#### **CHAPTER III**

#### METHOD OF RESEARCH

## A. Research method

This research will used quantitative research. Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity.<sup>1</sup>

In this research, the researcher will use experimental research in quasi experimental design. Experimental research can be interpreted as a research method used to find the effect of certain treatments on others in controlled conditions.<sup>2</sup>

And the design of this research was Quasi Experimental Design that involving two gruops of classes. One group would be treated as the experimental class and other group would be treated as the control class. In experimental class, researcher would apply Spelling Bee Game in teaching vocabulary while in control class use conventional teaching method.

In this study researchers are very eager to conduct research on such experiments. In addition, researchers also want to know the effectiveness of

<sup>&</sup>lt;sup>1</sup> C.R Kothari, "Research Methodology Methods and Techniques", New Age International (P), Limited Publish, 2004, p 3

<sup>&</sup>lt;sup>2</sup> Prof. Dr. Sugiono, "Metode penelitian pendidikan, (Bandung: Alfabeta, 2015), p. 107

Using Spelling Bee Game in Pronunciation at Eighth Grade Students of MTsN 1 kota Serang.

#### B. Place and time

The research has taken place at MTsN 1 kota Serang, Jl. Bhayangkara, Sumurpecung, Kec. Serang, Kota Serang, Banten 42100. This research will be conducted on the eighth grade students of MTsN 1 kota Serang. The time of this research is around one week with six meetings, third meetings for experimental class and third meetings for control class

The resercher choose this place, because the Researcher is one of the school's alumni, and to the knowledge of the researcher this game had never been used in the school.

# C. Population, and Sample.

# a. Population

Population is generalization area which consists of subject or subject which have quality and specific characteristic that is dermined by the researcher to be learned and concluded. Population is also not just the amount that exists in the object or subject being studied, but includes all the characteristics or properties possessed by the subject or object.<sup>3</sup>

Based on those theories above, it can be conclude that a population is the whole of research subject which have quality and certain characteristic that are of interest to the research. The population of this study is the eighth grade of MTsN 1 kota Serang, total number of population is 266 students.

# b. Sample

The sample is part of the number and characteristics of the population. What is learned from the sample, the conclusions can be applied to the population. For that samples taken from the population must be truly representative (represent).<sup>4</sup>

The researcher takes two classes as sample. The experimental group is class VIII C which consist of 29 students and the control group is class VIII A which consist of 29 students.

# D. Design of the Research

In this chapter, the researcher using by quantitative research in processing the data and getting the result. The researcher used

<sup>&</sup>lt;sup>3</sup> Ibid, p 117

<sup>&</sup>lt;sup>4</sup> Ibid, p 118

experimental research using pre-test and post-test because the researcher conducted an experimental to compare the result of pre-test and post-test to find out the result of learning pronunciation using spelling bee games at the eighth grade students MTsN 1 kota Serang.

The research will take two classes to be experimental class and control class. The one of class as the experimental class which is taught by Spelling bee game as learning media while another class as the control class which is taught without Spelling bee game as learning media. The writer used quasi-Experimental as the design for this study, because researcher need some time to treat students.

This is the scheme:

$$E = 01 \times 02$$

$$C = 03 - 04$$

Where:

E =the symbol for experimental class

C =the symbol for control class

01 = pre-test for experimental class

02 = post-test for experimental class

03 = pre-test for control class

04 = post-test for control class

X = treatment

# E. Technique of Data Collection

In this research, the researcher takes the eighth grade students of MTSN 1 Kota Serang which is consist of 58 students. The researcher conducted in three ways. There are as follows:

The researcher give a pre-test to the control group and experimental group.

- 1. Giving pre-test to class VIII C as the experiment group.
- 2. Giving pre-test to class VIII A as the control group.

After conducting the pre-test, the researcher conducted the treatment. The experimental group was given the treatment and taught by researcher as the experimenter while the control group was taught also by the researcher. Both group teaches in same material. Here are the time allocation of the treatment:

- 1. Teaching VIII C as the experiment class group by using spelling bee games .
- 2. Teaching VIII A as the control group using common technique.

After giving the treatment to the students, the researcher conducted the post-test. The post-test in used to know whether there is a significant differences between the pre-test and post-test result.

- 1. Giving post-test to class VIII C as the experiment group
- 2. Giving post-test to class VIII A as the control group

### F. Instrument of the Research

#### a. Test

Test is a set of questions and exercises used to measure the achievement or capacity of the individual or group. Test is performed for assessment in the form of tasks to be done, and see the ability of students to the results of his understanding.

The researcher gave the test twice (pretest and post-test) in both experimental and control class. In addition to giving the pretest and post-test, the researcher will also record what is pronounced by the student to know the correctness of the word being read.

#### b. Observation

Sutrisno Hadi (1986) stated that, observation is a complex process, a process that is composed of various biological and psychological processes.<sup>5</sup>

These are the ways, to learn besides taking formal courses. We can learn from experience, from observation and listening, and from studying on our own.<sup>6</sup>

The observation is the most commonly used method specially in studies relating to behavioural sciences. Observation becomes a scientific tool and the method of data collection for the researcher, when it serves a formulated research purpose, is systematically planned and recorded and is subjected to check and controls on validity and reliability.<sup>7</sup>

The Researcher also use observation methods to be able to control and see the actions and activities of students in conducting learning activities that develop according to the learning done by researchers because the researcher take a data with recorded , so observation is one of true instrument .

 $^6$  Frans Šayogie, "Students' Motivation And Personalityin Learning English", English Studies Journal, Vol. 3, No. 1, (January-June, 2010). p 8

<sup>&</sup>lt;sup>5</sup> Ibid, p 203

<sup>&</sup>lt;sup>7</sup> C. R. Kothari. "Research Methodology Method & Technique". (New Delhi, New Age International Publishers,2004), p 96

#### c. Documentation

Documentation is a technique of data collection by gathering and analyzing documents, whether written documents, pictures, and electronic. A large number of data and data are stored in languages in the form of documentation. Most of the available data is in the form of letters, diaries, souvenirs, reports, artifacts, and photographs. The main nature of this data is not limited to space and time so it gives an opportunity for researchers to know things that have happened in the past.<sup>8</sup>

# G. Technique of Analyzing the Data

The data collect through the test was analyzed by using the following steps:

1) Calculating the student's correct answer of test.

$$Score = \frac{Student's \ correct \ number}{Total \ number \ all \ items} \ X \ 100$$

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<sup>&</sup>lt;sup>8</sup>Dr. Juliansyah Noor. "Metodologi penelitian, skripsi, tesis, disertasi & karya ilmiah". (Jakarta. Kencana. 2011). P 141

2) Tabulated and classify the students score into the following clarification.

The score of the test were classified into seven levels as follows:

No	Range of Score	Classification
1.	96-100	Excellent
2.	86-95	Very Good
3.	76-85	Good
4.	66-75	Fairly Good
5.	56-65	Fair
6.	46-55	Poor
7.	0-45	Very Poor

3. The mean score experimental class (MX) of the students find out by means following the formula:

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

4. The mean score control class of the students find out by means following the formula :

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

5. Determine the total square of error in experimental class (X), with formula:

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

6. determine the total square of error in control class (Y), with formula:

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

7. Calculation T-Test, with formula:

$$t = \frac{MX - MY}{\sqrt{\left(\frac{\Sigma X^2 + \Sigma Y^2}{NX + NY - 2}\right)\left(\frac{1}{NX} + \frac{1}{NY}\right)}}$$

8. The degree of freedom, with formula:

$$Df = Nx + Ny - 2$$