**CHAPTER III**

**METHOD OF RESEARCH**

**3.1 Design of the Research**

In this research, the samples divided into two groups, namely the experimental and the control group. The experimental group was the group that received the treatment, the treatment was used Word Square and the control group was the group that did not receive the treatment.

 This is an experimental research, which is designed as the following:

**Table 3.1**

**Experimental Research**

|  |  |  |  |
| --- | --- | --- | --- |
| Group | Pre Test | Treatment | Post Test |
| Experimental |  | Word square media |  |
| Control |  | Without Word square media |  |

**3.2 Population and Sample**

**3.2.1 Population**

Dirgayasa (2001: 57) said that “a population is a set or collection of all elements processing one or more attributes of interest.”

Population of this study was the students at VII grade of Mts PP Ar – Raudlatul Hasanah Medan. There are two classes, they are VII O and VII U. The total number of the students consists of 60 students.

**3.2.2 Sample**

Dirgayasa (2001: 59) stated that if the population more than 100 people, the sample can be taken 30-35 % from the number population. But if the population less than 100 people, the sample can be taken 15 % - 20 %. This research used 60 students as the sample. In the research, the researcher used random sampling technique with simple random sampling.

**3.3 Instrument of Collecting Data**

The instrument of collecting data is such devices used by the research in collecting data. In this research, the instrument of collecting data was a test composed by researcher. The test was in the form of essay to gain the data or information which is used to analyze the students’ achievement in vocabulary.

 The test consisted of 20 questions which are related to vocabulary. The test is divided into 3 sections. First section consisted of 10 questions, it was about label parts of body. Second section consisted of 5 questions, it was about the functions of parts of body. Third section consisted of 5 questions to complete the paragraph. The test is arranged like that to make variation for the students in answering the test.

**3.4 Technique of Collecting Data**

 In collecting the data, the researcher used the following technique:

1. Pre-Test

A pre-test is the measurement of dependent variable prior to introduce of the treatment (the students are given essay test before the teacher gives them the treatment in the control group and the experimental group).

1. Post-Test

A Post-test is the measurement of dependent variable after the treatment has been introduced into the experimental group (the students are given essay test after they are given the treatment. Control group is given Post-Test by using conventional way and experimental group is given Post-Test by using word square media.

**3.5 Technique of Analyzing Data**

In this study, data got from the experimental group and control group to know the differences between those two groups, the data were analyzed by using the test formula.

Sudjana (2005) :

S ****



$\frac{M\_{x}- M\_{y}}{\sqrt{\left(\frac{\sum\_{}^{}x^{2}+\sum\_{}^{}y^{2}}{n \_{x}-n\_{y}-2}\right)\left(\frac{1+1}{n\_{x}-n\_{y}}\right)}}$Where :

S = Varian sample

T = Total score

*X*1 = Mean of Experimental group

*X*2 = Mean of control group

*S*12 = Standard deviation of experimental group

*S*22 = Standard deviation of control group

N1 = Number of students in Experimental group

N2 = Number of students in Control group