

CHAPTER III

RESEARCH METHODOLOGY

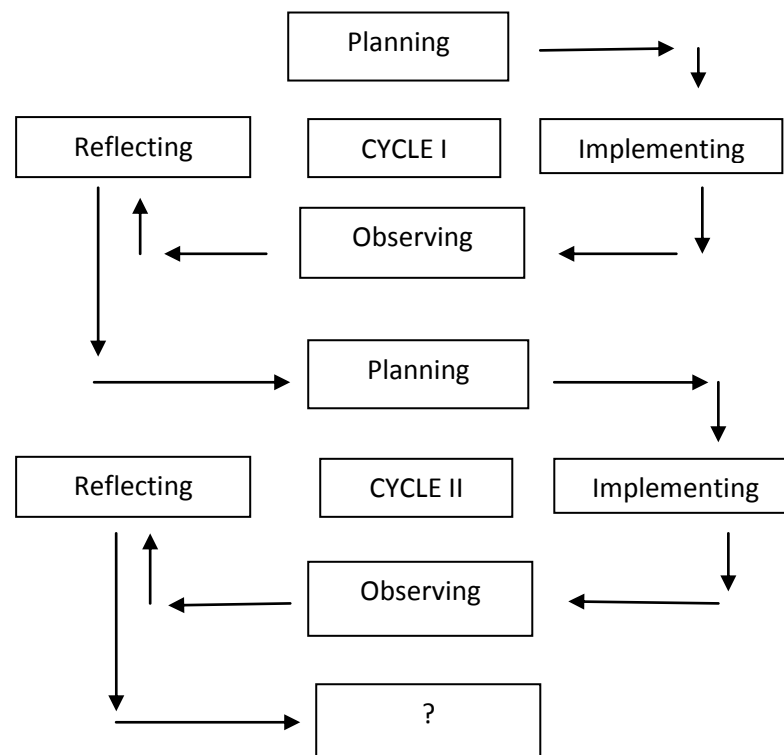
A. Research Design

This research was a Classroom Action Research. According to Kemmis in Indriyani et al. (2020), classroom action research was a reflective inquiry carried out cooperatively regarding certain social situations (including education) with the aim of increasing the rationality and fairness of social and educational practice activities, and increasing understanding of educational practice and the situations that supported its implementation. In simple terms, classroom action research was about how teachers could organize students' learning environments to try to improve their learning and observe the impact of those efforts. Since this research did not aim to prove a particular theory but to find the best way to solve problems in the classroom, the classroom action research method was the right choice. However, the Kemmis and McTaggart model of Classroom Action Research design consisted of four stages: plan, act, observe, and reflect.

Classroom Action Research (CAR) was a type of research in which the researcher focused on solving classroom problems. According to Suharsimi Arikunto and Suhardjono (2015), CAR was a style of research that was reflective, participative, collaborative, and spiral in nature, with the goal of solving and improving the system, method, process, substance, competence, and condition. CAR consisted of four components in a cycle that were repeated numerous times in order to fulfill the study's goal.

B. Procedure In CAR

The procedure in Classroom Action Research (CAR) was planning, implementing, observing, and reflecting. If the first cycle did not produce satisfactory results, it was carried out again until the expected results were achieved.

Table 2. Process of cycle in CAR

source : Kemmis and Mc Taggart (2020)

A. Planning

The researcher first chooses the focus of the event that requires special attention to be watched, and then constructs an observation instrument to enable the researcher capture the facts during the activity. Planning activities include: (1) identification of problems, (2) formulation of problems and causes of problems, (3) development of interventions (action/solution) (Sunardi, 2012).

In this step, the researcher prepared a lesson plan as a reference for the material that would be given to students, prepared pre-test and post-test questions to assess success in the research, and prepared an observation sheet to determine the extent of student participation in the learning process.

B. Acting

In this the implementation which is the application of the contents of the design, namely carrying out class actions. At this stage the teacher must remember and try to comply with what has been formulated in the design/according to the scenario, but must act naturally, not artificially. The scenario should be described in as much detail as possible (Sunardi, 2012).

The researcher implements the lesson plan that has been prepared previously. In 1 cycle, there are 3 meetings, and a post-test is given in the fourth meeting.

C. Observing

This stage actually coincides with the same time. Action is in progress, both are ongoing in execution. Observations were made over time. This stage the researcher/teacher makes observations during the implementation of the action. And record all the things that are necessary and happen. Data collection uses an observation format regarding its impact on student learning processes and outcomes in Sunardi (2012). The researcher makes observations using the prepared observation sheet. These observations are carried out during the learning process..

D. Reflecting

This stage is designed to completely examine the action made based on the data collected, and then review it for the purpose to improve the following action. The process of reflection in classroom action research (CAR) is the process of studying, synthesizing, and assessing the results of observed activities. If there are any concerns from the phase of reflection, a re-assessment process can be carried out in the following cycle, including: re-planning, re-action, and re-observation to rectify the problem. (Sunardi, 2012).

After acting and observing, The researcher reflects on the results of the treatment that has been carried out. If student participation in the learning process increases and the score on the post test also increases, it means that the first cycle was successful. But to ensure this, a second cycle is carried out.

E. Criteria Of Success

The criteria for success are set to determine whether the learning activities in the research are successful or not. Students who receive a score of 74, the lowest passing score for the English subject at SMP Negeri 7 Metro, are classified as successful or having passed the exam.

Based on the school curriculum, students are considered to have mastered a subject with a success indicator of more than 74 on the student's score. If 70% of 31 students get an average score of 74 then it is considered successful. Student participation or observation sheet scores in the learning

process are an average of 50, so if 70% of the 31 students on the observation sheet achieve an average score of 50, this research is considered successful.

C. Variable

Variables were characteristics, attributes, or properties that can change or be changed. It was a measurable or observable quantity that can take on different values depending on the person, object, event or situation. Variables were used to study and understand relationships, patterns, and influences in research studies. According to (Oyebanji, 2017) there were two types of research variables, Independent Variables and Dependent Variables. An independent variable is an input variable that, in part as a whole, causes a certain result. It was a stimulus that influences a factor that can be manipulated (e.g., under experimental or other conditions) to influence a response, prognostic, or outcome (tied). A dependent variable was an outcome variable that was caused in whole or in part by an input variable (free).

D. Research Subjects

The subjects selected were in class 8B, consisting of a total of 31 students, including 11 females and 20 males. The researcher selected subjects who had low scores and where the supporting teacher had not used video-based learning methods. From the results of interviews with the English teacher in class 8 at SMP Negeri 7 Metro, the researcher obtained the appropriate criteria for the research subjects. The sample in this study was one class with a total of 31 students, specifically class 8B at SMP Negeri 7 Metro in the academic year of 2024/2025.

E. Research Instrument

The instruments used by the researcher in this research are observation sheets, pre-tests, post-tests, and interviews.

1. Observation Sheet

Observation sheets helped the researcher collect information about how their teaching influenced student participation in the learning process. In this study, the researcher used observation sheets to obtain information and assess the process of implementing video-based learning in vocabulary mastery.

2. Pre-test and Post-test

The pre-test, or initial test, was given at the beginning of the study to measure students' knowledge before they received treatment using video-

based learning. The pre-test results measured students' initial abilities. The post-test determined the extent to which the basic competencies or indicators presented in the learning program had been mastered by students and helped identify the differences between the pre-test and post-test results. The score obtained from the post-test served as a reference for evaluating whether the research was successful.

3. Interview

An interview was a talk between two people with the goal of gathering important information for study purposes. According to Crabtree (2006), there were five types of interviews: Structured Interview, Semi-structured Interviews, Unstructured Interviews, Informal Interviewing, and Focus Groups.

The researcher used a semi-structured interview for this research, taking into account certain factors. Semi-structured interviews involved a formal discussion between the interviewer and respondents, with the interviewer using an "interview guide." The interviewer followed a guide to cover questions and topics in a specific order during the session. The results of this interview were used as additional data.

F. Validity

To determine the validity of the research instruments before conducting the research, the instruments were first tested by experts (judgment experts). The first judgment expert in this study was Fitri Palupi Kusumawati, M.Pd, a lecturer in the English Education Department, Faculty of Teacher Training and Education, Muhammadiyah University Metro. The second judgment expert was Wagino, S.Pd, an English teacher at SMP Negeri 7 Metro. The approved instruments were then trialed on samples. The subjects were class 8B at SMP Negeri 7 Metro for the academic year 2024/2025, with a total of 31 students.

G. Data Collecting Technique

The data collection techniques used in action research are as follows:

1. Observation

According to Anas Sudjono in (Puspitasari, 2019) Observation was a way to collect information or data by systematically observing and recording the phenomena being targeted. Observations in this study were carried out to ensure that the teacher conducted the learning process in accordance with the RPP that had been prepared previously, and to use the observation sheet for students.

2. Test

According to Suharsimi Arikunto in (Savira, 2021), the test was a measuring tool or the procedure used to measure or find out something in a way and rules that have been determined. According to Anderson (Suharsimi Arikunto, Suhardjono, 2015) that the test was series of questions, exercises or other tools used to measure skills, knowledge, intelligence, abilities or talent to obtain results in the form of data about the size of the value or performance. The purpose of the test in this study was to find out student achievement, thus the main function of the test in the classroom is to measure student achievement.

1) Initial Test (pre test)

The initial test (pre-test) was given to students before the learning using the video-based learning method was carried out, to assess their initial ability as a reference during the study process.

2) Final Test (post test)

The final test was given at the end of learning using the video based learning method which aims to measure changes or increasing student achievement during the learning process in each cycle.

3. Interview

An interview was a talk between two people with the goal of gathering important information for study purposes. According to Crabtree (2006), there were five types of interview. Those are including Structured Interview, Semi-structured Interviews, Unstructured Interviews, Informal Interviewing and Focus Groups.

H. Data Analysis Technique

All of the data were collected through pre-tests, post-tests, observation sheets, and interviews.

- a. The researcher sought to determine the score for each activity inside a single cycle. It was utilized for evaluating students' overall performance in language skills. The percentages of the results for the result test were calculated using the following formula Sainuddin in (Amilia, 2023).

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

- b. Collecting data from students' test answers. Tri in (Amilia, 2023) The researcher used the following formula to get the mean score of students who took the test, as the follows:

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

Note :

X = Mean or average score

$\sum X$ = Total students score

N = Total number of students.

c. Observation Sheet

There is an observation sheet for data collection, namely student activities. During observation, the researcher collect information on the teaching and learning process. That was gathered from the observation sheet of pupils during the learning process. Form the words to be answered using a score checklist. The issue observed concerned the use of video-based media to teach vocabulary mastery and how to improve students' vocabulary. The task continues by marking the checklist for each item, and then the average was calculated.

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

d. Analyzing data from interview

Regarding the data from interview the researcher used Miles and Hubberman in (Faris et al., 2023) was divided into two components; data reduction and data display.

1) Data reduction

The data collected in the field is substantial, so it was recorded carefully and in detail. As a result, data analysis was completed as soon as possible through data reduction. Reducing data involves summarizing, selecting key points, focusing on what was relevant, and identifying themes and patterns. This reduced data provides a clearer picture and makes it easier for researcher to collect and explore additional data as needed.

2) Data Display

The researcher displayed the interview data in the form of written data that had been condensed in order to make participants' explanations of English terminology more understandable.