

CHAPTER III

METHODOLOGY OF THE RESEARCH

A. The Method of The Research

The writer takes the title *The Effect of Multimedia Project on Students Writing Narrative Text*. In this research, the writer using quantitative approach and applying quasi experiment of experimental research to find out a real data for statistic calculation. Experimental research in language learning is usually conducted within a language classroom. According to David Nunan "The experimental method is basically a collection of research design, guidelines for using them, principles and procedures for determining statistical significance, and criteria for determining the quality of study."¹

In the experimental group was given influence or specific treatment, while in the control group was not given and the type of experiments here the validity of the internal experiment is to determine

¹ David nunan, *Exploring Second Language Classroom Research*, (United States : Heinle Cengage Learning, 2009), 83

whether the factors that have been modified truly influence or systematic effect on the background of the experiment.²

David Nunan Said in other books “the types of experiments and its characteristic briefly. First is Pre-experiments may have pre and post treatment group. Second is quasi experiment has both pre- and post-test in experimental and control groups, but no random assignment of subjects. And the third is true experiments has both pre and post-tests, experimental and control group, and random assignment of subject.³

The writer conclude the statement above that experimental research is used to look for the effect multimedia on students’ writing narrative text. The writer will uses the quasi experiment method. Quasi experiment has both pre and post-test and it compares the result of two groups between experimental class and control class but no random assignment of subject.

² Yatim Riyanto, *Metodologi Penelitian Pendidikan*, (Surabaya : SIC, 2010), 36-37

³David Nunan, *Research Method in Language Learning*, (Cambridge: Univeristy Press 1991), 41

B. Population and sample

a. Population

According to David Nunan " A population is simply a group of individuals who share a certain characteristic."⁴ The population in this research is the second grade students SMPIT AL-Ghifari. The total of population of the study is 40 students in 2 parallel classes which are considered of 20 and 20 students on each class.

b. Sample

Sampling is a small proportion subgroup and characteristic of a population is selected for analysis⁵. The writer took sample by multimedia from the population and divided into two classes as sample research from second grade students of SMPIT AL-Ghifari. The sample of this study is 40 students, taken from two classes namely class VIII A and VIII B in taking the sample. Class VIII A as an experimental class consist of 20 students and VIII B as a control class consist of 20 students.

⁴ David nunan, *Exploring Second Language Classroom Research*, (United States : Heinle Cengage Learning, 2009), 64

⁵ Sugiyono, *Metode Penelitian Pendidikan*, (Bandung : Alfabeta, 2015), 118

C. Place and Time of the research

For collecting data, the writer took place to the student of junior high school in SMPIT Al-Ghifari. It is Located on Jalan Syeh Nawawi Link Cidadap Cipocok Jaya serang-banten.. In the activity, a place needed as a location of research in formulating the questioners about the effect of Multimedia Project Technique on students writing narrative text. The writer chooses SMPIT Al-Ghifari because this school needs to research and suitable.

D. Instruments

1. Instrument for treatment

Every research uses instrument. Instrumentation is related to reliability since it involves consistency in data gathering.⁶ Instrument is whole process of preparing to collect the data. It is important to take the information and the data which will be treated in this research. The instrument used in this study is essay. It can be objective to measure learning outcome. In this study, the essay consist of determining orientation, complication and resolution.

⁶ David Nunan, *Exploring Second Language Classroom Research*, , (United States : Heinle Cengage Learning,), 87

2. The multimedia project worksheet

This study will be conducted by using treatment namely the multimedia project. The instrument uses some writing topic and writing text, the students write the narrative text after saw the multimedia project.

C. The Technique of Data collecting

In this research, the writer used the students writing test that is writing narrative text. It was used to measuring the student understanding about writing narrative text.

a. Pre-test

For writing pre test the writer uses written test through the paper before multimedia project applied. Pre-test consist of essay, the essay consist of determining orientation, complication, and orientation with the topic Cinderella and Malin Kundang. Before giving the treatment, the writer gives the pre test to the both classes as sample to know the students' ability in writing narrative text.

b. Post-test

The test will be administrated after the students are given treatment either by using the multimedia project or without using

the multimedia project to find out the result of the different treatment used. Similar with the pre-test, in the post-test there are essay consist of determining orientation, complication, and orientation with the topic The Origins of Name Pandeglang, The Legend of Surabaya and The Origins of Anyar. After giving the treatment, the writer gives the post-test to the both classes as sample to know the students' ability in writing narrative text.

D. The Technique of Data Analyzing

After the data collect, the writer analyzed the data. The purpose of analyzing the data is to find out the effect of using multimedia project on students' writing ability in narrative text. To analyze the significant difference of the mean score test in both experimental and control class. The writer analyzed data through quantitative analysis and statistical procedure. The data come from the result of pre-test and post-test analyzed by using t-test.

Because the writer wants to compare result of the research between experimental class and control class students. The result of the post-test in experimental class is named variable X_1 . The result of the

post-test in experimental class is named variable X_2 . The writer take steps as follow :

1. Determining mean of variable X_1 with formula :

$$M_1 = \frac{\sum X_1}{N_1}$$

2. Determining mean of variable X_2 with formula :

$$M_2 = \frac{\sum X_2}{N_2}$$

3. Determining deviation score variable X_1 with formula :

$$x_1 = X_1 - M_1$$

4. Determining deviation score variable X_2 with formula :

$$x_2 = X_2 - M_2$$

After getting the data from pre-test and post-test, the writer analyze it by using statistic calculation of t-test formula with the degree of significance 5% and 1% the formula as follow :

$$t_o = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

$$t_o = t \text{ observation}$$

$$M_1 = \text{The average score of experimental class (mean } X_1)$$

M_2 = The average score of control class (mean X_2)

$\sum X_1^2$ = Sum of the squared deviation score experimental class

$\sum X_2^2$ = Sum of the squared deviation score control class

N_1 = Samples of students of experimental class

N_2 = Samples of students of control class

df = degree of freedom

$$df = N_1 + N_2 - 2 .^7$$

5. Doing interpretation and calculation by comparing the result of calculation t-test with t-table

⁷Anas Sudijono, *Pengantar Statistik Pendidikan*, (Jakarta: Rajagrafindo Persada, 2012), 317