CHAPTER III
RESEARCH METHODOLOGY

A. Research Design

Classroom Action Research (CAR) is an instructional approach that enables educators to examine and identify the most efficient strategies for enhancing student learning within their specific classroom settings. As described by Ur (1996: 328), CAR involves teachers conducting research on phenomena occurring in their own classrooms. Its primary objective is to enhance the teaching process of the teacher-researcher and is executed through a cycle of investigation, action, and re-investigation, often involving collaboration among two or more teachers. Furthermore, Khasinah (2013) stated that this approach provides a means for teachers to continuously improve their instructional practices, bridging the gap between personal reflection and formal educational research. While there are various methods to enhance teaching knowledge, CAR offers a structured and systematic approach that promotes self-improvement and fosters a research-oriented mindset among teachers.

According to Bogdan & Biklen (1992: 223), action research is a systematic process of gathering information with the intention of facilitating social change. Cameron-Jones (1983), on the other hand, defines action research as research conducted by practitioners to enhance their professional practice and gain a deeper understanding of it. Building on this, Allwright and Bailey (1991: 2) emphasize that action research focuses on the classroom environment and aims to investigate the actual occurrences within it. It places a strong emphasis on classroom interaction as the primary subject of investigation.

Based on Kemmis and McTaggart (1988, cited in Burns 2010), classroom action research involves four phases in a research cycle: planning, action, observation, and reflection. The research will be conducted in multiple cycles until the desired objectives are achieved, with each session lasting for two hours. Observations will be made during the classroom activities, and

reflections will be based on the observations, with the results influencing subsequent cycles.

From the aforementioned explanation, it can be inferred that classroom action research is a research methodology aimed at identifying and addressing classroom issues, accompanied by specific steps that teachers can utilize to enhance and improve the quality of ongoing learning activities.

B. Subject Of The Research

The research subjects for this classroom action research were the students of class XI MIA II at SMAN 2 Sungai Kakap during the academic year of 2022/2023. Class XI MIA II was selected as the focus of this research due to the prevalent challenges its students face in developing their writing skills. Specifically, many students in this class struggle with organizing their ideas coherently, using proper grammar and punctuation, and expressing their thoughts effectively in written form. These difficulties have prompted the need for a targeted intervention to improve the writing abilities of the students. The total number of students in class XI MIA II is 30.

C. Research Setting

1. Place

This classroom action research is conducted on the eleventh (XI) grade students of SMAN 2 Sungai Kakap in the academic year of 2022/2023. The school is located at St. Daeng Hasyim, Jeruju Besar Village, Sungai Kakap District, Kubu Raya Regency.

2. Time

This research was conducted by the researcher from May 4th, 2023, to May 10th, 2023. A detailed explanation of the research implementation schedule will be described in the table below:

Table 3.1 Details of the Research Schedule

Cycle	Day/Date	Meeting
Cycle I	Thursday, May 4th 2023	Meeting 1
	Monday, May 8th 2023	Meeting 2 & Test 1
Cycle II	Tuesday, May 9th 2023	Meeting 1
	Wednesday, May 10th 2023	Meeting 2 & Test 2

D. Research Procedure

Based on Kemmis and Mc. Taggart's work (1988, cited in Burns 2010), the research methodology used in this study is classroom action research, consisting of four stages: planning, action, observation, and reflection.

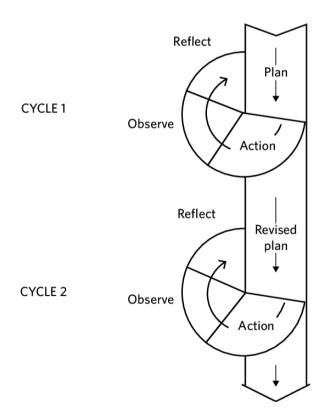Below is a cycle diagram created by Kemmis and McTaggart.

Figure 1. Classroom Action *Research Model*

(Kemmis and McTaggart model (1988:11-14, cited in Burns 2010)

a. Planning

In classroom action research, the researcher develops an action plan based on the identified problem and proposed action hypothesis. This stage involves detailed planning of what, why, where, when, and how the study will be conducted, serving as a roadmap for research operations. The following preparations are necessary at this stage:

1) Preparing a list of student names and assessments.

2) Developing a lesson implementation plan (RPP).

3) Creating Canva media, such as interactive videos (Canva-based interactive presentation slides/videos).

4) Preparing class observation sheets to document the classroom dynamics during the implementation of the chosen techniques or methods in the learning process.

5) Preparing assessments to measure the improvement of writing skills.

b. Acting

After the planning stage, comes the implementation stage, where the researcher puts the previously prepared action plan into action. During this stage, researcher need to ensure that the research actions align with the designed materials and tactics. The learning process should continue as usual, without artificial modifications, to maintain flexibility and effectiveness. The implementation involves the following steps:

1) Greeting the students.

2) Checking attendance.

3) Conducting a pretest.

4) Teaching by guiding students to attentively engage with Canva-based presentation slide and interactive videos that present the lesson content using the chosen method.

5) Administering the posttest.

c. Observing

The third stage in the ongoing learning process is observation. During this stage, the researcher carefully observes and documents all the

necessary information to meet the research objectives while implementing the planned actions. Research data can be collected through field notes and observation sheet, for example. In addition to observations, it is important for the researcher to document the actions taken during this stage, which can be done through capturing images or videos.

d. Reflecting

During this stage, the researcher analyzes the data collected, evaluates the observations made, examines the impact of the research actions, and identifies any shortcomings based on the data gathered during the observations. The outcomes of this reflection are documented and serve as a basis for preparing for the next cycle, especially if there were less effective aspects in the previous cycle. It is important to note that addressing a single problem may require multiple cycles of action research. These cycles are interconnected and continue until the objectives of the classroom action research are achieved.

E. **Technique And Tools Of Data Collection**

1. **Technique of Data Collection**

Utilizing suitable data collection methods and procedures is crucial to enable the researcher in acquiring the required data to address the research questions. In this study, the researcher employed a combination of qualitative and quantitative methodologies to examine the data, employing two distinct data analysis techniques. For quantitative data, the researcher employed the measurement method with essay questions, while for qualitative data, which can be gathered through the ongoing learning and teaching process, the researcher utilized the observation technique in conjunction with field notes to collect the data.

a. Observation Technique (observation)

The observational method, as stated by Nawawi (1991) in Samsu (2021), involves systematically observing and recording visible phenomena in the research object. This method is employed to gather

firsthand information and data through careful examination and documentation of observable occurrences. By closely observing and systematically documenting these phenomena, researcher can gain insights into the characteristics, patterns, and relationships within the research context. This method allows for a detailed and comprehensive understanding of the research object, facilitating the exploration and analysis of the observed phenomena. Observations of student activity during the learning process are carried out with the help of observation.

b. Measurement techniques

Assessment is a commonly used tool to gauge individuals' performance, whether through oral or written means. As highlighted by Arikunto, et al. (2004), the act of measurement involves comparing a certain entity with a specific unit of measurement to convert it into a numerical value. In the context of this research, a test will be administered to assess the level of students' English writing proficiency following instruction that incorporates the use of Canva. This test will serve as an indicator to determine the degree of improvement in students' language skills at each cycle, as anticipated by the researcher.

2. **Tools of Data Collection**

In research, a tool or instrument is essential for conducting a study. Research instruments are the tools used by researcher to collect data accurately. In this particular study, the researcher utilized observation sheet, field notes, and tests as instruments for data collection.

1. Observation Sheet

Observational sheet is a tool used in research to systematically observe and record visible phenomena in the research object. This method, as mentioned by Nawawi (1991) as cited in Samsu (2021), allows researchers to gather data by directly observing the subject of study. The observation sheet provides a structured format for noting down important observations and details during the research process. It helps researchers document their findings accurately and ensures

consistency in data collection. In this research, researcher will use observation sheets as an instrument to help the researcher for collecting data.

2. Field Notes

The primary purpose of field notes is to capture observations in a clear and concise manner while in the field. It is important to record these notes as accurately and promptly as possible to ensure they make sense to the researcher. Field notes serve as the initial and essential step in conducting a thorough analysis, providing concrete evidence of the observations made. Additionally, field notes, as highlighted by Herdiyanto and Tobing (2016), play a crucial role in data collection and analysis. They serve multiple purposes, aiding in the ongoing data collection process and offering valuable insights for the overall analysis. Researchers can refer to their field notes to ensure comprehensive and accurate data collection, as well as to identify patterns, themes, or significant findings during the analysis phase.

3. Writing Test

Writing tests are a form of assessment conducted by researchers to research subjects (students). This test was given to evaluate each student's writing ability, focusing on various aspects such as content, vocabulary, grammar, and mechanics. To assess students' writing test results, the researcher used a scoring rubric adapted from Brown and Lee (2014) which can be seen in appendix 4.

For this writing test, the researcher provided the students with a comprehensive test paper along with clear instructions, allowing for a thorough evaluation of their writing skills. This test was given at the end of cycle I and II.

F. Technique of Data Analysis

Data analysis in this study involves a combination of qualitative and quantitative methods. For the qualitative data obtained from observation sheet,

and field notes, the analysis will be guided by the framework proposed by Miles, et al. (2014). The analysis process includes three main steps: Data Condensation, Data Display, and Conclusion Drawing/Verification.

1. Qualitative Data

   a. Data Condensation

   The initial step in the qualitative data analysis approach is data condensation. Data condensation involves the systematic selection, concentration, simplification, abstraction, and/or transformation of data contained in a comprehensive corpus (body) of written field notes, interview transcripts, documents, and other empirical materials. It is intended that the information in the data can help the researcher to draw conclusions. Given the volume and complexity of the data, data condensation in data analysis is necessary. The purpose of data condensation is to evaluate the research relevance of the data obtained. A more precise picture will be generated through the data reduced during this data condensation process. The longer the researcher is in the field, the more varied the amount of data collected becomes. However, the data obtained also becomes more complex and difficult to understand, hence data condensation is needed here to prevent such varied data from accumulating and making it difficult to be scrutinised by the researchers.

   b. Data Display

   The second stage, which comes after the data has been condensed or reduced, is the data presentation stage, which is also when qualitative data analysis techniques are used. The practice of presenting data involves arranging the data gathering in a methodical and understandable way so that conclusions can be drawn. In addition to narrative text (in the form of field notes), matrices, graphs, networks, and charts can also be used to convey qualitative data. The data will be grouped and structured in a relational pattern through the presentation, making it simpler to understand.

c. Conclusion Drawing and Verification

Conclusion drawing and data verification are the final phases of qualitative data analysis methods that are implemented based on the outcomes of data condensation and continue to make reference to the desired outcomes of the research. In order to draw conclusions about how to resolve current issues in accordance with the research objectives, this step seeks to provide meaning to the data obtained by looking for links, parallels, or differences. If no supporting data is discovered during the subsequent phase of data gathering, the initial results may still be vulnerable to revision. However, the concluding judgments are credible if the initial conclusions are backed up by reliable evidence. Verification is to make the evaluation of the data's completeness more accurate and objective in accordance with the fundamental idea of analysis. Peer debriefing is a method for verifying data.
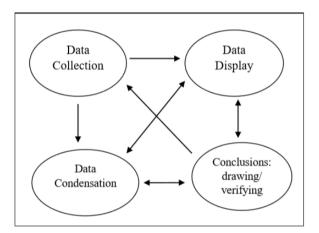

Figure 2. Interactive Model Data Analysis (Miles, et al., 2014)

2. Quantitative Data

In this study, quantitative data came from measurement techniques using writing tests. Quantitative data is a numerical record that is obtained through the measurement process and can be used to perform basic mathematical operations (Singh, 2007).

a. Students' Individual Score

The student individual score, which represents each student's individual grade, is used to assess each student's level of writing proficiency. The formula for calculating individual scores is as follows:

$$X = \frac{3C + 2.5V + 2.5G + 2M}{40} \times 100$$

Note:

X   : the students' individual score

C   : Content

V   : Vocabulary

G   : Grammar

M   : Mechanics

b. Mean Calculation

The score shown above represents an individual's performance, while the following formula is used to assess a class's overall improvement in terms of writing proficiency:

$$M = \left(\frac{\sum x}{N}\right)$$

Note:

M   : the students' average score

$\sum x$: the sum of students' score

N   : the number of students

Taken from Heaton (1988:176)

c. The Classification

To find out the improvement in students' reading skills after using Canva as a media to support the English learning process, the researcher adapted the classification of students' range scores from Ary, et al. (2010) as shown in the table below.

Table 3.2 The Classification of Range Score

Total Score	Qualification
80 – 100	Excellent
70 – 79	Good
50 – 69	Average
0 – 49	Poor

Adapted from Ary et.al (2010)