

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

As said by (Juanda, 2016), Research Classroom Action is research to help someone in solve practically th problems encountered in the situation emergency and assist the achievement of social science goals with work together within a mutually agreed ethical framework. Study Class action can also be interpreted as a scientific activity what teachers do in their own classrooms by designing, implement, observe and reflect on actions through several cycles in a collaborative and participatory manner to improve the quality of the learning process in his class.

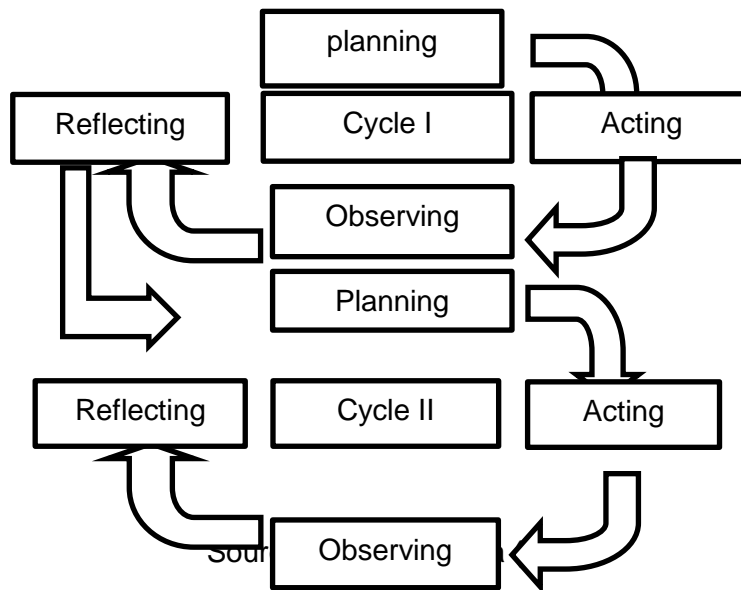
In the opinion of (Sukarsono et al., 2014) Classroom action research is a research conducted systematically reflective of the various actions taken by the teacher and is also a researcher. In this research, the researcher used a model that is proposed by Kurt Lewin in (Juanda, 2016) describe action research as a cyclical process spiral, which includes: planning, implementation and observation. Model Kurt Lewin became the main reference or basis for the existence of various other action research models, especially CAR. It says so, because he was the one who first introduced action research.

Researcher will conduct research by implementing classroom action research which consists of several cycles, each cycle consisting of four steps, namely: planning, action, observation, and reflection. Based on this method, this study will use word square media to improving students' vocabulary mastery. Sources of data are teachers and students. For data collection researcher used Test, observation, Interview, and Questionnaire. Research data on test results can be analyzed with individual scores and minimum completeness criteria (KKM).

B. The Procedure of Classroom Action Research

According to Kurt Lewin in (Juanda, 2016) stated that there are four steps in conducting action research, namely: planning, action, observation and reflection. The cycle which consists of four steps, the explanation is as follows:

Picture 1.1. CAR Implementation Cycle According to Kurt Lewin



1. Planning

In this stage the researcher took several actions such as observing the learning process techniques used by the previous teacher, identifying inhibiting and facilitating factors in the previous learning process, formulating alternative actions to be taken, then finally preparing a learning plan. From the explanation above the researcher made a schedule, which first observed the condition of the school, class conditions and also students then school facilities, as well as the learning methods used in the class. after that, set learning objectives based on observations, as part of the learning plan.

2. Acting

Acting is the implementation of planning in class. At this stage, researchers must follow the program in planning. This stage is carried out by implementing a learning plan for teaching reading. The cycle begins with giving a pre-test to students. The pretest results will then be compared with the posttest results. The researcher presents the following research actions: 1) Giving a pre-test 2) Learning vocabulary using word square media 3) Providing opportunities for students to ask about difficulties or problems 4) Giving a post-test

3. Observing

Observation is the process of researchers looking at learning methods and also gathering facts related to the impact of these actions. Then the researcher and the student's English teacher discussed the results of observations including what problems TITL eleventh grade students had in understanding vocabulary and also looking for solutions to overcome

these problems. To solve problems for students, researchers will record problems in the learning system

4. Reflecting

Reflecting is investigating the information that has been collected and if it fails then it will go to the next cycle stage. Research is said to be successful if 70% of students follow the learning method well and also provide appropriate responses to the teacher. Likewise, students increase their vocabulary scores by working on multiple choice and essay questions. The benchmark for success set by researchers is if 70% of students get the KKM score. If less than 70% of students can achieve the KKM score, it means the researcher must take action in the next cycle.

C. The Subject of the Study

This research is carried out in eleventh grade of SMK Negeri 3 Metro for the 2022/2023 academic year with eleventh grade research topics including 32 students including 31 male students and 1 female student. The researcher selected this class to be the research subject due to the fact maximum of the eleventh grade students is much less motivated in learning English, and the predicted grades remains under the average. With the Word Square learning media, it's far was hoping that eleventh grade students can learn actively, in order that student learning effects increase.

D. Research Instrument

1. Test

Test is some question items regarding the material that has been given to research subjects, to measure ability of students with inside the level of mastery of the material on the end learning.

2. Observation

Observation refers to a technique in which one or more people observe what happens in some real-life situation. It is used to evaluate an individual's overt behavior in controlled and uncontrolled situations. As a good research tool, observation requires good planning, adequate recording. When the researcher made observations of the teacher and students, the researcher made a checklist sheet to determine student learning activities.

3. Interview

Interview is an interaction process where the subject being interviewed provides the required information verbally in a face-to-face situation. Researchers conducted interviews with teachers and students about English language learning.

4. Questionnaire

Questionnaire is an instrument in research including a series of questions for the reason of gathering information from a respondent. This questionnaire is used to answer students' responses to the second problem formulation. This type of questionnaire is a type of closed questionnaire, which includes closed questions using Google Form.

E. Data Collecting Technique

For this research, there were four techniques used by researchers in collecting data, namely using tests in the form of pre-test and post-test,, observation, interview, and questionnaire. The explanation is as follows:

1. Test

For data collection with inside the shape of a test including a pre-test and post-test. The pre-test is carried out earlier than taking the action at the same time as the post-test is conducted after taking the action. Researchers will use the test used as an assessment.

a. Pre-test

The pre-test can be performed at some point of the primary meeting with the researcher to look how a lot of students understanding of learning. The test can be given approximately 90 minutes. The tests consist of multiple choice. For the question grid for multiple choice such as, identify and distinguish the types of part of speech, identify and understand a part of speech words, make simple sentences the usage of numerous types of a part of speech words.

b. Post-test

The post-test can be carried out at the final meeting in cycle 3, the post-test is the same as the pre-test.

2. Observation

In this research, researchers will observe teachers and students during the learning process takes place. In this study, researchers used a type of observation that can be done only by using a checklist in the space provided.

3. Interview

For data collecting in the form of interviews, the researcher interviewed teachers and students. The teachers were interviewed in the form of questions about students' abilities in learning English and what learning methods had been used by the teacher which caused these students to feel less active in learning, especially in vocabulary material. Then students were also interviewed about students' difficulties in learning English, especially in vocabulary.

4. Questionnaire

For data collecting in the form of a questionnaire, the researcher will give the questionnaire a question using the Google form, then the researcher will share the Google form link in the WA group. After that students are only asked to answer questions with two answer choices, namely in the form of yes or no.

F. Technique of Analyzing the Data

All of the data would be collected by pre-test and post-test, the following procedure was used:

1. The researcher tried to get the score per action within one cycle. It was used to know how well students score as a whole on vocabulary skill. The count of the percentages of the score test by using the following formula (Sainuddin Anita Anggraeni, 2019):

$$\text{Score} = \frac{\text{students correct answer}}{\text{The Total of Number}} \times 100$$

2. The collection data from the students in answering the test, the researcher use formula to get the mean score of the students as follows (Tri, 2018):

$$\bar{X} = \frac{\sum X}{N}$$

Note :

$$\bar{X} = \text{Mean or average score}$$

$$\sum X = \text{Total students score}$$

$$N = \text{Total number of students.}$$

3. The research ertries to get the class percentage which pass the KKM (70) computing the frequency and the percentage of students score of the students as follow (Nurhalimah, 2020):

$$P = \frac{F}{N} \times 100\%$$

P = The class percentage

F = The number of correct answer

N = The number of the question

4. Classification score evaluation

Table 4. Classifying the score five levels classification

No.	Classification	Score
1.	Very good	80-100
2.	Good	66-79
3.	Fair	56-65
4.	Poor	40-55
5.	Very poor	0-39

(Sainuddin Anita Anggraeni, 2019)

The researcher gets score from on cycle conducted in the research. It is to know how far the progress of the students in teaching and learning process. The researcher also used formula to find the final score based value KKM (70) of target score.

5. Observation Sheet

There are two kinds of observation sheets in data collection, namely teacher activities and student activities. During the observation, the researcher collected data on the teaching and learning process. that is what is taken from the observation sheet when teachers and students are in the teaching and learning process. The form of the word answers "yes" and "no". The situation observed was about using word square media in teaching vocabulary mastery and how to improve students while using word square media. The activity is continued by marking a checklist on each item.

6. Analyzing data from interview

Regarding the data from interview the researcher conduct analysis from Miles and Huberman (1994, p.10) in (Ansari, 2015) which divided of two components; data reduction and data display.

a. Data reduction

In the data reduction, the researcher reduced the data from interview in order to know participants' viewed from their explanation that related English vocabulary.

b. Data display

In displaying the data from interview, the researcher displayed it in form of written data that has been reduced in order to make explanation participants' viewed from their explanation related to English vocabulary.

7. Analyzing data from questionnaire

The data obtained from the questionnaire was analyzed through calculating the percentage of each answer by following the formula, (Thahir, 2019):

$$\text{Percentage (\%)} = \frac{E}{N} (100)$$

Where :

P : Percentage

F : Frequency

N : Total of Number

100% : Fixed Number

The highest percentage of answers to each question is considered to determine students' responses in improving vocabulary.