CHAPTER III

RESERCH METHODOLOGY

In this chapter, the researcher discusses the research methodology used in this research. The research methodology relates to how the research questions posed in the first chapter are processed using certain methods. Therefore, this chapter provides several points regarding the steps of conducting research which include research design, research subjects, data collection and instruments, and data analysis.

A. Research Design

This research was conducted with classroom action research (CAR). This research was conducted in the classroom to answer students' difficulties and increase their writing performance in descriptive text through the use of the clustering technique. As claimed in Creswell (2012. P.577) classroom action research is a method used to identify and address specific issues within educational settings. Typically, action research involves educators investigating particular problems in education with the goal of enhancing the quality of teaching and learning. In doing action research, the main point is it must have specific educational problems to overcome. In short, classroom action research is focus on the problem solving in the classroom that done by the teacher in order to improve students' quality and ability in writing performance. In the educational world it is so important to realize the problem that faced by the students in the classroom. In this research, the researcher

went directly to the school to remedy the problem identified during pre-observation.

CAR (Classroom Action Research) approach since the research takes the shape of classroom teaching and learning activities. The researcher focuses on how to improve students' descriptive writing ability using the clustering technique. According to Burns (2010. p. 8) classroom action research have four important parts in each cycle in the research. Those are known as planning, action, observation and reflection. In this research, the researcher will do it in two cycles also in each cycle will use four important points of action research that was mention above. The researcher will use two cycles because it will be more effective to improve students' writing ability, in which the problems faced by students could be fixed by using the technique presented by the researcher during the research. This research will conducted in SMPN 5 Kalis by use the class VIII B as the sample. As it mention above the researcher was do in two cycles.

The researcher use research design by Kemmis and McTaggart cited in Burns (2010. p. 8). As mention before there are four main parts to use in this model of research as follow the spiral form bellow:
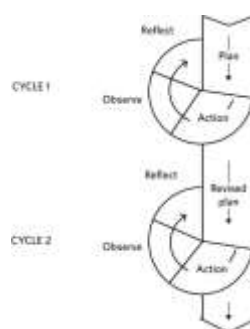
Figure 3.1 Cyclical Model Of Action Research Adapted from Kemmis and

Taggart (2010.p.8)

B. **The Subject of The Research**

This research was conducted in class VIII, consisting of 23 students at SMPN 5 Kalis for the 2024/2025 academic year, located in Kapuas Hulu, West Kalimantan Province. The reason the researcher chose this school was based on the results of observations that had been complete, which found difficulties in writing descriptive texts in class VIII of the school.

C. **The Procedure of Research**

a. Planning

Planning was done by the researcher. During this phase, the researcher made some plans. The researcher created a lesson plan, developed a Clustering Technique model, and prepared materials. The organized planning resulted in a lesson plan based on the present curriculum. Lesson plans provided the teacher with guidelines for teaching and learning activities. The researcher then used branches as a clustering strategy model when preparing it. It was conducted by the students depending on the topic assigned to them by the teacher, and the students then inputted their ideas into the Clustering Technique.

b. Action

In action, the researcher focused on carrying out the lesson plan that was developed during planning. During this stage, the researcher focused on the technique that was determined. The students explained how to write descriptive prose using the clustering technique. The writer then

constructed a model of the clustering procedure using branches. It was conducted by the students depending on the topic assigned to them by the teacher, and the students then inputted their ideas into the Clustering Technique.

c. Observation

The researcher witnessed all actions that took place in the classroom. The aspects of observation included data sources, instruments used to collect data, and data collection techniques. So, while observing, the researcher described the process of gathering all important facts that occurred throughout the action's implementation. The researcher utilized field notes or observation sheets as a guideline while observing.

b. Reflection

Reflection was the process of analyzing the data that had been collected to determine whether an action was successful. Reflection was required for evaluation when completing tasks. This phase discussed certain issues in the classroom that arose during the activity.

D. Data Collection Techniques and Instrumentation

In this research the researcher needs data collection technique to obtain results from a research. Moreover, Creswell (2009, P. 166) stated data collection steps include setting in collecting the data, the researcher applied some technique as follows

1. Data Collection Technique

Collecting data using the technique in this research is essential since

the researcher requires data collection techniques in order to achieve the results of the research. In this research, the researcher collected data using test, observation, interview, measurement, and documentation.

a. Observation

In additional Creswell (2012. p. 213) argues that, observation is the process of observing people and also the place of the research to collect and get the information. In this research the researcher uses collaborative observation in which collaboration with English Observation is an act of observing carefully. Researcher observed by observing teaching and learning activities in class during the lesson. How the teacher teaches and how students respond becomes the object of observation.

b. Interview

As stated by Creswell (2012. p. 213) interview is a data collection method in which interviewer asked respondents some questions. The purpose of the interview was to clarify information provided by the respondents. In this research, the researcher conducted interviews to collect data by asking several students questions following an action in the classroom. The goal of the interview was to understand their perspectives on the learning process utilizing the clustering technique. After the interview, the results were documented in the form of a script. Six students were chosen as interviewees.

c. Measurement

As claimed by Lester et al cited in Haseki (2019. p. 298) Measurement relies on quantifying observed qualities, ensuring that these observations are consistent and valid for everyone. It is a crucial element of the scientific method. These numbers should be assigned using a well-defined and repeatable process. It can be used in a variety of ways, depending on the sort of scale being designed, and assign numbers based on the attributes to be measured. Measurement theory is an area of applied statistics that tries to characterize, categorize, and evaluate the quality of measurements. So, measurement was essential to assist the researcher in evaluating the students' work accurately using a detailed scoring rubric. This process involved systematically assessing various aspects of the students' assignments to ensure that each component was judged fairly and comprehensively. By employing a structured scoring rubric, the researcher was able to provide precise and consistent scores for each student's performance.

d. Documentation

The researcher used documentation to support the data. In line with Creswell (2012. p. 223) document is beneficial information for the researcher in which it helps to understand important phenomena. It consists of two types of documents, public documents and private documents. Public documents consist of minutes from meeting, official

memos, etc., and private documents consist of notes, diaries, journals, etc. In that research, the researcher collected images during the learning sessions as well as videos of the students writing descriptive prose using the clustering technique. The goal was to demonstrate the situation during the learning sessions. These served as true proof presented by the researcher, as well as tools for the researcher to record further information.

2. Instrumentations

Instrumentation data Collection Instruments are tools that are selected and used in research activities to collect data from these activities to be systematic and easy for them. Type the instruments used by researcher are:

a. Observation Checklist

The researcher used an observation checklist to collect the data on the entire actions during the learning and teaching activity. As mentioned by Bruns (2010, p. 62), observation checklists are referred to as systematic or structured observation. In this case, the aspect of observing the situation that occurred in the classroom during the learning process was carried out by the English teacher as an observer to provide an evaluation to the researcher. The checklist was an indicator for observing students' motor development, students' cognitive development, students' motivation in learning, and how students participated in class.

b. Field Notes

The researcher wrote down the results and impacts of these actions and then recorded them in field notes. Leavy (2017, p. 136) claimed field notes are field observation notes or recorded notes. It was important to write the date and time in the field notes to keep a chronological record. In this case, the researcher documented what happened during the learning process in class. Collaborators typically provided suggestions, comments, and noted obstacles or problems faced by students and teachers. They also recorded the strengths and weaknesses of the researcher while teaching students in class when applying the clustering technique.

c. Interview Guideline

The interview guideline will use by researcher to collect data consists of of several questions related to the learning process. Emily et al. (2011. Pp. 29) mentioned that interview is a method aimed at drawing out a detailed view of the participant's perspective on the research topic. It requires the interviewer to ask questions directly in person, engaging in face-to-face interaction with the respondent. This section provided guidelines for researchers conducting interviews with respondents. Interviews were intended to capture patterns relevant to the research being conducted, facilitating the collection of data and information to be utilized throughout the research.

d. Students Test

Test is a series of questions or exercises. 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. The test will use the researcher by scoring rubric. This instrument usually consists of a set of questions posed to students in descriptive text subjects to determine the extent of one's knowledge of something or material.

c. Video

The researcher used several audio visuals as a tool to collect data in this research, one of which was video recording, which is an unwritten data source. which can help researcher in monitoring their activities in the classroom so that researcher have a recording tool to describe what is happening in the classroom at the time of learning in the context of classroom action research. in the classroom during learning time in the context of class action research. Tool This electronic tool serves to capture the atmosphere of the classroom, details about important or special events that occur or illustrations. important or special events that occur or illustrations of certain episodes so that they can be used to help describe what is happening in the classroom during the learning process, so that it can be used to help describe what the observer recorded in the field notes and observation sheet, Photographic images, video footage are also useful in interviews,

either to start a conversation or to remind the researcher not to stray

from the topic, or to remind the researcher not to deviate from the the

purpose of the interview.

Tabel 3.1 Scoring Rubric of Writing

Aspect	Score	Performance Description	Scale
Content 20 %	4	The topic is complet 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	5 X
	1	The topic is not clear and the details are not relating to the topic	
Organizatio-ns 20 %	4	Identification is complete and description are arrenged with proper connectives	
	3	Identification is almost complete and descriptions are arrenged with almost proper	
	2	Identification is not complete and descriptions are arranged with few misuse of connectives	
	1	Identification is not complete and descriptions are arranged with misuse connectives	5 X
Grammar 20%	4	Very few grammatical or agreement inaccuracies	
	3	Numerous grammatical or agreement inaccuracies	
	2	Few grammatical or agreement inaccuracies but not affected on meaning	5 X
	1	Frequent grammatical or agreement inaccuracies	
Vocabulary 20%	4	Effective choice of word form	
	3	Few misuse of vocabularies, word forms, but not change the meaning	
	2	Limited range confusing words, word form	5 X
	1	Very poor knowledge of words, words form, and not understandable	
Mechanics 20 %	4	It uses correct spelling, punctuation, and capitalization	
	3	It has occasional errors of spelling, punctuation, and capitalization	
	2	It has frequnt errors of spelling, punctuation, and capitalization	5 X
	1	It is dominated by errors of spelling, punctuation,	

		and capitalization	

<div align="center">Adapted from Jacob et al Citied in Abraham (2012. p. 2)</div>

Score : C (Obtained score x 5%) + (Obtained score x 5%) +

G (Obtained score x 5%) + V (Obtained score x 5%) +

M (Obtained score x 5%)

In this research, the researcher will use proficiency ratings to asses students ability in writing descriptive text with the following table:

<div align="center">Table 3.2 Criteria of Good Writing</div>

	Score	Criteria
1.	80-100	Excellent
2	62-79	Good
3.	51-61	Fair
4.	21-50	Poor

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

E. Data Analysis

Data analysis is one of the most important parts in a research. Data analysis used by researcher in collecting data to be more accurate and reliable. In line with Creswell (2009. p. 186), data analysis is a process carried out when conducting a research in collecting data It consists of analysing information from the participants.Usually the researcher uses an analysis of the general measures and found in a particular strategy It means that data analysis is a step taken by researcher in collecting data from research In this research, the researcher used two types of data analysis: qualitative data and quantitative data. Because classroom action research (CAR) requires these two

critical components, qualitative data is used to analyze the data descriptively, whereas quantitative data is used to assess in the form of numbers on test sections conducted by students, making it easier for researcher to determine whether students have increased or not.

1. Qualitative Data

On quanlitative data researcher will use data analysis models based on Miles and Huberman (2014. p. 10)

a. Data Reduction

Data reduction was the stage where the researcher selected data obtained from the results of observations, interviews, and documentation. The researcher processed all the raw data to make it more meaningful.

b. Data Display

Data display is the collection of quantitative data carried out by researcher by compiling a set of information, so as to enable drawing conclusions and taking action. Data can be presented in the form of field notes, graphs, and charts.

c. Drawing Conclusion and Verification

Drawing conclusion and verification is an attempt by researcher in collecting quantitative data to find meaning and explanation of the data that has been analyzed. This conclusion can be compiled briefly involving meaning, regularity, patterns, explanations, and causal flow.

2. Quantiative data

Quantitative data is used to support qualitative data. It means they are connected to each other, the score that was obtained from students' writing assignments in the form of test. Aliga and Counderson as cited in Muijs (2004.p. 1) Quantitative research involves describing phenomena through the collection of numerical data, which is then analyzed using mathematical techniques. In this study, the researcher used numerical data to examine students' scores. The test was intended to determine how far students' performance in writing descriptive text had improved using the clustering technique. To prove the test outcome, the researcher calculated it numerically. This helped to conclude or demonstrate the effectiveness of the clustering technique in improving students' performance in writing descriptive text.

Indicator of Success

The researcher of this research divides the classroom action research into two cycles. Every cycle has two meetings. The researcher requires criteria at every meeting in order to assess the cycle's progress following classroom instruction. The researcher will use these success criteria as a guide.

The criteria of succes describe based on the data that collect by the researcher in the table bellow :

Table 3.3 Criteria of Success

Aspect	Description
Observation	If 75% of students understand and follow the rule in writing descriptive text using clustering technique in the classroom, suggests that this cycle is successfully.
Interview	If 75 % of six students give positive respond and good opinions this cycle can be considered successful.
Test	If 75% of students score is 65 it means students well on the test, this cycle can be considered successful.

Based on criteria of success, if 75% students understanding the topic and how to apply clustering technique in producing descriptive text, the concludes this cycle successfully, and students obey the rules given by the teacher in the classroom, as evidenced by the observation checklist. When 75% of students achieve a high score on the test, it indicates that they have completed it successfully. The conclusion is that if the first cycle is successful, the resarcher does not proceed to the next cycle.