CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the Researcher explained the research design, research subjects, data collection techniques, instrumentation, and data analysis techniques that were used to conduct the research. The explanation of this chapter is as follows.

A. Research Design

The research design employed in this research was Classroom Action Research. The Researcher collaborated with an English teacher at SMA 3 Sekadau Hilir to facilitate data collection and assessment. In this setup, the Researcher assumed the role of a teacher responsible for conducting the teaching and learning activities in the classroom, while the English teacher served as an observer of the process. The research aimed to enhance students' writing skills through the implementation of the EGRA technique, focusing on hands-on application and personalized instruction to achieve targeted improvements.

On the other hand, Creswell (2012, p.577) Action research addresses a specific, practical issue and seeks to obtain solutions to a problem. Usually, action research is a method used in studies with the aim of enabling educators to improve the quality of education by researching specific problems that occur in the field of education. In conducting action research, the main point is to address specific educational problems. In short, classroom action research

focuses on problem-solving in, the classroom, conducted by the teacher to improve students' quality and ability.

The researcher carried out Classroom Action Research because this research was designed to solve student problems and improve their ability to write descriptive texts through the application of the EGRA technique (Exposure, Generalization, Reinforcement, and Application). Classroom action research serves as a method for improving the quality of education by addressing specific problems faced in education. It is an educator-focused research aimed at improving educational standards by tackling targeted educational challenges. At its core, classroom action research concentrates on solving problems in the classroom, conducted by teachers to enhance the quality and ability of students. Therefore, it is crucial to address specific problems faced by students in the classroom to achieve meaningful improvements in their educational experience.

In this research, the researcher came to the school directly to solve the problems found during the pre-observation. The research was conducted using the CAR (Classroom Action Research) approach because it involved teaching and learning activities in the classroom. The researcher focused on improving students' writing skills in descriptive text by using the EGRA technique (Exposure, Generalization, Reinforcement, and Application). According to Burns (2010, p.7), action research has four important parts in each cycle: planning, action, observation, and reflection. In this research, the researcher conducted it in two cycles, with each cycle incorporating these four key points

of action research. The decision to use two cycles was based on the belief that this would be more effective in improving students' writing ability. By using the techniques described by the Researcher, the identified problems faced by the students could be addressed during the research process. This research was conducted at SMA Negeri 3 Sekadau Hilir, using class ten as the sample. As mentioned earlier, the Researcher conducted the research in two cycles.

Cycle Model based on Kemmis and Taggart (cited in Burns. 2010. p.8-9). The estimate is below:

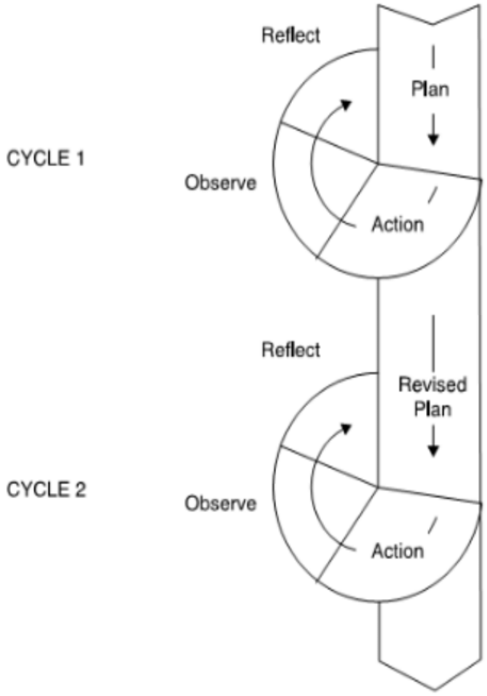

Figure 3.1 CAR Model

Those four parts in this model explain in detail as bellow:

1. Planning

   Using the Exposure Generalization Reinforcement and Application (EGRA) technique, the Researcher began to prepare all the activities and

materials for teaching writing on descriptive text. Preparation included preparing the learning module, resources, and media, as well as creating the scoring rubric and other instruments.

2. Acting

In acting, the Researcher focused on implementing what had been compiled in the planning. At this stage, the Researcher concentrated on the predetermined technique. The students were given an explanation of how to write descriptive text using the Exposure Generalization Reinforcement and Application (EGRA) technique. Then, the Researcher prepared a model of the EGRA technique. This was done by having students use the model based on the topic given by the teacher, and then the students put their ideas into writing.

3. Observation

At this step, the Researcher observed the effects of the action and documented the context. This involved observing the students' actions during the teaching and learning activities in order to gather information in the classroom for reflection.

4. Reflecting

This stage involves analyzing and evaluating the data collected during the observation stage. The Researcher reflects on the results of the actions taken, assesses successes and failures, and identifies lessons learned for future improvement. To achieve more effective results, the Researcher proceeded to the next cycle. Starting with an initial plan similar

to the first cycle, but aiming to be more creative and refined, both in the lesson plan and in the application of the EGRA (Exposure, Generalization, Reinforcement, and Application) technique.

B. The Subject Of The Study

This research was conducted at SMAN 3 Sekadau Hilir. The research subjects were the students of class ten at SMAN 3 Sekadau Hilir, totaling 29 students in the class. The Researcher chose this class because based on the results of the initial observation, several problems were found in this class that needed correction to improve their ability to write descriptive texts using the EGRA Technique (Exposure, Generalization, Reinforcement, Application). In conclusion, the Researcher focused on improving students' writing skills in the tenth grade.

C. Data Collection Technique and Instrumentation

In an action research Researcher need tools and techniques to provide measurements to students. This means to prove whether the learning has involved students' abilities or not. Therefore, a Researcher must determine data collection techniques and instruments.

1. Data Collection Technique

   Data collection techniques were the most important step in the research, as the primary purpose of the research was to obtain data. Without knowing the right data collection techniques, the Researcher would not have obtained data that met the established standards. The Researcher gathered data using techniques such as observations,

interviews, measurements, and documentation. To obtain valid and up-to-date data, the Researcher used the following data collection techniques:

a. Observation

It was critical for the classroom action researcher to monitor students' involvement and conduct throughout educational activities. Additionally, According to Creswell (2012, p. 213), observation involves observing individuals and the location where research is conducted to gather information. In this research, the researcher conducted collaborative observation in partnership with an English instructor. The collaborator monitored students' involvement and conduct during the educational process. This observation aimed to examine how students interacted in class and how the use of the clustering approach helped them write descriptive prose.

b. Interview

This method involved direct communication between the Researcher and the participants to gather information, opinions, or perspectives on specific topics of interest. Interviews could be structured, semi-structured, or unstructured, depending on the research objectives. According to Creswell (2012.p.213), an interview is a data collection method in which the interviewer asks several questions to the respondent. The purpose of the interview was to obtain clarification from respondents who provided data. In this research, the Researcher conducted interviews with some students

after the application of the EGRA (Exposure, Generalization, Reinforcement, and Application) technique in class. The aim was to understand their views on the learning process. The results of the interviews were documented in a script, involving a total of 6 students as interviewees.

c. Measurement

This technique involved quantifying certain variables or attributes using standardized instruments or tools. This technique allowed Researchers to collect numerical data, such as test scores, height, or weight, to analyze and draw conclusions about the phenomenon under investigation. To measure student work, Researchers needed an assessment rubric, so that data collection could be done effectively. In addition, according to Lester et al. (2014, p. 45), measurement was the systematic assignment of numbers to individuals as a means of characterizing those individuals. These numbers had to be assigned through a carefully defined and repeatable process. The use of different formats depended on the type of scale designed and the assignment of numbers according to the property being measured. Measurement theory was a subset of applied statistics that aimed to describe, classify, and evaluate the quality of measurements, such as tests, instruments, or scales. Measurement was important in helping researchers calculate the value of student work using a scoring rubric.

d. Documentation

In this research, the researcher took some photos during the learning activities and recorded videos of students using the EGRA (Exposure, Generalization, Reinforcement, and Application) technique for descriptive writing. The purpose was to describe the situation during learning. This served as concrete evidence presented by the Researcher and assisted in the preparation of the research report. According to Creswell (2012, p. 223), documents were useful information for Researchers because they helped to understand important phenomena. They consisted of two types of documents, namely public documents such as meeting minutes and official notes, and private documents such as notes, diaries, and journals.

1. Instrumentation

Instruments were tools used by researchers to collect data. In this research, researchers used observation sheets, field notes, interview guidelines, and student worksheets as data collection instruments.

a. Observation Sheet

This was a structured form or checklist used by researchers to systematically record observations during data collection. It typically included predetermined categories or criteria relevant to the research objectives, allowing for consistent and organized data collection. It allowed the researcher to gather information directly about the research subject without directly interfering with the environment.

According to Burns (2010, p. 62), observation sheets were referred to as systematic or structured observation tools. In this research, observers recorded their observations in the form of categories of events, such as behaviors or types of interactions. The Researcher, assisted by the collaborator, observed students' participation, assessed their involvement in class, listened carefully to the teacher's explanations, and identified students who effectively followed the lesson using the EGRA (Exposure, Generalization, Reinforcement, Application) technique. Additionally, student behavior was also carefully monitored.

b. Field Notes

Field notes were written or typed notes made by the Researcher during or immediately after observations or interactions with participants. Field notes captured detailed descriptions, reflections, and contextual information that may not have been captured through other data collection methods.As mentioned by Leavy (2017, p. 136), field notes were field observation notes or recording notes. Field notes included dates and times to maintain chronology, which helped identify areas of improvement for the next meeting.

c. Interview Guideline

This was a structured outline or set of questions designed to guide the interviewer throughout the interview process. This ensured consistency and standardization across interviews while allowing

flexibility to delve deeper into specific topics or responses. According to Burns (2010, pp. 74), interviews were a commonly used method in studies conducted in the form of conversations to explore the focus of the research. There were three types of interviews: structured interviews, guided or semi-structured interviews, and open-ended conversations.

This ensured controlled conversations, allowing the Researcher to obtain the same information from each respondent. The advantage was that the Researcher could compare students' answers to the same questions. The Researcher prepared the interview guidelines beforehand and compared the students' answers. The interviews were conducted after the lecture and involved several students as respondents.

d. Test

It referred to a standardized instrument or assessment used to measure participants' knowledge, skills, abilities, attitudes, or behaviors related to the research topic. As mentioned by Brown (2004, p. 3). As well as other means that are used to measure skills,

knowledge or intelligence possessed by individuals or groups. Tests were important instruments in the process of measuring and assessing education that made it possible to measure learning achievements and understand individual characteristics in more depth.

1. Scoring Rubric Of Writing Descriptive Text

In this research, content validity was used because the test results were expected to represent students' ability to understand and apply all the subject matter that had been taught. To assess whether the test had content validity or not, a more detailed specification of the ability or structure tested in the test was needed. The research instrument had content validity because it was designed based on the ATP. The content validity in this research was shown as follows:

Table 3.1 Scoring Rubric

Aspect	Score	Performance descriptive
Content (C) 20%	4	The topic is complete and clear and the details are relating to the topic
	3	The topic is complete and clear but the details are almost relating to the topic
	2	The topic is complete and clear but the details are not relating to the topic
	1	The topic is not clear and the details are not relating to the topic
Organization (O) 30%	4	Identification is complete and descriptions are arranged with proper connectives
	3	Identification is almost complete and descriptions are arranged with almost proper connectives
	2	Identification is not complete and descriptions are arranged with few misuse of connective
	1	Identification is not complete and descriptions are arranged with misuse of connectives

Grammar (G) 25%	4	Very few grammatical or agreement inaccuracies
	3	Few grammatical or agreement inaccuracies but not effect on meaning
	2	Numerous grammatical or agreement inaccuracies
	1	Frequent grammatical or agreement inaccuracies
Vocabulary and Mechanic (VM) 25%	4	Effective word choice and tense
	3	Few errors in word choice, spelling and punctuation
	2	There are occasional spelling, punctuation and capitalization errors
	1	Dominated by word choice, spelling and punctuation errors

Adapted from Jacob et al (cited in Abraham.2012.p.2)

$$\text{Score} = \frac{(20\%xC)+(30\%xO)+(25\%xG)+(25\%xVM)}{4} x\ 100$$

The writing rubric scored units 1-4, weighted by importance: content 20%, organization 30%, grammar 25%, and vocabulary and mechanics 25%, reflecting their relative significance and priority.

The scoring rubric criteria were divided into four categories as follows:

Table 3.2 Score Classification

No	Score Level	Classification
1	81-100	Excellent
2	75-80	Good
3	41-74	Fair
4	0-40	Poor

e. Video

This research employed videos to document audiovisual content, which improved knowledge of essential occurrences. Multimedia technologies enabled an effective and engaging learning environment. Video recordings taken throughout the learning process provided information that observation lists and field notes might have overlooked.

D. Data Analysis

Data analysis was one of the most crucial aspects of the research. Data analysis was used by researchers to improve the accuracy and reliability of their data collection. According to Creswell (2017.p.284), data analysis was a process that occurred when performing a research and gathering data. It entailed analyzing data collected from participants, typically involving an examination of the broad metrics discovered in a given method. This signified that data analysis was a process carried out by Researcher to collect data from their research.

In this research, there were two types of data analysis used by Researchers, namely qualitative and quantitative data analysis, because this research used classroom action research. Qualitative data was used to describe narratively, while quantitative data was used to evaluate in the form of numbers, especially on tests conducted by students. This allowed Researchers to see whether or not there had been a more measurable increase in student

achievement. Qualitative data analysis provided in-depth understanding, while quantitative data analysis provided a more numerically detailed picture.

1. Qualitative Data

Qualitative data was a type of data obtained from descriptions, observations, or interpretations of the phenomena under research. This data was descriptive and could not be measured with numbers. For example, qualitative data could be quotes from interviews, field notes, transcriptions of conversations, or text analyses. Qualitative data tended to describe the characteristics, patterns, or meanings of a situation or phenomenon, and was used to understand the context, perceptions, or experiences of the subjects involved in the research. In addition, according to Miles & Huberman (2014.p10-11), analysis consisted of three streams of activities that occurred simultaneously: data reduction, data presentation, conclusion drawing/verification. Regarding these three flows in more detail:

1. Data Reduction

Data reduction in qualitative studies involved the process of selecting, simplifying, and transforming raw data into manageable units for analysis. This included categorizing, coding, or summarizing data to identify major themes or patterns. Data reduction was an integral part of the analysis process, involving filtering, grouping, arranging, and organizing data so that final conclusions could be generated and verified. In the data reduction process, Researchers did not have to convert qualitative data into quantitative form. Qualitative data could be

simplified and transformed in various ways, such as through rigorous selection, summarizing, grouping into broader patterns, and other methods. Sometimes, data could be converted into numbers or rankings, but this was not always advisable.

2. Data Display

    Data display limited a presentation as an organized set of information that allowed conclusions to be drawn and actions to be taken. It was believed that better presentations were a primary means of valid qualitative analysis, which included presenting qualitative data in a meaningful and organized way to facilitate analysis and interpretation. This could include visual representations such as charts, tables, diagrams, or narrative descriptions.

3. Conclusion Drawing and Verification

    Drawing conclusions was only part of an activity of a whole configuration. During the research, conclusions were also re-examined. Verification could take the form of rapid reflection by the Researcher, review of field notes, discussion with peers to reach agreement, or a thorough effort to compare findings with other data. In qualitative studies, drawing conclusions involved synthesizing findings from the data analysis process to develop insights, interpretations, or explanations about the research topic. Verification involved ensuring the credibility, trustworthiness, and validity of conclusions through techniques such as member checking, debriefing with peers, or triangulation.

2. Quantitative Data

Quantitative data was used to support qualitative data, especially in the context of this research, which involved the value of students' written test results. This showed that there was an interrelated relationship between quantitative data in the form of numbers or values and qualitative data in the form of descriptions or interpretations, meaning that both were interconnected with each other, namely the values obtained from the results of students' writing assignments in the form of tests. According to Aliaga and Gunderson (cited in Muijs, 2010, p. 1), quantitative studies described phenomena by collecting numerical data that were analyzed using mathematically based methods. So, in this research, Researchers needed to use numerical data to analyze student scores. The test was used to see the extent to which students' ability to write descriptive text improved by using the Exposure Generalization Reinforcement and Application technique. To prove the results of the test, Researchers needed to calculate them in the form of numbers. This concluded or proved how effective the Exposure Generalization Reinforcement and Application technique was in improving students' ability to write descriptive text in each cycle.

3. Indicator of success

The Researcher for this research separated classroom action research into two cycles. Each cycle had two meetings. The Researcher required criteria at each meeting to evaluate the cycle's development after classroom teaching. The Researcher followed these success criteria as a guide. The

factors for success were described based on the data collected by the Researcher in the table below:

Table 3.3 Criteria of Success

Aspect	Description
Observation	If 75% of students understand and follow the rule in writing descriptive text using Exposure Generalization Reinforcement and Application (EGRA) technique in the classroom, suggests that this cycle is successfully.
Test	If 75% of students score is increase, which means that students did well in the test, then this cycle can be said to be successful.
Interview	If 75 % of students give positive respond and good opinions this cycle can be considered successful.

The cycle was successfully completed, and students complied with the rules set by the instructor in class, as indicated by the observation checklist, if 75% of the students understood the subject and knew how to apply the Exposure Generalization Reinforcement and Application (EGRA) technique when writing descriptive texts, according to the success criteria. 75% of students passed the exam with a good exam score. The researcher did not continue to the next cycle if the previous cycle had proven successful.