

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher explains about the research design, the subject of the study, data collection technique and instrumentation and data analysis. The researcher explain from general into the spesific discussion which relate to the research.

A. Research Design

The research method is basically a form of scientific method in obtaining data with the intended purpose and usefulness of the researcher. Research methodology is a series of procedures or steps that are systematic or structured and carried out by a researcher with the aim of answering questions from the formulation of existing problems. Kothari (2003, p.31), stated that Research Design is arrangement of the conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In conducting research we need to follow the rules or rules that apply, so that the research results obtained can be said to be valid.

Talking about research methodology, the point is to discuss or discuss scientific procedures with the aim of obtaining and discovering new knowledge. Findings themselves can be called a form of science if the search is based on the scientific method that should be used. In this research, the researcher applied Classroom Action Research, the researcher choose this design because it was related to learning activities

in the classroom so that it could confirm how to see an increase in students' ability to use Engage Study Active in the classroom. Therefore, the authors chose the Classroom Action Research design because it was in accordance with the needs of this research. Classroom Action Research is research that is directly applied in the classroom.

Classroom action research is a research carried out by educators in their own classrooms by designing, implementing and reflecting collaborative and participatory actions with the aim of improving their performance as educators so that student learning outcomes can increase. Classroom Action Research can be defined as research conducted by educators in the classroom by designing, implementing and reflecting collaborative and participatory actions, with the aim of improving their performance as a teacher, so that student learning outcomes can be improved. Classroom Action Research is designed to improve all participants in the teaching and learning process.

This means that the purpose of Classroom Action Research is to improve the teaching and learning process in the classroom. By using Classroom Action Research, researcher not only improve students' in vocabulary mastery in the classroom. Action research is conduct by a collaborative partnership of participants and researcher, whose roles and relationships are sufficiently fluid to maximize mutual support and sufficiently different at to allow individuals to make appropriate contributions given existing constraints (Somekh, 2005, p.7).

The researcher took this method because the researcher see the problems at SMP Nusantara Indah especially in seventh grade students, the ability to vocabulary mastery and ESA and teacher using English was very low, lack of vocabulary and students still not confident to speak in English, their lack of how to stationary, so they were not active and prefer well when the teacher enters the classroom and leaves the classroom and outside the classroom. This is in accordance with research by experts that the purpose of Classroom Action Research is to improve the quality of educational practice for the better. There are four stages that must pass to conduct research using the Classroom Action Research method, namely, (1) planning, (2) action, (3) observation, (4) reflection Zuber – Skerrit (cited in Cohen, Manion and Morrison 2007, p.303). The four stages are an element-forming cycle, namely with one round of activities that are sequentially then return to the first stage. This Classroom Action Research will carry out in a participatory collaborative way, research by collaborating or collaborating between teachers and researcher.

The research design which use by the writer is Classroom Action Research By Stringer, Christensen, and Baldwin (2009, p.8). The scheme of Classroom Action Research as follow:

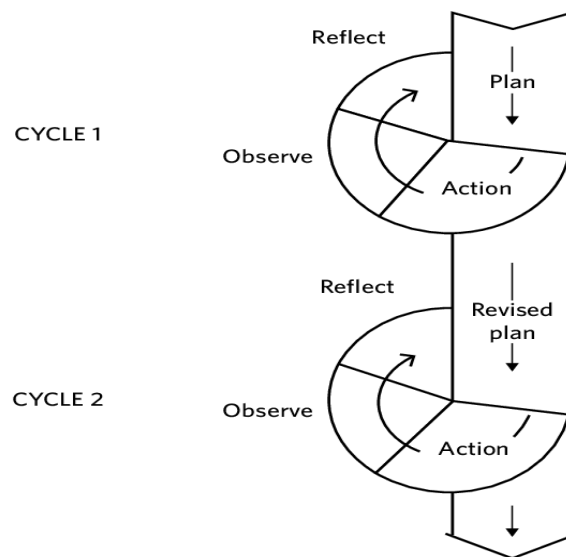


Figure 3.1 CAR model based on of Kemmis and McTaggaet, (cited in Burns, 2010 p. 9)

1) Planning

Planning here is based on the diagnosis and identification of problems that occur in the classroom. The plan should be flexible enough to accommodate unexpected effects and unseen obstacles. Classroom Action Research plans should be based on initial reflective observations. The results of initial observations of the processes that occur in the situation to be improved are described in the form of comprehensive field notes that clearly describe the learning process in the situation to be improved or improved. In planning, researcher prepare what will be done in the classroom, prepare strategies during teaching and learning activities, make lesson plans, prepare learning tools, and also prepare success criteria

in one cycle. Researcher planned to conduct two cycles in this research.

2) Action

The action here is the implementation of planning in order to apply appropriate strategies in the classroom. By taking action, the researcher will work together with the teacher in guiding teaching and learning activities. The researcher will complete one cycles in this research, namely two meeting in this research. In the implementation, the researcher will carry out several activities such as applying the ESA method during class, implementing the lesson plan, teaching students the material that has been prepared and also participating in the teaching and learning process.

3) Observation

The role of observation is to observe all activities carried out in the action stage. The subject of this observation is all student actions in the process of teaching and learning activities. Observation aims to describe everything that has to do with the research topic, find out the difficulties faced by students and see the answers given by students. Observation is also used to collect data needed in research. The role of observation is to observe all activities carried out in the action stage. The subject of this observation is all student actions in the process of teaching and learning activities. Observation aims to describe everything that has to do with the research topic, find out

the difficulties faced by students and see the answers given by students.

4) Reflection

Reflection means remembering, evaluating and contemplating an action exactly as it has been recorded in the observation. The function of reflection is to understand the real process, problems and obstacles in the strategic action. Reflection is often supported by discussions between researcher and teachers. Through discussion, reflection becomes the basis for improving the plan. Reflection is the process of analysis, interpreting and recognizing all data obtained from observations of the implementation of actions.

The cycle two plan was developed based on the reflection obtained from the observation results to get better results. The redrafting of the plan consisted of two areas of application, namely fluency in vocabulary and the classroom situation when ESA method was applied to students in the classroom. In the next cycle, the researcher developed a lesson plan consisting of material preparation, learning media, student exercises and everything related to the action. The cycle two took place in two meetings. The cycle two was based on the reflection on the first cycle, so as to make the teaching-learning process through ESA method better than the first cycle.

In using the ESA method as a technique to be applied in the classroom, the teacher must pay attention to the ESA method

procedure, so that teaching and learning activities in the classroom can run well.

B. The Subject of the Study

In this research, The researcher need a population to be study as a research subject. This research was conducted at SMP Nusantara Indah Sintang. So in this research the researcher use a sample of seventh grade students of SMP Nusantara Indah Sintang in the academic year 2022/2023. The research subject as a place where data for research variables are obtain and determin in a framework of thought. The subjects of this research are students of seventh grade which consist of 19 students, 11 males and 8 females. The sample take base on the researcher interest in the problem of vocabulary mastery at school that the seventh grade students of SMP Nusantara Indah Sintang still need to handle English subjects, especially to congratulate the the others.

C. Data Collection Technique and Instrumentation

Data collection technique and instrument that can determine the result of research. The data collection technique and instrument use in this research are:

1. Data Collection Techniques

a. Observation

Observation is defined as a technique that is cary out by systematically observing and recording. Researcher observe student behavior and observe the learning process in the classroom to find

problems face by students and see how to learn after using the techniques that researcher and teachers use. Researcher need to make observations because researcher want to see something that happens in the classroom. The researcher also wanted see the students' responses when the ESA method. According to Creswell (2014, p.85) mention that observation are those in which the researcher takes field notes on the behavior and activities of individuals at the researcher site.

In this observation, the researcher uses participatory observation to observe the teaching and learning process in the classroom. Participant of observation is an observation in which the person conducting the observation participates in taking part in the life of the person being observe. This observation is used to determine the atmosphere of the learning process and student behavior when the action is take. In this observation, the researcher wii assist by the teacher when teaching English in the classroom.

In this observation, the researcher observed student behavior in teaching and learning activities. Researcher observed to determine whether there was an increased in student vocabulary mastery through the ESA method. The researcher observe during the teaching and learning process before using ESA method and after using the ESA Method, so that the researcher could see an vocabulary mastery in student learning when using ESA method and without using ESA method

b. Interview

Interviews are a data collection technique by which researcher can conduct face-to-face interviews (face-to-face interviews) with participants in Interviews were conducted in a semi-structured manner, where the researcher use a framework of questions to ask and these questions could develop so that researcher could obtain as much information as possible about the subject's self-development abilities. DiCicco & Crabtree (2006, p.317) mention that Interview is meant to be a personal and intimate encounter in which open, direct verbal and questions are used to elicit detailed narratives and stories. Classifies interviews into four types, namely (1) one-on-one interviews, (2) focus group interviews, (3) telephone interviews, and (4) electronic interviews. In this research, researcher use one-on-one interviews. Interviews were conduct on the subject's parents who could provide information in connection with this research. With this method, it is hope that direct, flexible and flexible and open communication will occur, so that more and more information can be obtain.

The researcher conduct interviews with students after the ESA method was apply in the classroom, to see the response and find out the student's opinion in applying the ESA method in the classroom. In this interview, the researcher only interviews a few students. Researcher select students base on grades and gender. The researcher interview three males and three female students who got high scores,

students who got moderate scores and three students who got low scores. Open interview, is open-ended questions. When the researcher asks the subject to answer with their own ideas. The answer can be long or short, it really depends on the personality of the subject. Burns & Grove (2009, p.75) stated that A third type of interview is an open one where there are no pre-planned questions. In this research, researcher use open interviews when interviewing subjects. The researcher use an open interview technique because the researcher wanted to find information and the researcher want to know more about students' responses to the application of the ESA method in improving students' vocabulary mastery.

c. Measurement

Measurement is the process of collecting data through empirical observations that used to collect information that is relevant to the goals that have been determine. In this case the teacher assesses student achievement by reading or observing what students do, observing their performance, hearing what they say, and using their senses such as seeing, hearing, touching, smelling, and tasting. Allen & Yen (2001, p.2) stated that measurement is determining number on the individuals in a systematic way that reflects the nature (characteristic) of the individual. So, measurement is an activity carry out determine quantitative facts by comparing something with a standard unit of measure that is adjust according to the object to be

measure. Measurement is not only able to measure things that are visible but can also measure things that can be imagine such as consumer confidence, uncertainty, etc.

In this research, researcher use measurements to collect relevant information, researcher can also measure student characteristics. With measurement techniques, researcher will assess student achievement and observe what students do. With measurement, researcher can also determine quantitative facts by comparing things and adjusting to the object to be measure. Quantitative research is an approach for testing objective theories by examining the relationship among variables Creswell (2018. p. 44).

B. Scoring Rubric and Assessment Indicator

This assessment rubric was arranged base on the indicators of vocabulary mastery in the student's vocabulary in related theories use in this research. This assessment rubric was take from McTighe, and Arter (2001, p.8) a rubric is a particular format for criteria it is written-down version of the criteria, with all score points described and defined.

Table 3.1 Scoring Rubric

Aspect	Score	Descriptions	Actual score
Quantity (30%)	4	Students are capable to mention between 16 to 20 vocabulary	X 7,5
	3	Students are capable to mention between 11 to 15 vocabulary	
	2	Students are capable to mention between 6 to 10 vocabulary	
	1	Students are capable to mention between 1	

		to 5 vocabulary	
Meaning (30%)	4	Students are capable to mention the meaning in Indonesian between 16 to 20 vocabulary	X 7,5
	3	Students are capable to mention the meaning in Indonesian between 11 to 15 vocabulary	
	2	Students are capable to mention the meaning in Indonesian between 6 to 10 vocabulary	
	1	Students are capable to mention the meaning in Indonesian between 1 to 5 vocabulary	
Spelling (20%)	4	Students are capable to spell the vocabulary between 16 to 20 vocabulary	X 5
	3	Students are capable to spell the vocabulary between 11 to 15 vocabulary	
	2	Students are capable to spell the vocabulary between 6 to 10 vocabulary	
	1	Students are capable to spell the vocabulary between 1 to 5 vocabulary	
Pronunciation (20%)	4	Students are capable to pronoun the vocabulary correctly between 16 to 20 vocabulary	X 5
	3	Students are capable to pronoun the vocabulary correctly between 11 to 15 vocabulary	
	2	Students are capable to pronoun the vocabulary correctly between 6 to 10 vocabulary	
	1	Students are capable to pronoun the vocabulary correctly between 1 to 5 vocabulary	

This is the formula to calculate the students' score:

$$\text{Total score} = (A \times \Omega) + (B \times \Omega) + (C \times \Omega) + (D \times \Omega)$$

A = obtain score from aspect quantity

B = obtain score from aspect meaning

C = obtain score from aspect spelling

D = obtain score from aspect pronunciation

Ω = actual score for each aspect

After conclude the test, the researcher will determine the level of vocabulary mastery at this school, the vocabulary level is determine base on the table 3.2

Table 3.2 level of student's vocabulary mastery

Criteria	Score range
Excellent	81-100
Good	70-79
Fair	60-69
poor	0-59

C. Instrumentation of Data Collection

In this research, to collect the data the researcher uses some tools of data collection, namely: Observation sheets, Interview guideline and Test sheet.

1. Observation sheets

Observation sheet is a record of observe by fellow teachers who act as observers. This observation sheet contains notes on the learning process that is observe as it is in accordance with what happens in the process of action that includes teacher activities, student activities and environmental conditions in the process.

2. Field notes

Field notes in qualitative research, field notes are an important part as a data collection tool. Field notes are notes about events or events during observations regarding behavior, mental attitudes or events that were not previously plan, attitudes or behaviors that arise spontaneously or in an organized manner. Gray, (2004, p.324) defines Field notes remain one of the mainstays of qualitative data collection methods. In addition Creswell (2012, p.216) mention that field notes

are texts or words recorded by the researcher during an observation in a qualitative study.

In classroom action research, field notes use record event related teacher or student activities during the learning process or outside the learning process, this is intend to provide strength to the expect research results. Because basically those relates to aspects of human attitude or behavior are always changing at any time and field notes can be immortalized even though they are not as optimal or as recorders. According, the note consists of two parts, namely:

1. A description of what we actually observe, which really happens according to what we see, hear or observe with our instruments
2. Comments, interpretations, reflections, thoughts or our views on what we observe.

In this research, research notes are very useful for researcher as an intermediary tool that researcher, hear, feel in the context of collecting data. Field notes were prepared after observation and after conducting interviews with research subjects. This is an interview with the research subject. This is to facilitate the preparation of reports because the data obtained will easily forgotten by researcher. Therefore, field notes can be used as the heart of qualitative research because a theory must be support by data and material in memory. Likewise, in making research reports, everything must be support by data in the field, in this case field notes. Field notes must be descriptive, give the date and

time, and record by including basic information such as where the information was obtained, who will present, the physical setting of the environment, social interactions, activities that occur.

3. Interview guideline

Interview guideline is made to capture research patterns that have the special nature of verbal interactions between researcher and respondents, which was initiated for a purpose of research. Before conducting an interview, you need an interview guide that you can use to help direct the conversation to the research topic and formulation of the problem you want to study. Interview guides vary from being written in great detail to relatively loosely, but they are basically to: help you know what to ask, in what order, how you ask questions, and how to submit follow-up. This provides guidance on what to do or say next, after the person you interviewed answers the last question. Interview guidelines are used to determine teacher responses regarding learning that has been carried out and to find out there whether or not learning obstacles.

4. Test

The used in this research form of a student's vocabulary mastery. The test is an experiment conducted to determine whether or not there are certain learning outcomes for students. A test is a stimulus (stimulus) given by someone with the intention of getting an answer that can be used as the basis for a score. This test contains themes that

are in accordance with the syllabus material for seventh grade. The test is in the form of a congratulation ability test, how many students are able to say and have a short dialogue with the congratulation request by the researcher which refers to several elements and adapted to the theme of the lesson gave by the researcher at that time research was underway. The researcher gave some stationary vocabulary students and they have to make a conversation base on what gave by. After they made a conversation, they have to convey the conversation they have make base on what the researcher have instruct and they have to fill out questions about congratulation gave by the researcher. The test conduct in at the end of the cycle, before applying the ESA method and after applying the ESA method to see the improvement of students' abilities and the effectiveness of using the ESA method in the classroom.

D. Data Analysis

This Classroom Action Research used qualitative and quantitative data. Qualitative data as primary data and quantitative data as additional data. Analysis with qualitative descriptive techniques will carry out for qualitative data in the form of observations, interviews and measurements. The data in this study were obtain through observation. Observations will make for each activity. The main function of observation is to find out whether the ESA method can improve students' vocabulary mastery. There were also interviews used to collect data for qualitative data analysis.

Qualitative research is best suit to address a research problem in which you do not know the variables and need to explore According to Creswell (2018, p.44) argue that Qualitative data is use to describe everything that happens in the classroom. And there is also a measurement use to measure the character of students. Qualitative data is also use to describe the results of the application of the ESA method, about how students respond, about the extent to which the ESA method can improve student vocabulary mastery in the classroom.

Meanwhile, quantitative data were analysis using descriptive statistics, quantitative data in the form of scores on students' vocabulary mastery test results in each cycle. In quantitative research and qualitative research which seeks trends, patterns, predictability and control Manion, and Morrison (2002, p.268) argue that Researcher used tests to obtain data as a quantitative data collection technique in this study. The information obtained will be discussed, studied and solved together between researcher and collaborators. Quantitative data is used to describe the increase in student scores. Descriptive statistical methods were used to analyze quantitative data. This is done to compare the students' vocabulary mastery before and after the action by dividing the number of students' scores by the number of students before and after the action.