{1-1}\right) \mathrm{S} 2+\left(\mathrm{n}_{2-1}\right) 7_{2}^{2}}{\mathrm{n}_{1}+\mathrm{n}_{2}-2}
\end{aligned}
$$

Where :
$\overline{\mathrm{X}_{1}}=$ Mean score post-test
$\overline{X_{2}}=$ Mean score pre-test
$S_{1}^{2}=$ Standard deviation of pre-test
$S_{2}^{2}=$ Standard deviation of Post-test
$\mathrm{n}_{1}=$ Number of samples in pre-test
$\mathrm{n}_{2}=$ Number of samples in post-test

