

CHAPTER III

METHODOLOGY OF RESEARCH

A. The Method of Research

The writer uses the experimental research because he want to know how the effect of contextual teaching and learning in teaching passive voice. According to David Nunan in his book “Research Method and Language Learning” the experimental researchers are particularly concerned with the issue of external validity and formal is specifically designed to enable the researcher to extrapolate the outcomes of the research from the sample to broader population.¹This experiment is used by the writer to make the analysis easier, and become clear for knowing the result of the research.

Nunan said the experiment consist three kinds, they are pre-experiment, quasi experiment, and true experiment.² In this research the writer uses quasi experimental in which the researcher give certain treatment to the students to find assessment of how is the effect of contextual teaching and learning in teaching passive voice. Quasi experimental has both pre- test and post- test, and experiment control group but no random assignment of subject.

¹ David Nunan. *Research Method in Language Learning*, (Cambridge: Cambridge University Press, 1992), p.47.

² David Nunan, *Research Methods in Language Learning*, p.211

B. Population and Sample

1. Population

According to Nunan, population is all cases, situations, or individuals who share one or more characteristics.³ The population of this research is the first grade of SMA Al-Hidayah, consisted of two classes (X A, X B). Each class there are 25 students, and the total of population is 50 students.

2. Sample

Sample is a subset of individuals or cases from within a population.⁴ The first grade of SMA Al-Hidayah. The First grade of students' Senior high school SMA Al-Hidayah are 2 classes. Each class there are 25 students. And the writers choose two classes. The first class (X B) is for experiment class, and the last for control class (X A).

C. Place and Time

Place is needed as locating of research to get data in research. To examine The Effectiveness of Contextual Teaching And Learning

³David Nunan, *Research Methods in Language Learning*, p.231

⁴David Nunan, *Research Methods in Language Learning*, p.232

(CTL) In Teaching Passive Voice, the writer did the research at the first grade of SMA Al – Hidayah Rangkasbitung Lebak Banten as the subject or place of the research based on some reasons, Firstly I graduated from that School. Secondly, there is fact and several of the students are cleverer and very active while the other have low achievement in English especially on Grammar. Third the students still confused to different between passive voice and active voice.

D. Instrument of the Research

The writer uses the test as the instrument of this study. The test is dividing two parts that are pre-test and post- test. The result of pre-test and post- test became the result of this study.

E. The Technique of Data Collection

There is techniques which is taken by the writer in collecting data as follows:

a. Test

Test is a method of measuring a persons ability, knowledge or performance in a given domain. The writer will give a test, the test divided into pre- test and post- test.

1. Pre test

Pre test is a test given before learning has occurred or is supposed to have occurred.⁵

2. Post test

Post test is a test given after learning has occurred or is supposed to have occurred.⁶

F. Technique of Data Analyzing

The technique on a quasi-experiment nonequivalent control group design is comparing the student's result from pretest and posttest.

The writer used the steps as follow:

The writer gets two data. The first data is the result of pre-test and the second data is the result of post-test. The writing was also assessed by two refers, namely Teacher and I as a Reseacher. If is done to make data valid.

After getting the data from pre-test and post-test, the writer uses formula "t" test. "t" test one of statistic test that used to test the validity of null of hypothesis that in the between two means of simple that

⁵Jack C Richard And Richard Schmidt, *Longman Dictionary of Language Teaching And Applied Linguistics* (London : Pearson Education Limited, 2010). p.447

⁶Jack C Richard And Richard Schmidt, p.447

randomly taken from the same population, there is significance different or no. “t” is test that usually used for experimental method.

Level according to frequency, which used is significance for test formula, which used: ⁷

1. Determine mean of score experiment class (MX), with formula:

$$MX = \frac{\sum X}{N}$$

2. Determine mean of score control class (MY), with formula:

$$MY = \frac{\sum Y}{N}$$

3. Determine the total square of error of experiment class (X), with formula:

$$\sum X^2 = \sum x^2 - \frac{(\sum X)^2}{N}$$

4. Determine the total square of error of control class (Y), with formula:

$$\sum y^2 = \sum y^2 - \frac{(\sum Y)^2}{N}$$

5. Calculates T- test

⁷ AnasSudijono, *StatistikPenelitian*, (Jakarta: Raja GrapindoPersada, 2004)
p.289

To calculate t-test, the writers used to formula stated by SuharsimiArikunto as follows:⁸

Determine the Degree of Freedom, with formula:

$$Df = N_x + N_y - 2$$

Notes:

M_X = Mean of experiment class

M_Y = Mean of control class

$\sum X^2$ = The total square of error of experiment class

$\sum Y^2$ = The total square of error of control class

N = The numbers of subject

Df = Degree of freedom.

⁸Suharsimi Arikunto, *Dasar Dasar evaluasi pendidikan* (Jakarta : BumiAksara 2013), p.122