

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **A. Research Design**

##### **1. Classroom Action Research (CAR)**

In this study, the researcher used CAR (Classroom Action Research) because it could identify the media used to improve students' vocabulary mastery. This makes students more skilled and understands better through research applied to these students. Classroom Action research is carried out by taking actions in the classroom with certain situations. Classroom Action Research is research conducted in the classroom through a systematic investigation to find the right situation and decision (Mettetal, 2002).

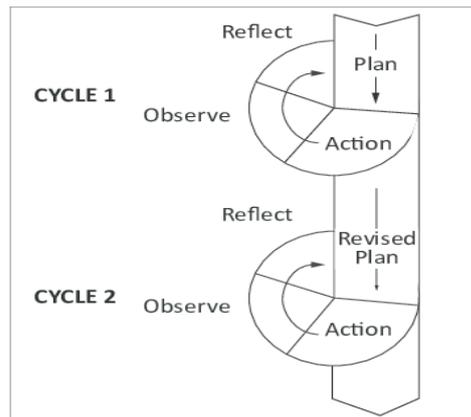
Classroom action research was an innovation that people from many sectors expected to use as a strategy for developing the science of the teaching profession to be more strengthened since the classroom action research included rationale as well as method facilitating the instructional development (Boonchom et al., 2012:221).

Khasinah (2013) mentioned classroom action research plays a role in finding solutions to problems in the classroom. Therefore, classroom action research by researchers includes innovative learning strategies to overcome problems that usually occur in the teaching and learning process using domino card games.

Based on the opinion above, the researcher can conclude that classroom action research is a method for finding solutions to problems that exist in the classroom, by conducting situation investigations and decisions to guide students in developing learning.

## 2. Procedure of Classroom Action Research

The procedure in this study is based on Kemmis and McTaggart cited in Burns (2009:9) Each cycle has several stages such as planning, action, observation, and reflection. For this research, the procedure of classroom action research can be seen in the picture below:



Taken by Kemmis & McTaggart in Burns (2009:9)

### a) Planning

In this step, the researcher prepares to carry out the next steps, namely actions such as syllabus, lesson plans, and data collection tools such as observation lists, field notes, and vocabulary tests. and also research media to improve vocabulary mastery by using subtitles such as projectors, laptops, and speakers. A planing is a step to consider and identify availability such as circumstances and resources (Bengtsson, 2016). From this it can be seen that planning requires preparation for carrying out the next action, everything needed for this research must be available in context.

### b) Acting

In this step, the researcher presented the appropriate material from the previous planning stage. In this action, the researcher carried out classroom action research by teaching vocabulary using Domino Card Game. Action is a step that is

directed through the way it is done under the purpose and its continuation depends on the information that occurs (Von Hofsten, 2007). The action must be set on the purpose of this research which is directed at the future, then it is necessary to find out information about the research that will occur next so that in the future the actions of this researcher are by the context.

c) Observing

In this step, the researcher observe from the previous action stage, such as observing what students do during the action, and at this stage, the researcher also needs to document the context, actions, and opinions of students. In this case, it is very necessary to use observation equipment such as observation checklists, field notes, and vocabulary tests. According to Baker (2006) observation is a step taken in the field to gain a comprehensive understanding of the people being studied. The statement revealed that obesity requires roles such as understanding the subject to be studied and also regarding the period in the field that allows using field notes and observation checklists.

d) Reflecting

In this step, In carrying out this step, the reflection step needs the results of observations to find out if the teaching action is successful or not. The results of the reflection are used for what researchers will do in the future in the next cycle. Reflection is a step to openness from the perspective of others as well as understanding one's thought process, self-awareness of assumptions, values, and beliefs (Coulson & Harvey, 2013)

From this statement, it can be seen that reflection considers the perspective of student input to understand processes, problems, and internal problems so that from reflection it can be seen whether this

research needs to be done again or not, has been effective or not, successful or not. If the results are unsatisfactory, it needs to be continued in the next cycle and if it is satisfactory then the classroom action research procedure carried out by the researcher has been completed.

## **B. Subject of Research**

The subjects in this study is eighth-grade students of SMP Negeri 03 Sungai Raya. The study was only conducted in one class, where the class consisted of 33 students. The reason the researcher choose the class as the subject was because there was a lack of vocabulary mastery for each student in the class so the researcher was interested in finding solutions to apply the domino card game.

## **C. Technique of Data Collection**

There are two data collection techniques in this research, the first is the observation technique and the second is the measurement technique.

### **1. Observation Technique**

The data collected must be based on facts using observation. Observation is a way of collecting data through detection where the data must be based on valid facts (Mu, 2013). The observation technique is a technique used to collect data directly on observations of the object in question. For the observation technique, the researcher used observation sheets & field notes.

### **2. Measurement Technique**

A measurement technique is a technique to determine the ability of students to complete a given test. Measurement is used to determine the level of knowledge and skills of students (Adom et al., 2020). A measurement test is a technique used to collect data by giving a test to

measure students' abilities through the results they are working on. This technique is influenced by students' answers in doing the test.

#### **D. Tools of Data Collection**

Data collection tools is based on data collection techniques, in this study, there are three tools to collect data consisting of checklist observations, field notes, and vocabulary tests. There are several tools that researchers use to carry out this data collection technique, namely as follows:

##### **1. Observation Checklist**

The observation checklist is useful in identifying teaching practices for students in observation in the class (Ong et al., 2017). It can be seen that an observation checklist is a tool of technical observation based on the situation or behavior in observations made under investigation in teaching and learning activities. In the observation checklist, researchers use class activities, student activities, and teaching activities.

##### **2. Field Note**

Information about the time, place, and population of the research can be included in field notes. Field notes are used as evidence that provides meaning and helps in understanding observations at the time, place, or population under study (Phillippi & Lauderdale, 2018). In the field notes the researcher uses based on information about learning activities such as the use of student appearance, teacher appearance, and class situation.

##### **3. Vocabulary Test**

The vocabulary test contains sheets that are given to students to measure the extent to which students can master vocabulary. (Bensalem & Al-Zubaidi, 2018) states that vocabulary tests are given

to participants to measure vocabulary knowledge in the form of assignments.

## **E. Technique of Data Analysis**

In data analysis techniques, there are two techniques that researchers use, namely qualitative data analysis and quantitative data analysis.

### **1. Qualitative Data**

Qualitative data analysis is part of the data analysis technique that produces data that is not in the form of numbers. According Dierckx de Casterlé et al. (2012) state that qualitative data analysis is a complex analysis that contains a description of practical aspects. This means that the results of qualitative data in the form of a description of the condition of the object under study have a risk of oversimplifying the analysis process because qualitative data is very complex. Observation checklists and field notes are tools for qualitative data analysis. In this research, there are three steps for qualitative data according to Miles & Huberman (1994:10) as follow:

#### **a. Data Reduction**

Data reduction means focusing on the important things, not picking up unnecessary data, and focusing on the necessary things. The result of this data reduction is a clear description related to the search for patterns and themes.

#### **b. Data Display**

Data display is an activity when a set of data is arranged in a systematic and easy-to-understand way, thus providing the possibility of generating conclusions. Data display is usually a short description such as a description or narrative text of data reduction.

c. Conclusion Drawing Verification

Conclusion Drawing Verification is the last part that comes from data display and data reduction which contains temporary conclusions. At this stage, it is possible to change the data depending on the less accurate evidence. If the evidence is valid, then the researcher is immediately spacious by determining the date.

2. Quantitative Data

Quantitative data analysis is part of a data analysis technique that produces data in the form of numbers and quantitative data is closely related to measurement. Quantitative data is a measurement to confirm and understand a problem or opportunity (Ahmad et al., 2019). From measurement in the form of values or numbers. A vocabulary test is a tool for quantitative data analysis in which number is obtained from the vocabulary test scores.

To prove that the using of the Domino Card Game has increased students' vocabulary in the assessment, the researchers measured the students' vocabulary mastery by answering the provided vocabulary test. To measure this, it can be formulated as follows:

a. Individual score

Individual scores are used by researchers to determine the individual scores of students' vocabulary mastery through a domino card game.

Where:

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

X = Individual Score

A = The students' right answer

N = The number of test items

Taken by (Cohen et al., 2007:423)

b. Mean score

The researcher calculated the students' average scores after calculating the individual student scores using the following formula.

Where:

$$M = \frac{\Sigma x}{N}$$

M = The mean score

$\Sigma$  = Total score of students

N = The number of students

Taken by (Heaton, 1988:176)

Then, the mean of students in each cycle can be categorized as the criteria as follows:

<b>Test Score</b>	<b>Classification</b>
80-100	Excellent
60-79	Good
50-59	Average
0-49	Poor

Taken by (Heaton, 1988:176)

