#### CHAPTER III

#### RESEARCH METHODOLOGY

This chapter provides the method used in the research, namely the type of study, data and source of data, research instrument, data collecting technique, and data analysis technique. In this research, the researcher uses Classroom Action Research (CAR) as the method.

### A. Research Design

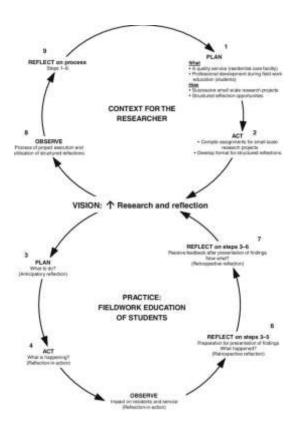
In this research, the researcher used Classroom Action Research (CAR) to establish the student vocabulary improvement in the SMP 6 Kayan Hilir. The researcher will use Classroom Action Research (CAR) as the form of research. CAR can be a device to improve the quality of teaching-learning ability in the physical classroom. Furthermore, of solving problems in classroom activity, CAR also help the teacher in new methods, skills, and strategies through pair-teaching between the researcher and the teacher as a collaborative study. "The purpose of action research is to develop new skill or new approaches and to solve problems with direct application to the classroom or working world setting", state by burn (2010: 5).

According to burn (2010:2), "Classroom action research is an action research which is carried out at the classroom aimed to improve learning practice quality". It means that CAR can improve the quality of teaching process in the classroom with the new method and strategies by collaborative.

Creswell said that CAR is the practical design which explores a

problem with an aim toward developing a solution to a problem, and also action research designs are systematical procedure done by the teachers to improve their teaching, and their students learning. Based on the definition means that CAR have an aim at improving the practice of education by studying issues or problems they face, and teachers reflect about those problems, collect and analysis data, and also implement changes based on their findings.

In this Classroom Action Research, the researcher used Kurt Lewin's design. There are four phases within one cycle designed for Classroom Action Research by Kurt Lewin's. Those are planning, acting, observing, and reflecting. There might be a new problem or the previous unfinished problem after implementing first cycle by the teacher. If it happens, it is necessary to continue to the second cycle in line with the same concept of the first cycle. The design of classroom action research used in this study was a cyclical process which consisted of four steps by Kemmis and McTaggert, can be seen in figure.



Model classroom action research (Kemmis and McTaggert)

# 1. The First Cycle

# a. Planning

Observation in the classroom action research is important because on the observation we know what the student weakness on the vocabularies. The researcher might be find some problems on the classroom and from the problem the researcher will make plan and preparation based on the competency. On preparing the planning, the researcher should choose the kinds of vocabulary that based on standard of competence.

# b. Acting

In the action, the researcher teaches the students vocabulary using mind mapping. The action will carried out into two cycles. The

researcher will implement the lesson plan that had been designed in planning stage. The action will be applied in two cycles with each meeting in one cycle consist of two meetings.

# c. Observing

During the action process, the researcher will observe students responses during the learning process. The first result of observation use to see the progress that make by the students, whether there are improvements from the first result of observation.

### d. Reflecting

By doing this process, it will identify the weakness and strengths of the action based on the result of planning, acting and observing. This result is use as an input for the researcher, whether to stop or rearrange another action to solve the problem in the first cycle.

In this research, Classroom Action Research is conducted to help the students improve their vocabulary mastery. The strategy is offer by using photograph sequence. The researcher do collaborative CAR because the researcher directly works together with the English teacher of seventh grade students at SMPN 06 Kayan Hilir. As a collaborator, the teacher will involve in the whole process of the activities. The researcher played as the real teacher meanwhile the English teacher is assigned to be an observer.

Classroom Action Research activities is a research that occur by involving repeated cycles. This cycle will continue until the problem

can be solved. Classroom Action Research activities involve repeated cycles, each consisting of planning, acting, observing and reflecting. The result of one cycle is used to determine the need for the following cycle, until the problems get solved.

In this research, the researcher will divide the research into two cycles. Each cycle will be divided into one meeting. The researcher will consider several things before deciding to continue to the next cycle. First, if more than 70% of students' scores increase. Second, if more than 80% of students are active in the learning process. The last, if more than 80% of students give a positive response after the mind mapping is implemented in class. If the students already reach the criteria desired by the researcher, the researcher will stop the research because the research is considered to success.

### B. The Subject of the Study

In this research, the researcher will be conducted the research at SMPN 6 Kayan Hilir. The school is located in Tanjung Baung Street of Tanjung Baung Village, Nangamau sub-district, Sintang district. The researcher chooses this school because the geographical is easy to reach by the researcher. The subject of this research is seventh A grade students of SMPN 6 Kayan Hilir that consist of 30 students. There are consist of 12 male and 18 female. The researcher choose seventh A class because this class have a problem of lack of vocabulary and low of motivation in learning English.

# C. Data Collection Technique and Instrumentation

In this research, the researcher used vocabulary test as the instrument to collect data. Selected noun used to measure the students ability in mastering English vocabulary. The students would be given test, treatment, and evaluation. In the test was consisted of 50 words and they ask to say the English words.

In this study, the writer applied mind mapping to collect the data.

Mind mapping

The data of this research were collected from the student of SMPN 6 Kayan Hilir. In this research, the writer analyzes all the data that provide in the class.

# a. Data Collection Technique

### 1. Observation

Observation is an instrument of collecting data that can be used to obtain a comprehensive picture of a situation according to Cresswell (2012:213). The researcher will observe the students how to understandthey are in learning and using vocabulary while the teacher is teaching. The technique of the teacher used in teaching vocabulary.

The researcher will use an observation sheet and field note as the data collection. There will be twice observation and taking field note to fulfill the data. The result of the observation is recorded as the useful data.

#### 2. Interview

Interview is a method used to get information from someone. In this study, the researcher will conduct interviews with several students to confirm after the flashcard is implemented in the classroom. Interview is a collection of questions that will be asked to students to find out student responses (Creswell, 2012:217)

In this step the researcher will interviews some students to fulfill the data. The interview will be around the understanding of the vocabulary, how the student learn vocabulary, and the best way to learn vocabulary by their own self.

By doing interviewing, the researcher will get more information about the teacher method in teaching vocabulary to students, how to make students more active in learning vocabulary.

#### 3. Test

There are some definitions about test from some expert. According to Ur states that test are used as a means to motivate students to learn or review specific material (1996). It mean that test give motivation to the students. For the test, there will be one testing section of the test, as follows;

After giving testing, the researcher conducted treatments. There are six steps, such as:

a. The researcher will explained to the students about vocabulary,

the definition, kind and types of vocabulary and also about mind mapping technique.

- b. The second treatment, the researcher used mind mapping technique in teaching vocabulary especially most common noun (people)
- c. The third treatment, the researcher used mind mapping technique in teaching vocabulary especially most common noun (things).
- d. The fourth treatment, the researcher used mind mapping technique in teaching vocabulary especially most common noun (place)
- e. The fifth treatment, the researcher used mind mapping technique in teaching vocabulary especially most common noun (animals)
- f. The sixth treatment, the researcher used mind mapping technique in teaching vocabulary especially most common noun (parts of the body).

#### 4. Documentation

In this research, the researcher will use recording visual to collect the data. In this technique, the researcher will take two documentation as an information such as photo and video while the learning process (Creswell, 2012: 223).

On the documentation, there will be a study document like

lesson plan, the vocabulary test and pictures on the process of the activity. All the documentation will be attached in the attachment.

#### b. Instrumentation

The tool of data collection is important to prepare by the researcher because it can give an additional information for researcher. In this researcher, there are some tools that use by the researcher to get the data. Burns (2010) stated that instrumentation is a tool that use to get the data in a research. The tool use by the researcher as follows:

#### 1. Observation Sheet

Observation sheet is use to check the students activity during the learning process. In this research, the activities will divided into there part, that is pre-activity, main-activity and post-activity (Burns, 2010: 62). The observation will be done to know the ability and condition in the classroom during teaching and learning process.

#### 2. Field note

Field note is important in a research because it can help the researcher to get the information from the student in a real condition in the classroom. Field note is a written account about what the researcher hear, see, experience, and think during collecting and reflecting on the data in qualitative research (Creswell 2012: 217).

The researcher will use field note which is it use to show how the description about the students in the real situation during a learning process. By doing field note it make the researcher easier in analyzes the method in teaching.

#### 3. Interview Guideline

Interview guideline is a tool used by the researcher when conducting interviews. In this research, interview guidelines will be a guide for researcher in asking questions to students (Burns, 2010:86).

By doing interviewing, the researcher will get more information about the teacher method in teaching vocabulary to students, how to make students more active in learning vocabulary. For the students the researcher will know how to make them more interesting in learning vocabulary also know the ability of the students in English vocabulary.

# 4. Vocabulary Assessment Task

In this research, vocabulary assessment task is use to know the students ability about the test of vocabulary. Testing is a method that use to know the students knowledge of vocabulary. In this research, the students improvement will see in four aspect, that is pronunciation, spelling and meaning. In this study, the researcher add one aspect in scoring rubric that is the quantity of vocabulary. To score the students performance, the researcher provide the scoring rubric adapted from Lado as cited in Mardianti (2012: 19) which is consist of pronounciation, spelling and meaning.

# 5. Scoring Rubric

In this research, the researcher will make an action to get a score from the students. The researcher have some criteria in giving score to the students. It is to know how far students understanding of vocabulary after the subject given.

Table 3.1 Scoring rubric of vocabulary

Aspect	Description	Score	Actual
			Score
	The students able to memorize 16-20 Words	4	
Quantity (20%)	The students able to memorize 11-15 Words	3	X 7,5
	The students able to memorize 6-10 Words	2	
	The students able to	1	

	memorize 0-5 words		
Pronunciation (20%)	The students able to pronounce 16-20 words perfectly	4	
	The students able to pronounce 11-15 words but not perfectly	3	X 5
	The students able to pronounce 6-10 words but using mother tongue style	2	
	The students cannot pronounce 0-5 words	1	
	The students can spell 16-20 words perfectly	4	
Spelling (20%)	The students can spell 11-15 words but not perfectly	3	X 5
	The students can spell 6-10 words but using mother tongue style	2	

	The students cannot spell 0-5 words	1	
Meaning (40%)	The students able to understand 16-20 words	4	
	The students able to understand 11-15 words	3	X 7,5
	The students able to understand 6-10 Words	2	
	The students able to understand 0-5 Words	1	

(Adapted from Lado as cited in mardianwati (2012 : 19))

# 6. Classification of Score

Table 3. 2 Classification o.f score

No	Classification of Score	Score
1.	Excellent	80-100
2.	Good	70-79

3.	Fair	60-69
4.	Poor	40-59
5.	Fail	0-39

(Adapted from Arikunto in Furqon (2013))

# 7. Recording Visual

In this research, the researcher use recording visual to record the activity and the place of the research. The tool of recording data such as camera. The researcher will use camera to take a photo or video as a proof of research (Burns, 2010:70).

On the process of the teaching activity there will be a recording camera to know the effectiveness of the method by the researcher, after the recording finish the researcher will observe the activity in the classroom.

### D. Technique of Analysis Data

Data analysis technique is the most decisive step of a research because data analysis serves to infer the results of research. In this research, the researcher use technique of data analysis based on cited Sugiyono (2020) which is involving four steps: data collection, data reduction, data display, and conclusion drawing/verification

# 1. Data Collection

The first step of the research is collecting data. In this research, the researcher will collect all the data to find while the researcher teaching

in the classroom with mind mapping method. In this step there will be some data might be collect by the researcher.

#### 2. Data reduction

Data reduction is a form of analysis that reinforces, directs, discards something that is not needed and organizes the data in such a way that it can be summarized and verified by research results.

# 3. Data Display

Limiting a data presentation as a collection of structured information that gives the possibility of illuminating conclusions and taking action.

# 4. Conclusion Drawing/Verification

Conclusion is only a complete configuration. The conclusions are also verified during the assessment. At this stage, the data must be tested for truth and compatibility so it is believed to be valid data.