CHAPTER III RESEARCH METHODOLOGY

A. Research Design

Doing the research the researcher used Classroom Action Research (CAR) as a technique of this research. Classroom Action Research is the combination and interaction of two modes of activity which are action and research (Burns, 2009). The driving purpose of the action research is to fill the gap between the realistic and ideal methods of doing things in a given social context. Classroom Action Research is an action taken by an educator or in collaboration with others in order to improve the quality of the teaching and learning process in the classroom (Kunandar, 2008).

In this research the researcher used Classroom Action Research (CAR) which consists of two cycles on its procedure. The procedure of Classroom Action Research itself consists of four steps. In line with Kemmis and McTaggart in Anne Burn's book stated that Classroom Action Research typically involves four broad phases in a cycle of research. The first cycle may become continuing, or iterative, spiral of cycles which recur until the action researcher has achieved a satisfactory outcome and feels it is time to stop. Based on the explanation, it can be conclude that if the result failed, the researcher should continue the research by going to the next cycles until the aim of implementing the media achieved.

The explanations of the four broad phases of Classroom Action Research are as follow:

1. Planning

In the planning phase, researchers prepare everything related to the need to carry out research. For example, making the lesson plan, preparing teaching materials, and preparing student worksheets that will be used as tools for data collection.

2. Action

In this stage, the researcher used planning and informed the students of the approach that would be used throughout the learning process. This phase required that every action be clearly documented. The researcher provided several open-ended questions regarding the subject that had been taught at the conclusion of the learning procedure. The outcome of this test served as a reflection for the following cycle.

3. Observe

The researcher act as an English teacher using Flashcards as a teaching tool during the teaching process, with the assistance of another English tutor who will watch the implementation from the beginning to the finish. The collaborator will watch the teaching process while the class is in session. As a result, the collaborator would be handed sheets to record all of the activities involved in the teaching and learning process. Throughout the research, this observation will be conducted from the moment the teacher entered the classroom until the completion of the lesson.

4. Reflect

After putting the media to use and receiving observational data from the implementation phase, the researcher will examine the data, look for issues, and then create a new cycle. In this stage, the researcher also had a discussion with the observer, seeking advice and feedback on the earlier instructional media. This was done to assist the researcher in rearranging the necessary next steps.

B. Subject of The Research

In this research, the researcher choosed students of English Parit Baru Village as the subject to doing this research. The subject consists of 30 students who have troubled in mastering vocabulary. The research subject in this research conducted was homogenous which means that the level of students in one class was different. Based on this considerations, the researcher made the decision to select students with the levels starting from grade 2 to grade 6 so as to fulfill the student quota of 30 students.

C. Technique of Data Collection

In collecting the data, researcher used Participant observation and measurement test as techniques.

1. Observation

The observation conducted in this research is aim to investigate the problem that students at English Village have in mastering vocabulary. In this research, the researcher used Participant Observation as a technique of collecting the data. In this observation, the researcher is involved with the daily activities of the person being observed or used as a source of research data. While making observations, the researcher also does what the data source does, and also shares his joys and sorrows. With this participant observation, the data obtained will be more complete, sharp, and know at the level of meaning of every behavior that appears (Sugiyono, 2017:227).

2. Measurement Technique

The researcher used measurement technique to collect the data quantitatively from the subject. In Classroom Action Research measurement tests are very important to find out whether there is an improvement in students or not. In line with Blerkom (2009) measurements as the process of assigning a meaningful number (or table) to a person or object based on the degree to which they possess some characteristic. The measurement technique utilized by the researcher to know and analyze whether there is the students' improvement or not.

D. Tools of Data Collection

Data collection tools refer to the devices/instruments used to collect data. The goal behind data collection is to gather quality evidence that allows analysis to lead to the formulation of reliable and convincing answers to the questions asked.

1. Field Notes

Field notes were utilized to record all of the details of events that occurred during the research process as part of participant observation. The procedure of the field note as follow:

- a. First and foremost, the researcher took an active role in the research.
- b. Second, the researcher keeps meticulous notes of everything that happens during the research process.
- c. Third, the researcher confirmed every aspect of the occurrences to each of his coworkers who were also involved in the study.
- 2. Vocabulary Test

In this research, the researcher used test to measure the improvement of the vocabulary. A good test should never be constructed in such a way as to trap the students into giving an incorrect answer (Heaton, 1988). The test is important in a research especially in Classroom Action Research. The test will allow researcher to determine whether or not there had been an improvement in achievement. By carrying out a test, it can directly measure the abilities possessed by a person which of course must be in accordance with the specifications of language learning carried out in the learning program (Heaton, 1988). The test will be held in each cycle while conducting this research. The test will be in the form of objective test. Objective test usually have only one correct answer (Heaton, 1988).

E. Technique of Data Analysis

Data analysis technique is a systematic process of collecting data to make it easier for researchers to draw conclusions. Data analysis is the process of searching and compiling systematic data obtained from interviews, field notes and documentation, with how to organize data into categories, break down into units, do synthesis, arrange into patterns, choose what is important and what will be studied, and draw conclusions so that they are easily understood by themselves and others (Sugiyono, 2018). The researcher used qualitative and quantitative analysis to analyze the data in this study.

a. Qualitative Analysis

The process of analysis data, in this study, was done gradually during the process of collecting data through doing observation with the use of field notes. To analyze the data qualitatively, the researcher used the theory from Miles and Huberman (1992: 16), the way to analyze the data consist of three steps of analysis, as follow :

1) Data Reduction

Research conducted over a long period of time will certainly produce a lot of data, therefore researchers must reduce the data so that the excess data obtained can be sorted according to the category to be studied. Data reduction begins with an explanation, selection of the fundamental elements, and concentration on a key component of the data's field-specific information. Making choices on which data chunks to focus on first is part of the data reduction process. So, the reduced data can provide an in-depth description of the observational finding. In this study, data reduction is accomplished through summary contact, category coding, reflection note-making, and data selection. Since the researcher choose Field Note as the tools of collecting the data, it is will be more suitable to reduce the data. Field notes are a complicated, confusing, and occasionally useless form of field notes that are typically written in capital, lowercase, numbers, and symbols that are nevertheless disorganized and challenging to comprehend (Sidiq, 2019).

2) Data Display

After the researcher takes the first step, which is to reduce the data, the next step that must be taken by the researcher is to present the reduced data. In quantitative research, data display is generally in the form of diagrams, tables, graphs, and so on. However, in this study, researchers want to focus on presenting data qualitatively. In qualitative research, data display can be done in the form of a brief description, charts, relationships between categories, and the like (Sidiq, 2019).

3) Conclusion Drawing

The third step in data analysis according to Miles and Huberman is conclusion drawing and verification. Early conclusions are provisional and can be modified if compelling evidence is discovered to support the evidence underlying the next round of data collecting. Yet if the findings proposed at an early stage are supported by data that hold up when researchers go back to the field to gather data, then the conclusions proposed are believable.

b. Quantitative Analysis

Doing the quantitative analysis, to know students improvement in teaching learning process that got from the test, the researcher used individual score and mean score to analyze the data from the test. Individual score and mean score will be analyzed with this following formula:

Individual Score

After gave the test, researcher will use following formula to analyze the individual score:

$$x = \frac{A}{N} X \ 100$$

Where:

X = Individual Score

A = The students' accurate response

N = Total of test items

Adopted from (Cohen et al., 2007)

Mean Score

After calculate the individual score of students, and then the researcher analyzes the mean score with the following formula:

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

Where:

- M = the average of students' score
- $\sum X$ = Total score
- N = The Number of students

Adopted from (Heaton, 1988)

| Table 3.1 Criteria of Mean Score | |
|-------------------------------------|-------------------|
| Range Score | Classification |
| 80-100 | Good to Excellent |
| 60-79 | Average to Good |
| 50-59 | Poor to Average |
| 0-49 | Poor |

(bin Tahir, 2012)