

## **CHAPTER III**

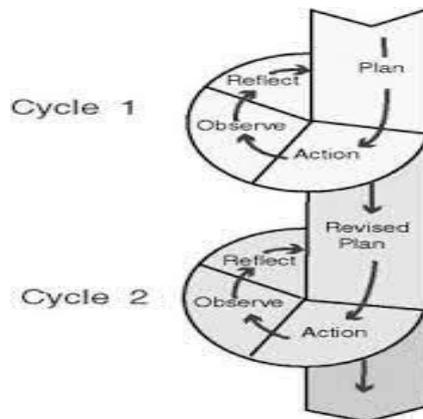
### **RESEARCH METHODOLOGY**

#### **A. Form of Research**

This research uses classroom action research (CAR), which was Adapted from Kemmis & McTaggart (1998, as cited in Burns 2010) which involved four phases in a research cycle, such as planning, action, observation, and reflection. The lesson plans were laid out for the planning step to implement for English vocabulary using flashcards. The Thesis be conducted in two cycles. Every meeting was completed in two hours. The observation step is applied during the teaching and learning process in the classroom. Based on the observation and posttest in the first cycle, the reflection step will be settled down.

The consequences of reflection in the first cycle will be carried over to the second cycle by repairing the action step. This Thesis be conducted in the classroom, and the researcher has already planned to do the treatment based on the cycle of classroom action, which particularly aims to ensure the students' mastery of learning vocabulary. In this room action analysis is sharing out during a democratic cooperative manner, particularly research by collaborating between academics and researchers. Information that will be analyzed is declared in descriptions of how the media will be a strategy to improve vocabulary mastery and motivation. It was calculate a numerical-calculations in the questionnaire and test, also answering the students' problem in learning English. this is often in accordance with the characteristics of qualitative-quantitative research.

**Table 3.1 : Steps of Action Research**



Adapted by Kemmis & McTaggart in Burns (2010: 9)

Action research is conducted in four certain cycles. The procedures include (1) Planning, (2) Action, (3) Observation (4) Reflection

### **B. Subject of the Research**

A subject is a group of people, objects, or items that are taken from a larger population for measurement. Sugiyono (2018: 131) states that the subject is part of the number and characteristics of the population. To get the subject, the researcher using purposive sampling. It can be defined as a set of respondents (people) elect from a larger population for the purpose of a survey. Because of sample is a part of population it means that subject ought to be selected. In SMPN 03 bengkayang, eighth grade was divided into 3 classes namely class A, B, and C. So the researcher used eighth grade A students because the class was chosen with the aim of obtaining data because students had problems in mastering vocabulary and to find out how students increase motivation when flashcards are applied in the teaching and learning process. The subject of the research are A Class of eight grade of SMPN 03 Bengkayang that consists 29 students,

### **C. Technique of Data Collection and the Instrument**

A quantitative and qualitative approach be used by the researcher to collect the data. The qualitative data obtained based on the situation of the teaching and learning process. Meanwhile, the quantitative data will be collected based on the students' scores of the questionnaire. Thus, there are two kinds of techniques in obtaining the data, namely; observation technique and measurement technique.

#### **a. Technique of Data Collection**

##### **a. Observation Technique**

The observation is helpful to gather information about what is happening in the classroom during the teaching and learning process. According to Koshy (2005: 98), that observation is a natural process the researcher observes the students and incidents all the time and based on the observations the researcher makes a judgment. Then, According to Burns (1999: 80) observation is a mainstay of action research which enables the researcher to document and reflect systematically upon classroom interactions and events as they actually happen rather than as the researcher thinks that they occur.

##### **b. Measurement Technique**

Measurement is the technique that is used to determine the quantity of the students' achievement through certain rules so that the quantity obtained actually represents the students themselves. According to Ary et al. (2010: 101) "measurement is the assignment of numerals to objects or even according to rules". Further, Cresswell (2012: 263) revealed that measurement means that the researcher observes and records the score on an instrument. Through this technique of collecting data, the research is going to give a multiple choices test to the students to know the students' achievement.

## **b. Instruments of Data Collection**

### **a. Observation Checklist**

An observation checklist is a list of statements related to the students' performance, the teacher's performance, and the class environment. According to Ary et al. (2010: 217), a checklist presents a list of the behaviors that are to be observed and the observer then checks whether each behavior is present or absent. Therefore, there are three categories to be observed; teacher's performance, students' performance, and the classroom environment. In this tool of collecting data, the researcher is going to observe the teaching and learning process in the classroom from the beginning to the end of the classroom activity to collect information about the student's attitude, attention, enthusiasm during the teaching and learning process. The observation checklist will be provided by the "Yes" and "No" option, where the collaborator should make the judgment and put checklist mark (√) to the point observed. This will be continually done over each cycle to stay monitoring what will be happening during the teaching and learning process.

### **b. Field Note**

This tool is used to write down the setting, reaction, interpersonal relationship, and also his feelings or impression when the teacher implementing the technique in action. Further, the researcher will use this tool to have some more notes during the teaching and learning process that are not listed in the observation checklist. Hence, it enables the researcher to make some more notes and description of events which are not written down in the observation checklist. It supported by Burns (1999: 87) that field notes as they are often referred to qualitative research, are descriptions and accounts of events in the research context which are written in a relatively factual and objective style.

c. Questionnaire

A questionnaire is a research tool featuring a series of questions used to collect useful information from respondents. This tool will use to find out students' motivation in vocabulary mastery using flashcards. In this research, the researcher is using close-ended question.

d. Vocabulary Test

Vocabulary test is a test for knowledge (as of meaning or use) of a selected list of words that is often used as part of an intelligence test. Test vocabulary often used by having students identify prefixes, suffixes, and root words. Allow students the chance to figure out words through identifying word parts.

#### **D. Technique of Analysis Data**

Data analysis is derived from the construction of data collection and analysis is a test to see something well by describing its constitutional percentage or the constitution of these components for additional studies. In order to be able to find out what the answers and research questions are and to test the research hypotheses, it is necessary to do an evaluation so that data analysis actions are needed. In analyzing the data, the researcher used qualitative and quantitative techniques that had been previously owned, which were proven in depth as a result of:

##### **1. Qualitative Analysis**

###### **a. Observation Checklist**

The researcher used an observation checklist to observe the behavior of each student in the class. Observations in this study will be carried out in each cycle to continuously monitor what will happen during the teaching and learning process. Researchers use it as a measurement of student activity in class and situations when researchers use flashcards as a medium for the teaching and learning process. The researcher analyzed the observation checklist using

descriptive analysis. In the descriptive analysis to analyze the observations, the checklist contains a list of objectives in teaching activities or structured observations and an observation checklist used by English teachers when researchers apply flashcards in the teaching and learning process. In this data collection tool, researchers will observe the teaching and learning process in the classroom from the beginning to the end of class activities to collect information about the attitudes, concerns, and enthusiasm of students during the teaching and learning process. as for the four categories to observe; teacher performance, student performance, and classroom environment. The categories are divided into four categories, namely 1 for adequate (1=Enough), 2 for moderate (2=Enough), 3 for good (3=Good), 4 for very good (4= Very good). Observers must provide check statements based on real situations that occur in the process of teaching and learning activities.

#### **b. Field Notes**

The experimenter was used interactive model to dissect the qualitative data that suggest by Miles and Huberman (1984:10) the process of assaying the qualitative data used 3 factors, they're reduction of data, data display, and conclusion drawing/ verification.

##### 1) Data Reduction

Data reduction refers to the process of opting, fastening, simplifying, abstracting, and transubstantiating the data that appear in written- up notes. Data reduction involved the process of opting, simplifying, and rooting themes and patterns from written field notes, reiterations, and other available coffers. In this case, the experimenter had reduced the data set up to make it easier for the experimenter to draw a conclusion.

##### 2) Data Display

After reducing the data, the alternate major inflow of analysis exertion is data display. Data display is to get the figures of matrix

or list of orders in every data taken from data use in descriptive form. In this step, the exploration will use the data taken from data reduction into the map, table prints, and descriptive paragraph in order to make it easier for making a conclusion or to make it accessible.

### 3) Conclusion Drawing and Verification

The third sluce of analysis exertion is conclusion delineation and verification. In this step, the experimenter will conclude and described the exploration after reducing and displaying the data grounded on the has been set up.

### 4) Final Conclusions

Grounded on carried while has been vindicated. The final conclusions are anticipated to be attained after data collection is complete.

## **2. Quantitative Analysis**

### **a. Questionnaire**

Quantitative data analysis is a Quantitative Research Methods are transaction with numerals and anything that is measurable in systematic course of action of interrogation of phenomena and their relationship, it is used to answer questions or relations inside measurable variables with an intention to explain for predict and control phenomena. current studies on student classroom learning accentuation the significance of taking into consideration each motivational and cognitive constituent of instructional bringing off Motivational additives accommodate students' understandings of the classroom environment moreover to their self-related beliefs including individual goals, self-efficacy, interest, motive and value beliefs.

### **b. Vocabulary Test**

Analysis Action Research facts is a chronic procedure of reduction collections to find constituents and patterns. there are no 'quick-fix guidelines for this kind of analysis. Try to extract the

important thing meanings, message, and building to interestingness on what the facts are telling it. Therein method will rectify students' advice almost what is accomplishment on. The researcher can draw out new concepts, increase individual theories and find possibilities for classroom practice that it can test out in further cycles. any general public concern to this analysis technique as 'squashing' or furthermore recognized as it, 'crunching' the data. They analyze the data of vocabulary tests the researcher had been used characteristic reckoning and penny-pinching reckoning in analyzing the data, and the researcher had been individual score and mean score in analysis the data, and the researcher had been used the individual score and mean score. That the researcher was calculable by using the following formula:

### **1). Individual Score**

After give the vocabulary test, the researcher to calculate the individual score the researcher used this formula. The data were gained from the result of scoring. The pattern of the average in student's individual score is shown below:

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

Where:

X = Individual Score

A = The students' right answer Score

N = The number of test items

*Taken from Cohen et al. (2007: 423)*

### **2). Mean Score**

After the researcher calculated the individual score of students, then, researcher counted the mean score by using the formula below:

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

Where: M = The average of students' score  
 $\sum x$  = The sum of students' total score  
 N = The number of students' being observed

**Table 3.2**

**Classification of source**

<b>Categories</b>	<b>Range</b>
Excellent	90-100
Good	80-89
Average	70-79
Poor	0-69

*(Taken from Heaton, 1988:145)*

**E. The Procedure of Class Action Research**

This study use classroom action research, so in this case the researcher use some steps as Kemmis stated. There are tree cycles in this action research. In each cycle the procedure are as follows.

**a. Planning**

The Activities in planning are:

- a. Preparing materials, making lesson, plan and designing the steps in doing the action.
- b. Preparing list students name and scoring
- c. Preparing teaching aids (e.g. flashcards, picture)
- d. Preparing sheets for classroom observation (to know the situation of teaching- learning process when the method or technique or mode is applied)
- e. Preparing a test. (to know whether student's vocabulary improves or not)

**b. Action**

- a. Introduction/ greeting

- b. Check of the present of the students
- c. Giving pretest
- d. Asking the students about the vocabulary that relation with theme.
- e. Teaching vocabulary by ostensive means
- f. Asking the students some questions orally and students have to answer orally about the theme.
- g. Giving posttest.

**c. Observation**

Observation is one of the instruments used in collecting the data. As a scientific method, observation can be systematically used to serve and note the phenomena investigated like students feeling thinking and something they do in teaching learning process. The researcher plans this observation flexible and open to record the unexpected.

**d. Reflection**

The result of the observation is analyzed. It is to remember what happened that has been recorded in observation. Reflection seeks to make sense of the process, problems and issues in strategic action. It looks account of the variety of perspectives possible in the social situation and comprehends the issues and circumstances in which they arose. Reflection has evaluative aspect; is asks the researcher to weight the experience, to judge whether effects (and issues which arose) were desirable and suggest ways of proceeding. The researcher's reflection is done by discussing with his collaborator. Then the next cycle can be decided or designed.