

CHAPTER III

RESEARCH METHODOLOGY

In this part, the writer explained about Research Design, the Subject of the study, Data Collection Technique, data collection instrument, and Data Analysis.

A. Research Design

This research design refers to the stage in the process of developing a research strategy in which the writer decides what kind of research will be employed to conduct the future study. Thyer (cited in Ranjit Kumar. 2011. p.94) stated that a research design is a procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately, economically. It means research design is a plan and the procedure for research that the span the decisions from broad assumptions to detailed method of data collection and analysis. Research design is blueprint or detailed plan for how research study is be completed-operationalizing variables so they can be measured, selecting sample of interest to study, collecting data to be used as a basis for testing hypotheses, and analysing the result. Meaning of statement a research design is a plan for conducting research that typically involves several steps and a model that the writer will put into practice in the real world in order collect data.

The research strategy adopted by this investigation was that of classroom action research. To confirm or see an improvement and to describe to student's reactions to the use of the drilling technique in the classroom, the

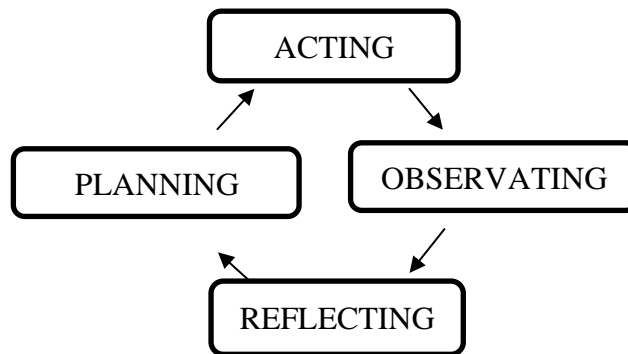
writer opted for the classroom action research design because it was based on the teaching and learning process in the classroom. Action research is a systematic approach to research that enables people to find effective solutions to problems they confront in their everyday lives (Stringer, 2007, p. 1). In addition, Classroom Action Research is a combination of definitions of three words, namely research action class the meaning of each word is as follows; 1) Research: the activity of observing an object by using certain methods and methodologies to obtain useful data or information in solving a problem. 2) Action: an activity that is intentionally carried out with a specific purpose. Actions carried out in Classroom Action Research in a series of activity cycles. 3) Class: a group of students who at the same time receive the same lesson from the teacher.

Classroom action research is used to improve instructors' instructional strategies, increase students' test scores, and resolve academic difficulties. In order to confirm or see gains and explain student responses to the use of Drilling in class, the writer here employed a research design known as Classroom Action Research. Because of its suitability for the objectives of this study, the writer settled on the Classroom Action Research methodology. Research that is implemented immediately in a classroom setting is called "Classroom Action Research". The term "Classroom Action Research" refers to studies undertaken by instructors in the classroom to enhance their own teaching practices and ultimately the learning results of their students.

Writer conducted in a classroom setting, known as "classroom action

research", aims to enhance education for all involved. In other words, the purpose of classroom action research is to enhance classroom instruction and student learning. Writer improved student's language retention and classroom engagement with the use of Classroom Action Research. The writer adopted this strategy because she saw a number of issues at SMPN 03 Sokan, most notably a lack of vocabulary mastery and a general lack of motivation among seventh grade students. Classroom Action Research ultimate goal is to enhance the standard of classroom practice. Planning, carrying out the plan, observing the results, and reflecting on the process are the four phases of the Classroom Action Research methodology. There is a cyclical relationship between these four steps, in which the process repeats itself after each round. Teachers and writer will work together on this Classroom Action Research, which is also known as research by collaboration.

The writer used the classroom action research method, classroom action research generally aims to enhancing a certain skill in students where each teaching and learning process certainly has certain levels and steps in an effort to achieve targeted learning objectives, as stated by Kemmis and Mc Targgart (cited in Burn 2010, p. 7-9). Classroom action research usually has four main phases in the research cycle. The cycle can be a spiral cycle that allows the research to continue, or be repeated, until the writer achieves the results. The writer can repeat the cycle if the writer feels that they have not obtained the targeted results and can stop if the desired results have been achieved.



Adapted from kemmis and Mc Taggart (1988, p.9)

Figure 3.1 CAR Model

The implementation of this research the writer conducted planning, acting, observing, and reflecting:

1. Planning

Using the drilling technique, the writer began to prepare materials and all of the activities for teaching vocabulary mastery. Preparation include preparing lesson plan and media, as well as creating the scoring rubric and other instruments.

2. Acting

In this study, the action is carried out by carrying out the prepared strategy for teaching using drilling technique. In this study, actions include delivering the material learning in accordance with the lesson plan standards, assessing the learning process, and reflecting.

3. Observing

Observations in this study occurred in the classroom during the learning process using drilling technique. The data acquired through

direct observation are analyzed in light of the intended corrective action. The information gleaned from this process will be assisted by a collaborator to assess whether the drilling technique could make it easier for students to learn vocabulary and whether students participated more after using the drilling technique.

4. Reflection

Reflection is an attempt to assess what has occurred, what has been produced or has not been produced, and how the action that have been implemented have been finished. The outcomes of these reflections are utilized to determine the next steps in accomplishing the learning action objectives.

B. The subject of study

The subject of this study is involving of fourteen students from seventh grade in SMP Negeri 03 Sukan. The writer only takes the students from seventh grade as subject in order to conduct the research and obtain the data because their comprehension toward the vocabulary are lacked and they have a hard time to overcome it. Therefore, the writer intends to help and solve it by applying the drilling technique during the process of teaching and learning activity later.

C. Data Collection Technique and Instrumentation

A sample is selected from a larger population through random selection. A sample is a smaller version of the population, the group to which the

researcher would ultimately like to generalize or apply the results of the study Lodico et al. (2010, p. 25). Meanwhile Cohen et al. (2007, p. 105) said that with both qualitative and quantitative data, the essential requirement is that the sample is representative of the population from which it is drawn, sample is the population. The writer selects a data collection methodology that employs both qualitative and quantitative methods.

1. Data Collection Technique

The writer selects a data collection methodology that employs both qualitative and quantitative methods. Collect qualitative data, such as the outcomes of interview and observation, as well as quantitative data, such as students test results.

a. Observation

This observation is carried out to find out how teaching and learning occur in the classroom. Observation is often used in research to observe what is happening in the field. According to (Kothari, 2004, p. 96) the observation technique is the most generally used method especially in behavioral research studies, the way in which we all observe the things around us.

b. Interview

The interview is one of the techniques to collect the data. According to Kumar (2011, p. 144) interview technique is generally formed as a technique to collect information from the subject. In the others aspect of life, we gained the information through kind forms

of interaction with the others.

The writer using interview technique because interested in both collecting data and gaining a deeper understanding of students' reactions to the use of drilling to enhance vocabulary retention. In addition, it is also used to direct researcher to easily understand and interpret the information received from respondents, so that researcher can easily obtain data in accordance with research needs. Therefore, researcher was used the interviews as a technique for obtaining data in the field.

c. Measurement

Measurement is known as one of the techniques in data collection that can be used by researcher to obtain quantitative data, so that it quantitative data, so that it can also be used as additional information to reinforce and support qualitative explanations in to emphasize and support qualitative explanations in research activities.

In addition, the use of measurement in research activities generally appears in various forms such as scoring rubrics or even achievement criteria that are used to determine the results of a test.

d. Documentation

Documentation is a form of data that includes things like notes, book transcripts, photographs, videos, summaries, agendas, and more. According to Kawulich (2005, p. 12) a major deliberation in a research study is to conduct the research in an ethical manner

and to let the subject or people know that the purpose of the observation is to monitor their activities. This technique is used to find out the condition of teachers and students, school profiles and locations. In this research, writer used photos and videos as documentation.

2. Instrumentation

Instrumentation in data collection can be interpreted as tools, media or even equipment prepared and used by writer in order to carry out data collection techniques in the field during research activities. Instrumentation in data collection in general is divided into several forms based on the use of each technique. In this research, in collecting the data the writer used some tools of data collection, namely: Observation checklist, field notes, Interview guideline, and Test sheet.

a. Observation checklist

Observation checklist is a list observation that contains a statement or question related to the method use by the writer with a structure and framework for observation but also serves as a contract of understanding with the teacher, which a result may be more complex and will elicit specific feedback on aspects during classroom teaching. This list of observations is given by the teacher to the writer during teaching and learning activities. And will provide result regarding whether the drilling technique is effective for enhancing students' vocabulary mastery.

b. Field notes

Field notes are known as instrumentation that is often used in observation activities in which it contains notes about activities, situations or conditions during research, the continuity of implementation of research, and so on. Demunck and Sobo(in Kawulich, 2005, p. 22) recommend took the two notebooks to wrote notes in the field, one with questions to answer, the other with more personal observations that may not fit the topic discussed in the first section. Keeping important notes in two separate notebooks helps avoid mixing them together during a search. Interview notes and observations are all appropriate for the first notebook of field notes. Field notes were utilized in classroom action research to keep track of what was happening as it related to the actions of teachers and students. The purpose of this study is to bolster writing findings so that the full learning process involving the behavior or attitudes of students and teachers can be documented in field notes.

c. Interview Guideline

Interview guide is a sort of instrumentation that it employs through the interview activity it consists of various questions that have been organized for the interview, and it used to conduct interviews. Boyce and Neale (2006, p. 5) develop an interview guide that lists the aspect to be asked or issues to be explored during interviews to the subject and include an informed consent form. In

the research activity, the use of an interview guideline serves two primary purpose : first, is used to acquire information about the interviewee's experience and viewpoint after they have followed the entire activity; second, it is used as supplementary data for qualitative explanation. Both of these functions are accomplished through the utilization of the interview guidelines.

d. Test sheets

The test sheet is used as an instrument to obtain data in the form of student scores. Test refers to an instrument that is used in the process of data collection. This instrumentation displays quantitative data that is typically acquired through the process of measurement. In general, the examination will consist of a number of questions, which may be of the multiple-choice or essay variety, each of which requires a proper response. Anderson (2000, p. 170) said the purpose of my class test is generally to do assess the learners progress in vocabulary learning and more specifically, to give them an incentive to keep studying vocabulary on a regular basic.

Tests, in general form, are methods to measure a person's skills, knowledge, or performance in mastering the ability of something (Brown, 2004, p. 3). It means that the test is in the form of questions or exercises that are used to measure the knowledge skills, abilities or talents possessed by individuals or groups. So this test question is used to measure the learning outcomes obtained by

students. Efron and Ravid (2013, p. 156) stated that rubric allows to assess these complex and multifaceted assignments that are often hard to evaluate objectively.

e. Video

Video recording is taken during the learning process, which help the writer to obtain information that could not be captured by observation checklists and field notes.

Table 3.1 Scoring Rubric

Aspect	Point			
	1 (poor)	2 (average)	3 (good)	4 (excellent)
Quantity	The student is able to write about 1-5 word	The student is able to write about 7-10 word	The student is able to write about 15-16 word	The student is able to write about 17-20 word
Meaning	The student is able to understand 1-5 meanings of words	The student is able to understand 7-10 meanings of words	The student is able to understand 15-16 meanings of words	The student is able to understand 17-20 meanings of words
Spelling	The student is able to spell 1-5 words correctly	The student is able to spell 7-10 words correctly	The student is able to spell 15-16 words correctly	The student is able to spell 17-20 words correctly
Pronunciation	The student is able to pronounce 1-5 words correctly	The student is able to pronounce 7-10 words correctly	The student is able to pronounce 15-16 words correctly	The student is able to pronounce 17-20 words correctly

Adapted from Read (2000, p.75)

Based on the rubric table above, the maximum point of this rubric is 16. This, the writer is going to use the formula below the calculated the score:

$$\text{Score} = \frac{\text{obtained point}}{\text{maximum point}} \times 100$$

interpretation

score : the students score
 obtained point : the students total point
 maximum point : 16

1) Level of Student's Vocabulary Mastery

After conducting the test, the researcher will determine the level of vocabulary mastery in this school, the level of vocabulary mastery is determined based on the table below:

Table 1.2 Level of Student's Vocabulary Mastery

Criteria	Score range
Excellent	80-100
Good	60-79
Fair	50-59
Poor	0-49

Adapted from Harris (1979, p.116)

The level of students' vocabulary mastery is obtained from the scores obtained by students after the learning process, so that the writer can determine the level of students' vocabulary in this class. For example, if most students score between 60-79, then it can be said that the students' vocabulary level is good.

D. Data Analysis

The writer has quantitative and qualitative data because the writer used classroom action research. The qualitative data is observation and interview while the quantitative data is test. In data, the writer is going explain about qualitative data, quantitative data and the criteria of success.

1. Qualitative data

The writer and the same research and took a qualitative design suggested by Burns (2010: 104), the process of qualitative data analysis consists of five stages namely (assembling the data, coding the data, comparing the data, building interpretations, reporting the outcomes).

2. Quantitative data

Quantitative data is the secondary data of the research. Quantitative data means declaring the data in numeric form. Kothari (2002, p. 3) said quantitative data referred to measurement of quantity or amount. In other word, it used statistical analysis to calculate the numerical data. These data were expressed in the mathematics and must be evaluated and interpreted by means of appropriate statistical procedure.

3. Criteria of success

The indicator of success in this classroom action research is when the vocabulary mastery of students had increased. In this research, the writer needed several criteria to determine whether a cycle was successful or not. These criteria of success are used as guide by writer to decide whether this cycle has been successful or not and whether another

cycle should be done. The criteria of success in this research are described in the table below:

Table 3.3 Criteria of Success

Instrument	Indicators
Observation	If 70% of student's participate actively, enthusiastically, and enjoy the lesson, the cycle is considered successful
Interview	If 70% of student's respond positively and give opinion about the learning process, the cycle is considered successful
Test	If 70% of student's scores increase, the cycle is considered successful

Based on this research, a cycle will be said successful if 70% the students are got score in good criteria with score 70, then their can had be considered successful and the criteria of successful also seen in the another instruments such as, observation checklist and field note, interview guideline and documentation. Also the writer can seen in students are activities, and motivated in learning. When 70% or more students are good to learning by used drilling technique, the cycle can be said successful so the teacher do not needed cycles to drill the research.