CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

1. Classroom Action Research (CAR)

This study going used the Classroom Action Research method, which is research conducted to find a practical knowledge base to improve the situation which is carried out on a limited basis in the classroom. Research methods are the strategies, processes or techniques utilized in the collection of data or evidence for analysis in order to uncover new information or create better understanding of a topic.

Researcher uses this method to improve the quality of learning. The researcher wants to know what are the weaknesses of students in learning vocabulary, so they can find ways to improve students' vocabulary mastery.

Classroom Action Research is repetitive research (reflective) by doing recycling actions to improve or improve learning practices in the classroom in a more professional manner. According to Khasinah (2013:108), action research is a process in which educators examine their own practice systematically and carefully using research techniques. Classroom action research can be used in the implementation of various school programs. The trick is to examine various indicators of the success of the process and the learning outcomes of students.

Classroom action research should show a positive change toward improvement. According to Wulandari *et al* (2019: 314), Classroom action research is a component that needs to be carried out and fulfilled in improving and advancing teachers' careers, which is supported by government law of Ministry of Administrative and Bureaucratic Reform No.16 of 2009. The main characteristic of classroom action research is the participation and collaboration

between the researcher and members of the target group. If the action brings weakness, decline, or negative change it means that it violates the character of classroom action research.

2. Procedure of Classroom Action Research

The procedure in research is very important because it is to know the steps in conducting research. In this research, the researcher used classroom action research. Implementation of classroom action research includes several steps. This research uses the model development by Kemmis and McTaggart cited in Burns (2009: 8). Classroom action research can be seen in the illustration below:

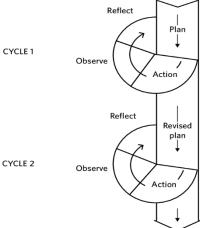


Figure 1.1: Cycling process of Classroom Action Research (CAR)

Kemmis and McTaggart in Burns (2009: 9)

Based on the figure above, the procedures of classroom action research are explained below:

1) Plan

The plan is the first step of action research. In this phase, the researcher going identify problems and develop an action plan to bring about improvements in specific areas of the research context. The researcher going investigate what might be done in reality and the constraints of the teaching situation that the researcher going do and the potential improvements that the researcher thinks might be made.

2) Action

Action is the implementation of the plan that has been prepared by the researcher. The plan is a carefully considered one that involves some deliberate intervention into the researcher's teaching situation that the researcher going undertake over an agreed period. An action refers to the activities carried out by the researcher in the classroom related to the application of the blindfold game in students' vocabulary mastery.

3) Observation

This phase involved the researcher systematically observing the effects of the actions and also documenting the context, action, and opinions of those involved. This phase is data collection where the researcher uses 'open' and 'open-minded' tools to gather information about what happened. Activities in the observation phase going be carried out by collaborators with an observation checklist and field note when the researcher teaches students vocabulary in class through blindfold games.

4) Reflection

Reflection is the last procedure of classroom action research. In this phase, the researcher reflects, evaluates, and describes the effect of the action to understand what has happened and to understand the problem that the researcher has explored more clearly.

3. Subject of Research

The subject of this research is eight-grade students of SMP Negeri 2 Sajingan Besar. This class consists of 23 students consisting of 14 girls and 9 boys. The researcher conducted this research based on pre-observation. The researcher chose this class as the subject because the researcher found problems related to vocabulary mastery. Students have difficulty in vocabulary mastery. The researcher knows this problem because the researcher has done

pre-observation during his internship at this school. During the preobservation, the researcher once taught in the class and saw that the students had difficulty in mastering vocabulary and they needed an effective and efficient method to master vocabulary. So, the researcher is interested to find out the solution to mastering vocabulary by applying blindfold game.

4. Technique of Data Collection

In completing the data, the researcher going use qualitative and quantitative data. Qualitative data consist of observation, while quantitative data consist of measurement tests.

a. Observation Technique.

The researcher going use the observation technique to get data. Ciesielska *et al* (2018: 33) stated that observation is one of the most important research methods in the social sciences and at the same time one of the most diverse. Observation is a data collection technique in which the researcher or their collaborator records information as they witness during the research. Intended a way of collecting data through direct observation of situations or events that exist in the field. Observation can be served as a technique for verifying information provided face to face. In this research, the observation technique going use to investigate and observe the class condition.

b. Measurement Technique

In this research, the researcher going use a measurement technique to collect quantitative data. According to Papadimitriou *et al* (2012: 63) measurement is a process used in a measurement procedure that has a "measurement" (measured amount) as its input, a control variable, and its output represents the "measurement result". The form of measurement technique in this study is a vocabulary test. The vocabulary test in this study going use to measure individual scores and students' average

scores. With this measurement technique, the researcher finds out about students' vocabulary mastery by using a test that will be give to find out how well students' vocabulary mastery will improve.

5. Tools of Data Collection

Tools are important as a complement to collecting the data because the tools are the instrument which is used to collect during the observation and measurement. Tools vary in complexity, interpretation, design, and administration and each tool are suitable for gathering certain types of information (Pandey & Pandey, 2015: 57). The tools for observation and measurement are different. For the observation technique, the tool that going be used is the observation checklist and field note. While measurement technique will use a vocabulary test.

a. Observation Checklist

An observation checklist is a list of things an observer going see when observing a class. This list may have been prepared by the observer or the teacher or both. According to Ong et al (2017: 35), observation checklists can be used to facilitate useful observations in a variety of ways. observation checklist not only provides the observer with a structure and framework for observation but also serves as a contract of understanding with the teacher, who as a result may be more comfortable, and will get specific feedback on aspects of the classroom. In this research, the researcher makes observation checklist based on the teacher's performance when starting learning and carrying out the teaching and learning process, student performance during the teaching and learning process, and class condition.

b. Field Note

In the research when conducting observation, field note is also very useful for the researcher as an intermediary tool that the researcher see, hear, and feel in the context of collecting data. Kawulich cited in Deggs & Hernandez (2018: 2555) explained that the field notes functioned as a record of the activities or ceremonies observed and informal discussions from the field. This is to facilitate the preparation of the report because the data obtained will be easily forgotten by researchers. Field notes should be descriptive, dated and timed, and recorded with basic information such as where the information will obtain, who will be present, the physical setting of the environment, social interactions, activities that took place, etc.

c. Vocabulary Test

A test is a set of questions and exercises that going use to measure the achievement of the individual or group. Boopathiraj & Chellamani (2013: 191) stated that the test is conducted by the researcher himself for data collection. The test in this research action. In this research, a test going be done in form of multiple-choice filling, arranging the word, matching test, and pronunciation test.

6. Technique of Data Analysis

After the data is collected, the researcher going analyze the data using qualitative and quantitative data. Qualitative data going obtain from the observation checklist and field notes. Next, the researcher going obtain quantitative data from the vocabulary test.

a. Qualitative Data

Qualitative data is the type of data used to explain or describe information narratively manner and not numerical. Goodrick & Rogers (2015: 562) explained that qualitative data analysis often involves sorting data into a category and labeling

the category. Qualitative data is a type of non-numeric data that cannot be processed in the form of numbers. In this research, there are three steps for qualitative data analysis according to Miles and Huberman (2008:10) as follow:

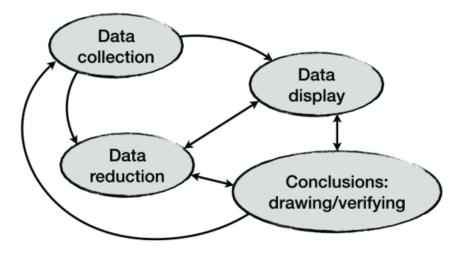


Figure 1.2: The Components of Qualitative Data Analysis Miles and Huberman (1994:10)

2) Data Reduction

Data reduction is the first step in analyzing the data in qualitative analysis. Data reduction means choosing the main things, focusing on the important things, looking for patterns and themes, and removing unnecessary ones. Thus the data that has been reduced will provide a clear picture and make it easier for the researcher to conduct further data collection, and look for it when needed.

3) Data Display

After reducing the data, the next step is data display. Data presentation can be done in the form of brief descriptions, charts, relationships between categories, flowcharts, and others. By displaying the data, it will be easier to understand what is happening and plan further work according to that understanding. In this research, the presentation of data

is done by compiling a short description or narrative text based on the results of data reduction

4) Conclusion Drawing/Verification

The last step is conclusion drawing and verification. The initial conclusions put forward are still temporary and will change if no strong evidence is found to support the next stage of data collection. However, if the conclusion determined at the initial stage are supported by valid and consistent evidence when the researcher returns to the field to collect data, then the conclusion put forward are credible conclusions. The conclusion is drawn based on the presentation of the data reduction and data display.

b. Quantitative Data

Quantitative data is data that can be measured and also calculated directly. According to Ali (2021: 3), quantitative data analysis is a systematic process for collecting and evaluating measurable and verifiable data. In quantitative data, the researcher uses two types of scoring, which are individual scores and mean scores will use to measure the students' vocabulary mastery through blindfold game. The researcher going analyze the data by using the following formula:

1) Individual Score

The individual score is used by the researcher to find out the individual score of the students' vocabulary mastery through the blindfold game. The formula for individual score is as follow:

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

Note:

X : The individual's score

A : The number of correct items

N : The total number of test items

: Maximum score

Taken from Cohen at al (2007: 423)

2) Mean Score

After the researcher calculated the individual scores of students, then the researcher calculated the students' mean scores using the following formula:

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

Note:

<u>X</u> : Mean

 Σ : Sum of

X : Raw score

N : Number of score

Take from Ary et al., (2010: 108-109)

The Classification of Range Score

Range Score	Classification
80-100	High
60-79	Mid
0-59	Low

Take from Ary et al., (2010: 108-109)