# CHAPTER III

METHOD OF RESEARCH

This chapter presents: (1) research design; (2) variables of the study; (3) operational definitions; (4) subject of the study; (5) data collection; (6) data instruments analysis; (7) research treatment; (8) data analysis; and (9) hypothesis testing

3.1. Research Design

The type of this research is experimental research. In this study, one of the quasi-experimental designs, pre-test post-test the non-equivalent control group design was used. This research does not include the use of random assignment. Cohen, Manion, and Morrison (2007) proposed the illustration on the design as follows:

O1	X	O2	**Experimental Group**
- - - - - - - - - - - -			
O3		O4	**Control Group**
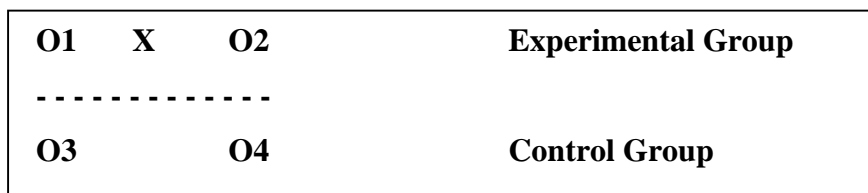
Where:

-----   : Dash line indicates that the control and experimental groups have not

　　　　　been equated by randomization

O1   : Pre-test in experimental group

O2   : Post-test in experimental group

X   : Treatment in experimental group using Dicto-Comp Technique

O3   : Pre-test in control group

O4   : Post-test in control group

3.2. Variables of The Study

Variable is an object of research. In this study, there are two kinds of variables. There are independent and dependent variables. Dependent variable is an object that is affected by the independent variable. While, an independent variable is an object that affects the dependent variable. Therefore, the independent variable in this study is Dicto-Comp technique and the dependent variable is the students' recount writing.

3.3. Operational Definition

The tittle of this research is Using Dicto-Comp Technique to Improve the Tenth Grade Students' Recount Writing Achievement at SMPN 3 Palembang. To avoid misunderstanding, some definitions need to be explained. The terms are Dictation Composition (Dicto-Comp), recount text, and writing.

Dictation Composition (Dicto-Comp) is a combination activity of listening and writing. It is a kind of controlled writing form. The learners have to remember the ideas of the original text and reproduce what they remember in their own words.

Recount text is a text which list and describe past experiences by retelling events in the order in which they happened (chronological order).

Writing achievement is the students' ability to produce ideas appropriate with aspects of writing that is measured by a writing test which is the test assigned in the form of grades.

3.4. Subject of the Study

3.4.1 Population

Population is the larger group of sample. In this research, the population was all the active students in eighth grade students of SMPN 3 Palembang in the second year in academic year 2018-2019 which consists of nine classes. The population of the study could be seen in the table below.

Table 2

Distribution of Population

No.	Class	Total
1.	VIII 1	34
2.	VIII 2	34
3.	VIII 3	34
4.	VIII 4	35
5.	VIII 5	35
6.	VIII 6	33
7.	VIII 7	34
8.	VIII 8	33
9.	VIII 9	35
	Total of students	307

Source: Staff Administration of SMPN 3 Palembang (2018-2019).

3.4.2. Sample

A sample is a part of population that is used to do research. In this study, to get the sample, convenience sampling method was used. This method was applied

after I had interviewed and discussed with one of English teacher at SMPN 3 Palembang. I asked to use two classes as the sample for experimental and control groups. Then the teacher recommended class VIII 4 and VIII 5 since they have the same charasteristics such as the number of sample and the similar ability in English, and the teacher for both classes is the same. The sample of the study could be seen in the table below.

Table 3

The Sample of the Study

No.	Class	Total
1.	VIII 4	35
2.	VIII 5	35
Total of students		70

Source: Staff Administration of SMPN 3 Palembang (2018-2019).

3.5. Data Collection

3.5.1. Test

In this research, recount writing test was used to collect the data, both for pretest and posttest of both the experimental and control group. The purpose of the test was to measure students' writing achievement before and after the treatment through Dicto-Comp Technique. The instrument was used in pre-test and post-test was the same. The students are required to write recount text by choosing the topics that was given.

1. Pre-test

Pretest was given to identify how students' ability before treatment. Recount writing test was given before teaching learning activities by using Dicto-Comp technique as a treatment. I asked the students to write recount text by choosing one of the topics was given by me in 60 minutes.

2. Post-test

Posttest was the test to know the students' ability after treatment. Recount writing test was given to know the students' score in writing achievement after the treatment by using Dicto-Comp Technique. The type of posttest was the same as the pretest. The result of this test was compared with the result of pre-test in order to know the effect of Dicto-Comp technique in teaching writing.

3.6. Research Instrument Analysis

3.6.1. Validity Test

Validity is about the appropriateness, correctness, meaningfulness, and usefulness of the instrument. Validity test is useful to know the instruments for pre-test and post-test activities are valid or not. Based on the statement above, there are two kinds of validity was used. They as follow:

1. Construct Validity Test

Construct validity mainly refers to the relevance and quality of the content in instrument. Construct validity of the instrument in this research is consulted with some experts to evaluate whether the components of the instrument are valid or not to be applied in research activities. In this part, the construct validity of the research instruments involves two types. They are question items for

pretest and posttest activities, and lesson plans for experimental and control groups activities.

In this study, I asked three lecturers of UIN Raden Fatah Palembang as validators. There are some characteristic for expert judgement or validators, such as: (1) They have English educational background, (2) They are English of lecturers, (3) They have score TOEFL at least 550; and (4) Their teaching experience is more than 5 years. The result of three validators can be assumed that the instrument and lesson plan are appropriate to apply to the research.

2. Content Validity Test

The concern of content validity is that all the items or tasks are relevant and representative to be assessed. The extent to which test items or tasks are relevant and representative of the construct domain is normally determined by professional judgment of experts. A specification of the skills or structures was made based on the curriculum and syllabus.

Table 4.

Test of Specification Table

Objective	Material	Indicator	Type of Test	Number of Item
The students are able to write a recount text through Dicto-Comp technique	1. My unforgettable experience 2. My bad experience 3. My first day at school 4. My Holiday	The students are able to write a good recount text	Written test	1

3.6.2. Reliability Test

Reliability test is the consistency of the scores in each items, how consistent they are for each item to another. In this study, inter-rater reliability was used. Inter-rater reliability was determined by looking at the percentage of agreement between the raters. To know the test used is reliable or not, I gave try out firstly for the students and analyze the result of tryout. After that, to get reliability, I need expert judgment to know the consistency of the result from instrument. If the result shows the aspect of instruction, aspect of cognitive achievement and language structure are appropriate, it means the writing test are reliable.

3.7. Data Analysis

In analyzing the data, I described some techniques as follows:

3.7.1 Scoring

Scoring as a result, usually expresses numerically a test or examination. The classification of student' score was described in the table, the highest score 85- 100 and the lowest score is 0-55. The score was categorized, as follows:

Table 5

The Clasisification of Student's Score

The Range of Score	Qualitative score
76- 100	Good
56-75	Average
<55	Poor

3.7.2. Data Description

In data description, there are two analyses to be done. They are; (1) distribution of frequency data and (2) descriptive statistic.

1) **Distributions of Data Frequency**

In distributions of frequency data, the students score, frequency, percentage were achieved. The distributions of frequency data were obtained from; (1) students' pretest and posttest scores in control group, (2) students' pretest and posttest scores in experimental group, (3) students' pretest and posttest scores of poor, average and good categories in control group, (4) students'pretest and posttest scores of poor, average and good categories in experimental group.

2) **Descriptive Statistics**

In descriptive statistics, number of sample, the score of minimal, maximal, mean, and standard deviation were analyzed. Descriptive statistics were obtained from; (1) students' pretest and posttest scores in control group, (2) students' pretest and posttest scores in experimental group, (3) students' pretest and posttest scores of poor, average and good categories in control group, (4) students'pretest and posttest scores of poor, average and good categories in experimental group.

3.7.3. Prerequisite Analyses

Before analyzing the data, prerequisite analysis was done to see whether the data obtained is normal and homogenous. The following is the procedures in pre-requisite analysis.

1) Normality Test

Normality test was used to measure whether the obtained data (data form pretest and posttest in experiment and control) is normal or not. In measuring normality test, one-sample *Kolmogronov Smrinov* in SPSS program was used. The data were classified into normal whenever the p-output is higher than 0,05. The normality test was used measure students' pretest and posttest scores in control groups, students' pretest and posttest scores in experimental groups, students' pretest and posttest scores of poor, average and good categories in control group, and students'pretest and posttest scores of poor, average and good categories in experimental group.

2) Homogeneity Test

Homogeneity test was used to measure whether the data obtained are homogen or not. In measuring homogeneity test, I used *Levene Statistic* in SPSS program software. The score is categorized homogen when the p-output is higher than mean significant difference at 0.05 levels. The homogeneity test was administrated to measure students' pretest and posttest scores in control group, students' pretest and posttest scores in experimental groups, students' pretest and posttest scores of poor, average and good categories in control group, and students'pretest and posttest scores of poor, average and good categories in experimental group.

3.8. Hypothesis Testing

There are two kinds of hypothesis testing in this study, they are as follows:

1. In measuring significant difference, independent sample t-test will be used for testing the students' post-test scores who are taught by using Dicto-Comp Tehnique and Teacher's Strategy. The significant difference is accepted whenever the p-output is lower than 0.05 and t-obtained is higher than t-table 1995 (with df = 68).

2. In measuring a significant difference, two-ways ANOVA will be used for testing students' post-test score in poor, average and good categories who are taught by using Dicto-Comp Techniques and Teacher's Strategy. The significant is accepted whenever the p-output is lower than 0.05.